Sonoma State University Catalog 1986-88



Sonoma State University

an ideal place to live and learn

SONOMA STATE UNIVERSITY: A RICH AND REWARDING EDUCATIONAL EXPERIENCE

Sonoma State University offers a distinctive education in the liberal arts and sciences. The university's excellent academic programs, distinguished faculty and close-knit campus community combine to give students a rich and rewarding educational experience.



Small classes and close associations with dedicated professors provide students with a unique opportunity for personalized learning. A wide range of support services help students deal with the practical aspects of their education while cultural and intellectual events on campus enhance their social and academic life at the university.



Student government, campus clubs and organizations, and an extensive athletic program offer many opportunities for personal involvement in the campus community.

And, finally, the university's rural setting and beautiful campus allow students to pursue their educational goals in a pleasant environment removed from the pressures of urban life.

The liberal education which students receive at Sonoma State University lays the foundation for a lifetime of learning and achievements.

An Education That Anticipates Your Future

What is a "liberal" education? The word "liberal" can easily be misinterpreted because it is often used in a political context as in "liberal vs. conservative." It is useful to look at the origin of the word to find its meaning as it applies to education.

"Liberal" comes from the Latin *liber*, which means "free." The words "liberal arts" in Latin would be *artes liberae* — translation: "work befitting a free man."

It follows that a liberal education in the arts and sciences is one which provides maximum opportunity for self-expression and limitless possibilities for the pursuit of personal and professional goals.

A liberal education develops minds. It helps students understand the achievements of the past, enables them to comprehend the present, and allows them to make sensible judgements about the future.

A liberal education assists individuals from every walk of life to sharpen their intellectual powers, to acquire knowledge, to develop judgement and to prepare for a good living and a good life. In this sense, an education at Sonoma State University is *an education that anticipates your future.*



Small Classes and Personal Attention

Small classes, personal attention from a distinguished faculty, and the opportunity for individual involvement in classrooms and laboratories have prompted many students to choose Sonoma State University over larger universities.

The average class size at SSU is about 16 students. Lecture, seminar and laboratory classes are taught by faculty, not by teaching assistants.

Unlike other schools where only the most advanced students have access to sophisticated equipment, every student at SSU has many opportunities for hands-on learning. In the sciences, for example, students have access to well-equipped laboratories and handle a variety of modern devices such as argon ion and tuneable dye lasers, spectrophotometers, binocular petrographic microscopes, and an electron microscope.

Students also have access to the university's computers. The learning experience at SSU can lead to a wide variety of computer applications in fields ranging from management to art, from physics to psychology and from music to computer science.







An Ideal Place to Live and Learn

Sonoma State University in Rohnert Park is ideally located in a region of Northern California which is rural but not remote. Farmland and foothills surround the campus, yet the nearby city of Santa Rosa offers the conveniences of a metropolitan community.

The excitement of San Francisco, the romance of the Napa and Sonoma wine country, and the grandeur of the Pacific Coast redwood forests are all in easy reach of the SSU campus. The Golden Gate Bridge is less than an hour's drive to the south and the world-famous wineries of the Sonoma and Napa Valleys are a pleasant drive to the north. The beautiful Sonoma coast, the Russian River resort area, and nearby lakes and parks offer year-round recreational and educational opportunities for SSU students. For example, the Biology Department maintains a 22-foot boat for coastal research and manages a 160-acre natural preserve near the campus.

The Sonoma State University campus is on a 220-acre site and has a park-like quality with abundant, beautifully landscaped open spaces. Students find solitude in the quiet tree-shaded areas around the campus lake or they mingle with friends and classmates on the large open lawn area at the center of campus. Bicyclists and joggers enjoy the bike paths and country roads in the vicinity of the campus.

Students who choose to attend Sonoma State University enjoy a refreshing balance of city and country living while they pursue their educational goals at a fine university.





Student Services

Concern for the academic and personal well-being of students at Sonoma State University is demonstrated by the many student services available on campus.

Academic support services help students establish and achieve their educational goals while other services, such as basic health care and counseling, attend to the individual and more personal needs of students.

Special services are also provided for reentry students, veterans, students with disabilities, minorities, and the economically disadvantaged.

Some of the most-used services are described briefly in this section. More detailed information on these services and additional student-support service may be found in the back sections of this catalog.

Academic Advising

Academic Advising at Sonoma State University is more than the routine process of passing on information about specific university rules or graduation requirements to students. Faculty Department Advisors or trained Advising Center staff help students define their academic goals and then show them how to draw on the total resources of the university to achieve those goals.

The Advising/Counseling Center will also help students, who haven't decided on a major, plan a program of exploration which matches students' interests and talents with clearly defined objectives.

In addition to providing general academic counseling for all students, the Advising Center coordinates information on the requirements for the various degree programs offered by the university.



Learning Center

The Learning Center helps students learn how to learn so that they can reach their full academic potential. The center offers numerou workshops on writing, test-taking and study kills. Free one-on-one tutorial assistance and group study sessions are provided for many specific classe .

Many students have completed difficult classes and improved their study habits by taking advantage of the center's services.

Reentry Program

Many students coming to Sonoma State University are reentry students. These individuals are entering or reentering college after a break from formal education. Some are returning to school to finish their long-coveted Bachelor's or Master's degrees, while others are pursuing mid-life career changes. Reentry students are generally older than the "traditional" college student and their rich and varied life experiences add a valuable dimension to the campus community.

The SSU Reentry Program provides counseling, encouragement, support and referrals for present and prospective reentry students.





Children's School

High-quality, subsidized child care provided by the Sonoma State University Children's School has made it possible for many single and lowincome parents to obtain a higher education. The Child Care Center is staffed by credentialed preschool teachers, student volunteers and the parents of enrolled children, and offers a comprehensive educational and developmental program for children ages two to five years.

The children of students who are single parents or members of low-income families are given admission priority. However, there is a limited number of spaces available for other families with tuition based on an hourly rate.





Counseling Center

The Sonoma State University Counseling Center provides free crisis counseling for students as well as workshops and classes designed to promote personal development. The center's programs focus on topics such as career planning through self-exploration, assertiveness training, men's and women's issues, communication skills, stress reduction, overcoming test anxiety, procrastination, and time management.

The center is staffed by professional counselors, graduate interns and peer advisors who are available by appointment and on a drop-in basis. Complete confidentiality is maintained and a referral service is offered for students who need therapy from community or private practitioners.

Student Health Center

The Student Health Center, located in a modern well-equipped facility, provides health care and pharmaceutical services for regularly enrolled students. The staff consists of doctors, nurses, support personnel, laboratory and x-ray technologists and a pharmacist. Acute illnesses and minor injuries are treated at the center with most services available at no cost to students. Referrals to off-campus physicians are made when necessary. Low-cost health insurance is also available through the center.

Campus Bookstore

The campus bookstore is a non-profit enterprise which makes available to students textbooks, current hardback and paperback books, general supplies and convenience items, the University Catalog and the University Schedule of Classes. Facilities are also available for photographic processing, gift, art and stationary purchases. The bookstore also includes a small lounge area.



Career Development

The excellent liberal arts education provided by Sonoma State University, and the varied professional qualifications which are a natural outgrowth of that education, do not necessarily guarantee that a student will step out of college and into a desirable career.

This is why the university has extensive career development programs to prepare students for the world of work which inevitably follows graduation.

Individual career counseling and a variety of workshops and seminars are available through the Career Development Center to help students plan their careers and to acquire valuable job-seeking skills.

Students can also gain a competitive edge in the labor market by receiving practical work experience related to their academic and career interests through field experience programs coordinated by the Career Development Center.

Internship and Community Involvement programs provide excellent learning opportunities by reinforcing classroom education with on-the-job education.

Students in the internship program earn academic credit while working part-time for government agencies, private businesses or non-profit corporations. Intern positions are available in many fields including computer science, management, environmental studies and planning, and nursing.

The Community Involvement program places student volunteers in community service organizations such as schools, hospitals, recreation and day care centers. They also gain valuable experience and receive from one to four units of elective credit for their work.

Career Minor Program

Internships are also an integral part of Sonoma State University's innovative Career Minor program which allows students to focus on particular careers while pursuing a broader major field of study.

Career minors are offered in Health Systems Organization, Arts Management, Information and Research, Science and Technical Writing, Recording Technology, and English as a Second Language. The university also offers a Wine Marketing Certificate program.

Each career program consists of specific courses which relate a variety of majors to specific careers. For example, an Economics major might choose the wine marketing program while a Physics or Chemistry major may consider a career minor in science and technical writing.

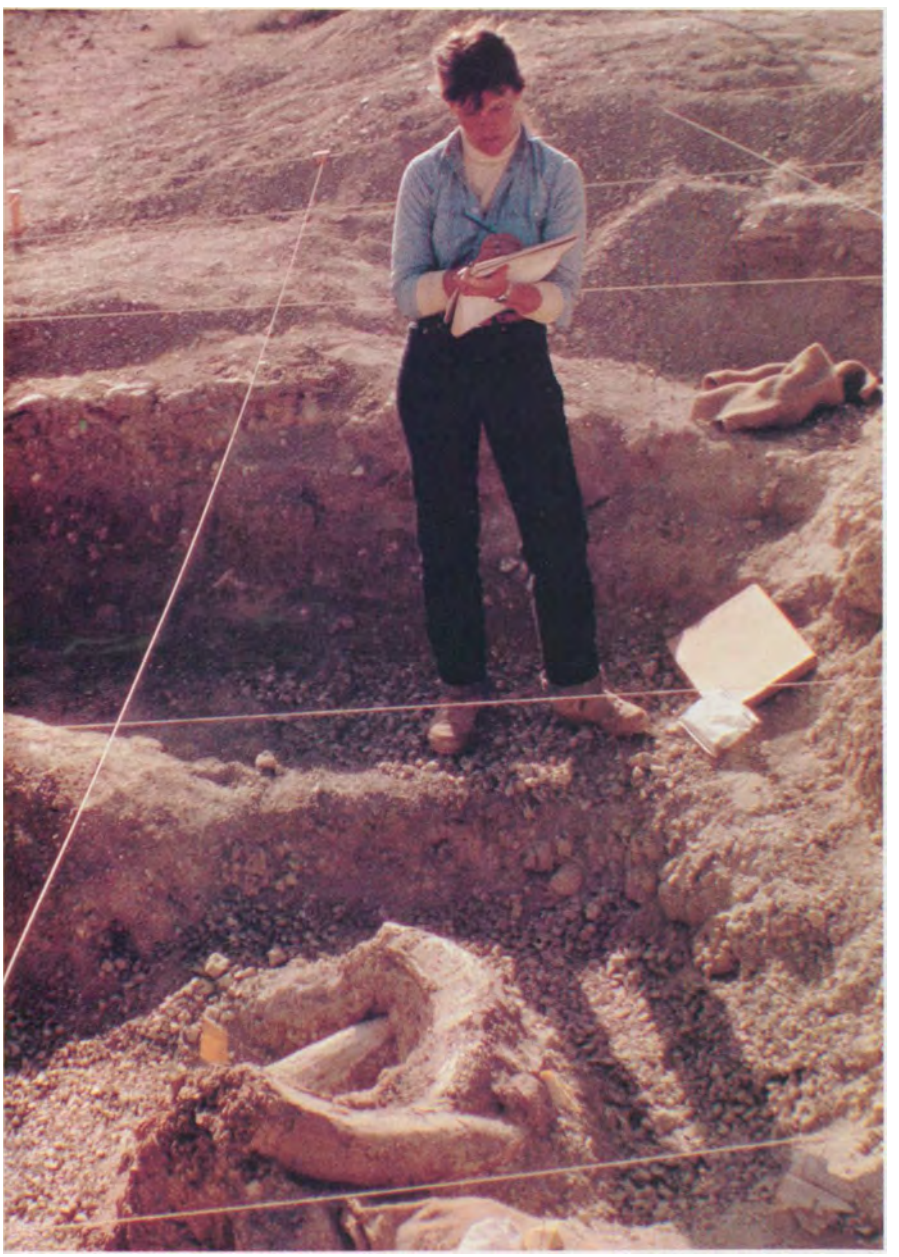
Internships culminate the career minors by providing practical experience in the field.



Scholarships



Academic excellence among students at Sonoma State University is recognized and rewarded by many public-spirited individuals, firms and organizations who contribute to the university's scholarship program. This generous community support provides for a wide variety of yearly scholarships ranging from $250 to $1000. Most of the scholarships are awarded on the basis of an applicant's previous academic performance without special consideration of financial need.



Campus Life

Is there life outside the classroom? There is at Sonoma State University, where campus life is enriched by a tantalizing variety of social, recreational, cultural and intellectual extra-curricular activities.

Student government, clubs, concerts, plays, poetry readings, films, athletics, lectures and conferences are all important aspects of the university experience.

Student Government

The Sonoma State University Associated Students is a dynamic student government which is directly involved in student affairs on both the state and local levels. Students who participate in the activities of the Associated Students enjoy a unique fellowship and they experience the rewards and frustrations of community and political involvement. The insights gained from their involvement help prepare them for positions of leadership later in their professional careers.

Student Organizations on Campus

Membership in an SSU student organization is just one of many ways for students to meet new people and become actively involved in campus life.

The diverse backgrounds and interests of students at the university have, over the years, led to the establishment of more than 50 student organizations.

These groups include clubs, pre-professional associations, and honor societies associated with various academic departments as well as religious and political groups. Some clubs were formed to promote recreational activities such as folk dancing and sailing.

The Student Union

The Student Union is the focal point on campus for many student activities. It houses the offices of the student government and a variety of student services. The Union also offers saunas, photographic developing and printing facilities, a low-cost duplication service, a travel service and meeting rooms for campus organizations.

The Pub, located in the Union, is a popular meeting place for students. Food and beverages are served and entertainment is offered ranging from poetry reading and belly dancing to folk, blues and jazz music.



Athletics

Many students these days realize the importance of physical fitness and they make staying in hape part of their weekly routine. At Sonoma State University athletic programs and modern facilities provide many opportunities for both individual and organized sports activities.

The facilities include weight and gymnastic rooms, a dance studio, tennis courts, outdoor racquetball courts, a large gymnasium, a fine new swimming pool, and several well-maintained athletic fields.

SSU is a member of the Northern California Athletic Association (CAA) and the university's intercollegiate sports program involves fourteen different men's, women's and co-educational teams. The intercollegiate program is a member of the orthern California Athletic Conference which includes other orthern California state universities. All the men's and women's sports (seven each) are classified NCAA Division II.

Intercollegiate athletics at SSU includes: baseball, softball, basketball, cross-country, football, soccer, tennis, track and field, and volleyball.

There is also a large and popular intramural sports program which involves students in various ports for both men and women. Intramural teams compete against one another as well as with other schools and off-campus groups.







Campus Media

Campus-based media at Sonoma State University fulfill a two-fold purpose — they inform and entertain the campus community while providing practical "hands-on" experience to student editors and staff members.

The Sonoma State *Star*, the weekly campus newspaper, is produced by students and publishes news about issues and events on campus. Newcomers can look to the *Star* to find out who's who on campus and what they are doing.

Commercial-free KSUN, 90.9 FM, offers a wide variety of music, news and public affairs programming to the university and surrounding communities. Students and local residents interested in the broadcast media are encouraged to participate in station activities.



The *Mandala* is a literary magazine published annually by the English department. Student editors, assisted by faculty advisors, select poetry, photographs, drawings, short stories and essays for the publication.

The *Sonoma Management Review*, a business magazine published by the Management Studies department, has received critical acclaim from the Sonoma County business community. This publication is produced quarterly by a staff of students and faculty.



Entertainment and Cultural Events on Campus

Concerts, theatrical productions, dance performances, and art exhibits are regular events on the SSU campus. Every year both rock and roll and fine arts concert series are offered which feature well-known musicians such as the rock band DEVO, reggae artist Peter Tosh and jazz great Count Basie.

The Center for Performing Arts is responsible for a wide variety of entertaining and educational performances which are either free or offered at a low cost to students. The programs featured by the center are diverse in nature, ranging from classical music, chamber singing and opera to jazz, African dance and original drama.

The center sponsors distinguished guest artists and off-campus performances by performing arts groups. Weekly noon concerts and student productions are also presented through the center.

The various activities sponsored by the center are immensely popular and draw an enthusiastic audience from throughout the community as well as the campus.

Significant art exhibits and national shows are scheduled on a regular basis in the university's Art Gallery, which is one of the newest and largest galleries in the North Bay Area. Selections from the university's own fine collection and the current art work of faculty and students are also exhibited. In addition, a variety of special programs gives students the unique opportunity to meet and talk with internationally-recognized artists who visit campus to lecture and exhibit their work.







Lectures and Conferences

Numerous lecture series, colloquia and seminars held on campus every semester provide students with the opportunity to learn personally and directly from the insights and ideas of some of today's leading thinkers.

These programs augment regular classroom lectures, but more importantly, they keep students up-to-date on current social, political and scientific developments.

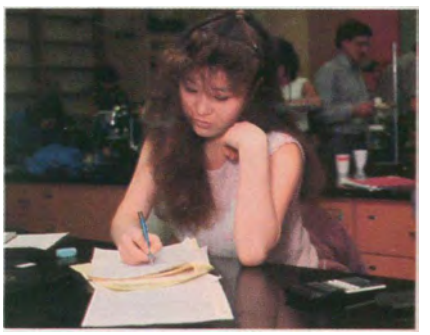
Contemporary social and political issues are explored by the University's *Lecture Series* which brings to campus internationally-recognized commentators on the American scene, such as Michael Scriven, philosopher and authority on information technology and intellectual processes; Betty Friedan, accalimed author and founder of the National Organization for Women; David Halberstam, Pulitzer Prize-winning reporter; and Joseph Kraft, syndicated political columnist.

Every semester various academic departments sponsor lectures and seminars which feature noted authors, physicists, geographers, businessmen, mathematicians, biologists, astronomers, artists, and economists. In all, more than 190 off-campus lecturers appeared at the university during the past year.

The Student Union in conjunction with the Associated Students also offers a series of lectures which address contemporary concerns and sometimes controversial issues. Nuclear energy, abortion, sports medicine and allergies were some of the topics recently presented.

The exchange of ideas and information also takes place during major conferences on campus involving philosophers, historians, attorneys, educators, scientists, and so on.

These intellectually stimulating events are available to all students and to the public and most of them are offered free of charge.





On-campus Housing

The Residential Community at Sonoma State University can accommodate approximately 640 students. The housing units in the on-campus community are unlike traditional college dormitories. They are two and three-story townhouses grouped around a recreational pavilion and swimming pool. Each unit has a separate outside entrance.

Activity areas, lounges and dining facilities are located in an attractive administrative facility. The community is, to a large extent, self-governed with resident students participating in policy deliberations and maintenance of the complex.

Food Service includes both vegetarian and non-vegetarian entrees.

Off-campus Housing

Many students who prefer to live off-campus enjoy the friendly small-town atmosphere of Rohnert Park and the neighboring college-oriented community of Cotati. Others choose the more metropolitan environment of Santa Rosa which is a short commute by car or bus to the campus. Some prefer to live in one of the numerous smaller towns and rural regions of Sonoma County.

Assistance for students seeking off-campus housing is provided by the off-campus housing office which maintains lists of available houses, cottages, apartments, trailers, rooms and shared rentals. Maps of the area, a courtesy phone and community resource information are also available in the office.

A computerized car-pooling service is available at registration time each semester to help students plan for their transportation needs.





The Sonoma State University Mission

The mission of Sonoma State University is to prepare students to be learned men and women who:

- have a foundation for life-long learning,
- have a broad cultural perspective,
- have a keen appreciation of intellectual and aesthetic achievements,
- will be active citizens and leaders in society,
- are capable of pursuing fulfilling careers in a changing world,
- and are concerned to contribute to the health and well-being of the world at large.

To achieve its mission, Sonoma State University recognizes that its first obligation is to develop and maintain excellent programs of undergraduate instruction grounded in the liberal arts and sciences. Instructional programs are designed to challenge students not only to acquire knowledge but also to develop the skills of critical analysis, careful reasoning, creativity and self-expression. Excellence in undergraduate education requires that students participate in a well-planned program which provides both a liberal education and opportunities for specific career preparation.

Sonoma State University offers a wide range of traditional disciplines, as well as interdisciplinary programs, so that students are able to explore diverse modes of inquiry, the understanding gained within the various di ciplines, and the broad spectrum of ideas, institutions, values and artistic expressions in both Western and non Western cultures.

The university offers selected professional and graduate programs leading to master's degrees, teaching credentials, and certificates in various career fields. These programs respond to regional and state needs within the academic, business, education and professional communities.

The quality of the educational experience at Sonoma State University depends upon close human and intellectual relationships among students and faculty in a learning community in which the open exchange of ideas is highly valued. Sonoma State University's special character within California higher education emerges from its relatively small size and its commitment to effective teaching, high standards of scholarship, on-going professional development, and the promotion of diversity in the student population.

Sonoma State University also recognizes its obligation to serve as an educational and cultural resource for people in the surrounding communities. It offers a wide variety of courses, lectures, workshops and programs which are open to the public. Special events in the arts, the sciences and athletics contribute to the intellectual and cultural life of students and the community.





CREDITS

FORMAT DESIGN, ART DIRECTIO AND GRAPHICS
Jim Molica, Matt Thompson, Barbara Footé

PRINTING COORDINATION Fred Relyea

COVER PHOTOGRAPHY Don Cabrall

I TRODUCTORY PHOTOESSAY SECTION Copy by Mary Howland, Color Photography by Don Cabrall, Tony Reveaux, Frank Tansey, Candace N Floyd, Linnea Mullins, Robert Lindner, Michael Weiss, Ed Bridant

ACADEMIC SECTION Copy by Mary Howland, Copy Coordination and Editing in collaboration with academic departments by Louis Dallara, Ardath Lee, Jeffrey Doutt, Robert Sherman, Photography by Don Cabrall, Michael Weiss, Linnea Mullins, Ed Bridant, Duane Strawser, Arlene Houghton, Ernest Waugh

Table of Contents

	Page
Academic Calendar	3
The California State University	
Trustees of the CSU	10
Office of the Chancellor	10
Directory of Campuses	11
Sonoma State University	
Advisory Board	14
Administration	14
Degrees	
Baccalaureate Degree Requirements	16
General Education Program	17
Post-Baccalaureate Degrees	21
Career Planning	23
University Curricula	
Degree Programs	26
American Multi-Cultural Studies	31
Anthropology	35
Applied Arts	44
Art	46
Astronomy	55
Bachelor of Arts in Liberal Studies (B.A.L.S.)	58
Biology	59
Career Minors	69
Center for Performing Arts	72
Certificate Programs	73
Chemistry	74
Communication Studies	81
Computer and Information Science	85
Counseling	91
Creative Writing	95
Credential Programs	106
Criminal Justice Administration	96
Dance (See Theatre Arts)	289
Drama (See Theatre Arts)	289
Economics	99
Education	105
English	120
Environmental Studies and Planning	128
Foreign Languages	135
Geography	149
Geology	154
Gerontology	159
History	163
Humanities	170
Hutchins School of Liberal Studies	171
Interdisciplinary Studies	180
International Studies	184
Linguistics	187
Management	190
Mathematics	201
Mexican-American Studies	209
Music	214
Native American Studies	227
Nursing	230
Philosophy	239
Physical Education and Health Sciences	245
Physical Science Minor	253
Physics	254
Political Science	261
Pre-Law and Pre-Medical Programs	269
Psychology	271
Sociology	284
Theatre Arts	289
Women's Studies	284
Special Programs	
Community Involvement Program	300
Internships	301
Prior Learning Assessment	301
Special Studies Courses	302
Admission to the University	305
Enrollment Regulations	320
Fees, Expenses and Financial Assistance	328
Instructionally Related Services	
Library	334
Computing Services	335
Media Services	335
Student Affairs	
Advising/Counseling Center	338
Academic Advising	338
Personal Counseling	338
Reentry	339
University Ombudsman	339
Associated Students	339
Child Care Center	339
Career Development Center	339
Student Employment	339
Field Experience	340
Career Planning and Placement	340
Career Placement Information	340
Educational Support Programs	343
Opportunity Program	341
Student Affirmative Action	341
Upward Bound	341
Health Center	341
Housing Services	341
International Student Programs	341
Sonoma State American Language Institute (SSALI)	341
National Student Exchange	342
Learning Center	341
Tutorial Program	342
Learning Skills Program	342
Intensive Learning Experience	342
Office for Students with Disabilities	343
Student Resource Center	343
Orientation	343
Student Union	343
Testing Services	344
General Information	
History and Accreditation	346
Schedule of Classes	346
Affirmative Action Policy	346
Academic Foundation	347
President's Associates	347
Corporate Partners	347
Alumni Association	347
Extended Education	347
Summer Session	347
The Faculty	350
Appendix	
Annual Costs and Sources of Funds	366
Privacy Rights	366
Nondiscrimination on the Basis of Sex	367
Nondiscrimination on the Basis of Handicap	367
Nondiscrimination on the Basis of Race	367
Student Discipline	367
Determination of Residence	368
Admission Table	370
Index	374

Sonoma State University

1801 East Cotati Avenue, Rohnert Park, California 94928

All University offices may be dialed directly from off-campus telephones. The telephone numbers of major offices are listed in the public telephone directory under the name of the University. The general information number for the University is (707) 664-2880.

Copies of the Sonoma State University Catalog may be purchased at the University Bookstore or ordered by mail. The price per copy is $5.50. For mail orders, send check or money order made payable to the Sonoma State University Bookstore in the sum of $6.50 to cover cost of mailing. Class Schedules for each semester may also be purchased at the Bookstore.

Changes in programs occur throughout the year and all information is subject to change without prior notice. Students should check with department/programs for recent changes.

Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this Catalog, students and others who use this Catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of The California State University, by the Chancellor or designee of The California State University, or by the President or designee of the institution. Further, it is not possible in a publication of this size to include all of the rules, policies and other information which pertain to the student, the institution, and The California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

Nothing in this catalog shall be construed, operate as, or have the effect of an abridgement or a limitation of any rights, powers, or privileges of the Board of Trustees of The California State University, the Chancellor of The California State University, or the President of the campus. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies which apply to students. This Catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or The California State University. The relationship of the student to the institution is one governed by statute, rules, and policy adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

Academic Calendar 1986–87

Fall 1986

November 1, 1985
Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1986 begins.

November 30, 1985
Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.

February 8, 1986
Last day to apply for CAL grants, Graduate Fellowships and Bilingual Teacher Grants for 1986–87.

March 1, 1986
Last day to complete 1986–87 application process for financial aid consideration.

March 14, 1986
Last day to submit application materials to University Scholarship Program for 1986–87.

June 1, 1986
Last day for foreign students to apply for admission to the Fall Semester, 1986.

July 16, 1986
Schedule of Classes on sale in Bookstore.

August 25, 1986
Academic year begins. General faculty conference. Fall administration of ELM, EPT and ESLPT, required placement tests.

August 26, 1986
ew Student Orientation and Advising.

August 27, 28, 1986
Registration.

September 2, 1986
Instruction, change of program and late registration begins.

September 16, 1986
Last day to apply for refund of registration fee or difference in unit payment status.

September 19, 1986
Last day to apply for degrees to be awarded in January, 1987.

September 26, 1986
Census date. Last day to file change of program or register late. Last day for graduate students to file G-2 form with Graduate Studies Office.

October 10, 1986
Last day to declare Basis of Grading. Last day to apply for partial refund of non-resident tuition. (See University Catalog, page 368.)

November 1, 1986
Last day for foreign students to apply for admission to the Spring Semester, 1987.

Nov. 17–Dec. 5, 1986
Academic Advising for Spring 1987.

November 19, 1986
Last day to petition for a late schedule change or to withdraw from the University (serious and compelling reasons required). See Catalog page 322.

December 1, 1986
Last day to submit graduate theses or projects to Graduate Studies Office.

December 12, 1986
Last day of instruction.

December 15–19, 1986
Final Examinations.

December 20–31, 1986
Holiday recess. Classes not in session.

January 2, 5–6, 1987
Student faculty conferences; School and Department meetings for evaluation. Semester ends.

January 6, 1987
Grades due.

Holidays

September 1, 1986
Labor Day. Campus closed.

***September 8, 1986**
Admission Day observance. Campus open.

***October 13, 1986**
Columbus Day observance. Campus open.

***November 11, 1986**
Veterans' Day Observance. Campus open.

November 27–28, 1986
Thanksgiving Holiday. Campus closed.

December 22–31, 1986
Holiday recess. Campus closed.

January 1, 1987
New Year's Day. Campus closed.

January 7–23, 1987
Mid-semester recess. Classes not in session.

January 19, 1987
Martin Luther King, Jr. Holiday observance.

Spring 1987

August 1, 1986
Period to apply for Spring Semester, 1987 begins.

August 30, 1986
Priority application period for Spring Semester 1987 ends. Applications received after this date will be processed on a space available basis.

November 1, 1986
Last day for foreign students to apply for admission to the Spring Semester, 1987. Period to apply for admission to the University and to the Credential Programs for Fall Semester 1987 begins.

November 30, 1986
Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.

January 2, 1987
Begin filing period for 1987–88 student financial assistance.

January 5–24, 1987
Intersession. Class schedule available in Extended Education (Stev. 1045).

January 9, 1987
Schedule of Classes on sale in Bookstore.

* The University reserves the right to observe these days by closing the campus at other times throughout the year.

January 26, 1987
Spring Semester begins. General faculty conference. Spring administration of ELM, EPT, and ESLPT, required placement tests.

January 27, 1987
New Student Advising and Orientation.

January 28, 29, 1987
Registration.

February, 1987
1987–88 CAL Grant, Graduate Fellowship and Bilingual Teacher Grant application deadlines generally fall during second week of February.

February 2, 1987
Instruction, change of program and late registration begins.

February 17, 1987
Last day to apply for refund of registration fee or difference in unit payment status.

February 20, 1987
Last day to apply for degrees to be awarded June 1987.

February 27, 1987
Census date. Last day to file change of program or late register. Last day for graduate students to file G-2 form with Graduate Studies Office.

March 1, 1987
Last day to complete 1987–88 application process for priority financial aid consideration.

March 13, 1987
Last day to submit application materials to University Scholarship Program for 1987–88.

March 13, 1987
Last day to declare Basis of Grading. Last day to apply for partial refund on non-resident tuition. (See University Catalog, page 368.)

April 13–17, 1987
Spring recess. Classes not in session.

April 20–May 8, 1987
Academic Advising for Fall 1987.

April 24, 1987
Last day to petition for a late schedule change or to withdraw from the University. (Serious and compelling reasons required.) See Catalog page 322.

May 3, 1987
Open House, 11:00 a.m.–4:00 p.m.

May 4, 1987
Last day to submit Master's theses and projects to Graduate Studies Office.

May 20, 1987
Last day of instruction.

May 21–28, 1987
Final Examinations.

May 29, 1987
Commencement, 10:00 a.m.

June 1–3, 1987
Student faculty conferences. School and Department meetings for evaluation.

June 3, 1987
Semester ends; grades due.

June 22–July 31, 1987
Summer Session. Catalog available in Extended Education (Stev. 1045).

Holidays

***February 12, 1987**
Lincoln's Birthday observance. Campus open.

February 16, 1987
Washington's Birthday observance. Campus closed.

April 13–17, 1987
Spring recess. Classes not in session.

May 25, 1987
Memorial Day observance. Campus closed.

* The University reserves the right to observe these days by closing the campus at other times throughout the year.

Academic Calendar 1987–88

Fall, 1987

November 1, 1986
Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1987 begins.

November 30, 1986
Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.

February 10, 1987
Last day to apply for CAL Grants, Graduate Fellowship and Bilingual Teacher Grants for 1987–88. Application deadlines generally fall during the second week of February.

March 1, 1987
Last day to complete 1987–88 application process for financial aid consideration.

March 13, 1987
Last day to submit application materials to University Scholarship Program for 1988–89.

June 1, 1987
Last day for foreign students to apply for admission to the Fall Semester, 1987.

July 16, 1987
Schedule of Classes on sale in Bookstore.

August 24, 1987
Academic year begins. General Faculty Conference. Fall administration of ELM and EPT and ESLPT required placement tests.

August 25, 1987
ew Student Orientation and Advising.

August 26, 27, 1987
Registration.

August 31, 1987
Instruction, change of program and late registration begins.

September 15, 1987
Last day to apply for refund of registration fee or difference in unit payment status.

September 18, 1987
Last day to apply for degrees to be awarded in January, 1988.

September 25, 1987
Census date. Last day to file Change of Program or register late. Last day for graduate students to file G-2 form with Graduate Studies Office.

October 9, 1987
Last day to declare Basis of Grading. Last day to apply for partial refund of non-resident tuition. (See University Catalog, page 368.)

November 1, 1987
Last day for foreign students to apply for admission to the Spring Semester, 1988.

Nov. 16–Dec. 4, 1987
Academic Advising for Spring 1988.

November 28, 1987
Last day to petition for a late schedule change or to totally withdraw from the University. (Serious and compelling reasons required.) See Catalog page 322.

November 30, 1987
Last day to submit Master's theses and projects to Graduate Studies Office.

December 14–18, 1987
Final examinations.

December 19–31, 1987
Holiday recess. Classes not in session.

January 4–6, 1988
Student-faculty conferences and evaluation. School and Department meetings for evaluation. Semester ends. Grades due.

Holidays

September 7, 1987
Labor Day. Campus Closed.

***September 9, 1987**
Admission Day. Campus Open.

***October 12, 1987**
Columbus Day. Campus Open.

***November 11, 1987**
Veterans' Day. Campus Open.

November 26–27, 1987
Thanksgiving Holiday. Campus Closed.

December 25, 1987
Christmas. Campus Closed.

January 1, 1988
New Year's Day. Campus Closed.

January 7–15, 1988
Mid-semester recess. Resident classes not in session.

January 18, 1988
Martin Luther King, Jr. Holiday observance.

Spring 1988

August 1, 1987
Period to apply for Spring Semester, 1988 begins.

August 30, 1987
Priority application period for Spring Semester, 1988 ends. Applications received after this date will be processed on a space available basis.

October 9, 1987
Priority deadline for June 1988 graduation.

November 1, 1987
Last day for foreign students to apply for admission to the Spring Semester, 1988. Period to apply for admission to the University and to the Credential Programs for Fall Semester 1988 begins.

November 30, 1987
Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.

January 4, 1988
Begin filing period for 1988–89 student financial assistance.

January 4–22, 1988
Intersession. Class Schedule available in Extended Education (Stev. 1045)

January 11, 1988
Schedule of Classes on sale in Bookstore.

* The University reserves the right to observe these days by closing the campus at other times throughout the year.

January 25, 1988
Spring semester begins. General faculty conference. For information on ELM, EPT, and ESLPT testing see Spring Class Schedule.

January 26, 1988
New student advising and orientation.

January 27–28, 1988
Registration.

February, 1988
1988–89 CAL Grant, Graduate Fellowship and Bilingual Teacher Grant application deadlines generally fall during second week of February.

February 1, 1988
Instruction, change of program and late registration begins.

February 16, 1988
Last day to apply for refund of registration fee or difference in unit payment status.

February 19, 1988
Last day to apply for degrees to be awarded in June, 1988.

February 26, 1988
Census date. Last day to file change of program or late register. Last day for graduate students to file G-2 form with Graduate Studies office.

March 1, 1988
Last day to complete 1988–89 application process for priority financial aid consideration.

March 11, 1988
Last day to declare Basis of Grading. Last day to apply for partial refund on non-resident tuition. (See University Catalog, page 368.)

March 28–April 1, 1988
Spring recess. Classes not in session.

April 18–May 6
Academic Advising for Fall 1988

May 1, 1988
Open House, 11:00 a.m.-4:00 p.m.

May 6, 1988
Last day to petition for a late schedule change or to withdraw totally from the University. (Serious and compelling reasons required. See Catalog, page 322.)

May 9, 1988
Last day to submit Master's theses and projects to Graduate Studies Office.

May 19, 1988
Last day of instruction.

May 20, 23–26, 1988
Final Examinations.

May 27, 1988
Commencement, 10:00 a.m.

May 31, June 1, 2, 1988
Student-Faculty conferences and evaluation. School and Department meetings for evaluation. Semester ends.

June 2, 1988
Semester ends; Grades due.

June 20–July 29, 1988
Summer Session. Catalog available in Extended Education (Stev. 1045).

Holidays

*** February 12, 1988**
Lincoln's Birthday. Campus open.

February 17, 1988
Washington's Birthday observance. Campus closed.

March 24–24, 1988
Spring recess. Classes not in session.

May 26, 1988
Memorial Day observance. Campus closed.

* The University reserves the right to observe these holidays by closing the campus at other times throughout the year.

NOTE: This calendar is not intended to be construed as an employee workweek calendar.



The California State University

The California State University

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became The California State University and Colleges and in 1982 the system became the California State University. Today, 18 of the 19 campuses have the title "university."

The oldest campus—San Jose State University—was founded as a Normal School 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 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.

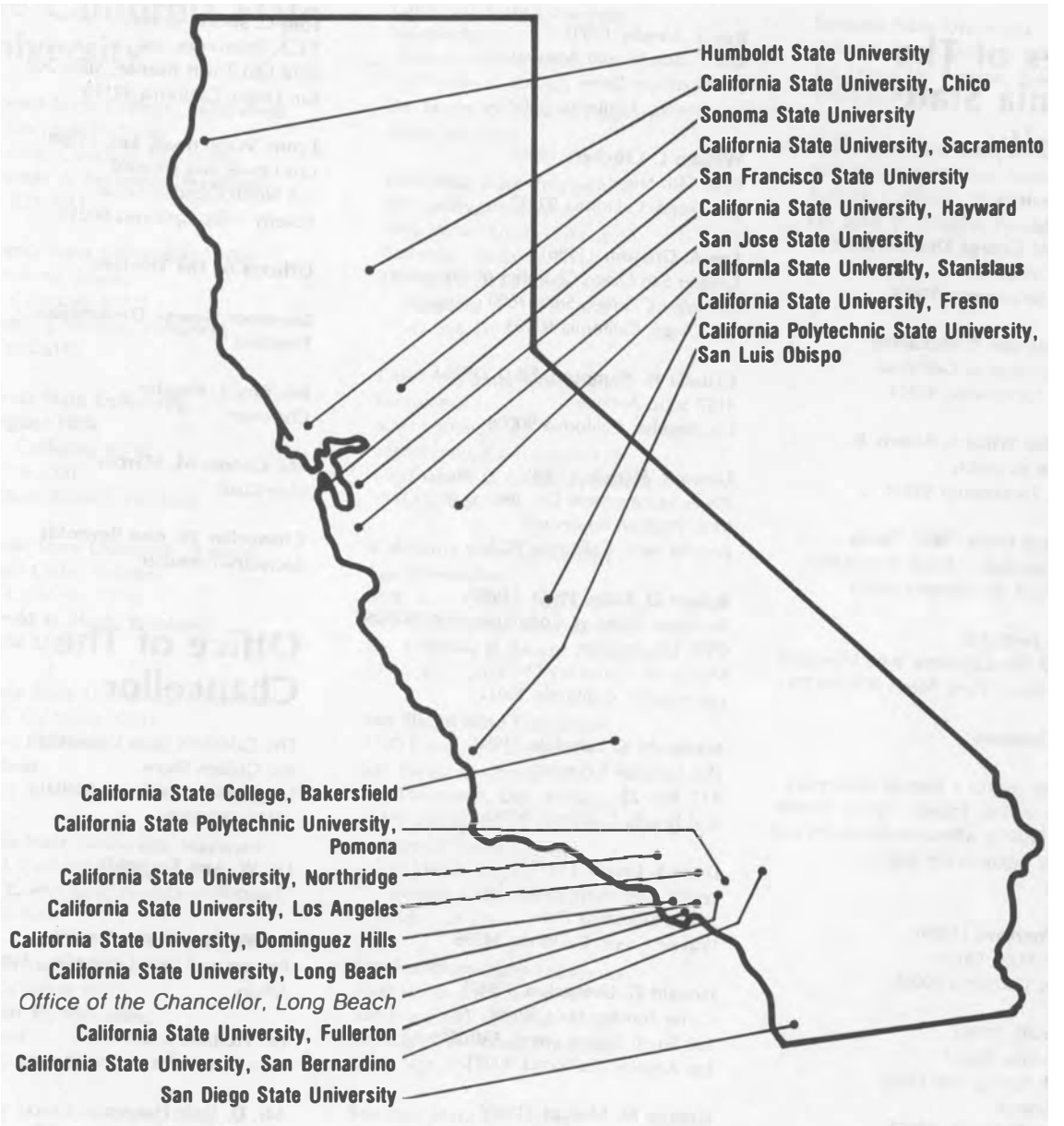
The Trustees, the Chancellor and the Presidents develop systemwide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of The California State University, made up of elected representatives of the faculty from each campus,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

Academic excellence has been achieved by the California State University 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.

The CSU offers more than 1,500 bachelor's and master's degree programs in some 200 subject areas. Many of these programs are offered so that students can complete all upper-division and graduate requirements by part-time late afternoon and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California.

The Consortium of the CSU draws on the resources of the 19 campuses to offer regional and statewide off-campus degree, certificate, and credential programs to individuals who find it difficult or impossible to attend classes on a campus. In addition to Consortium programs, individual campuses also offer external degree programs.

System enrollments total approximately 316,000 students, who are taught by a faculty of 18,700. Last year the system awarded over 50 percent of the bachelor's degrees and 30 percent of the master's degrees granted in California. More than 1 million persons have been graduated from the 19 campuses since 1960.


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

Trustees of The California State University

Ex Officio Trustees

The Honorable George Deukmejian
Governor of California
State Capitol, Sacramento 95814

The Honorable Leo T. McCarthy
Lieutenant Governor of California
State Capitol, Sacramento 95814

The Honorable Willie L. Brown, Jr.
Speaker of the Assembly
State Capitol, Sacramento 95814

The Honorable Louis "Bill" Honig
State Superintendent of Public Instruction
721 Capitol Mall, Sacramento 95814

Dr. W. Ann Reynolds
Chancellor of The California State University
400 Golden Shore, Long Beach 90802-4275

Appointed Trustees

Appointments are for a term of eight years except for a student Trustee, alumni Trustee and faculty Trustee whose terms are for two years. Terms expire in the year in parentheses.

Wallace Albertson (1986)
1618 Sunset Plaza Drive
Los Angeles, California 90069

Roland Arnall (1990)
Chairman of the Board
Long Beach Savings and Loan
11878 La Grange
Los Angeles, California 90025

Marian Bagdasarian (1988)
6382 East North Avenue
Fresno, California 93725

Celia I. Ballesteros, Esq. (1987)
530 B Street, Suite 2001
San Diego, California 92101

Thomas J. Bernard (1989)
Investors Bancor
2100 Main Street, Suite 104
Irvine, California 92714

Roy T. Brophy (1991)
Roy T. Brophy and Associates
3040 Explorer Drive
Sacramento, California 95827

William L. Crocker (1986)
4838 54th Street
San Diego, California 92115

Lee A. Grissom (1986)
Greater San Diego Chamber of Commerce
110 West C Street, Suite 1600
San Diego, California 92101

Claudia H. Hampton, Ed.D.(1986)
4157 Sutro Avenue
Los Angeles, California 90008

Dixon R. Harwin (1990)
Alwin Management Co., Inc.
9300 Wilshire Boulevard
Beverly Hills, California 90212

Robert D. Kully, Ph.D. (1985)
Professor, Dept. of Communication Studies
CSU, Los Angeles
5151 State University Drive
Los Angeles, California 90032

Marianthi K. Lansdale (1993)
The Lansdale Company
P.O. Box 27
Seal Beach, California 90740

Dean S. Lesher (1993)
Lesher Communications, Inc.
2640 Shadelands Drive
Walnut Creek, California 94596

Donald G. Livingston (1987)
Carter Hawley Hale Stores, Inc.
550 South Flower Street, 11th Floor
Los Angeles, California 90071

George M. Marcus (1989)
Marcus & Millichap Incorporated
2626 Hanover Street
Palo Alto, California 94304

Dale B. Ride, Ed.D. (1992)
Assistant to the Superintendent
Santa Monica Community College District
1900 Pico Boulevard
Santa Monica, California 90405

Willie J. Stennis (1991)
Golden Bird, Inc.
3947 Landmark
Culver City, California 90230

Tom C. Stickel (1992)
T.C.S. Enterprises, Inc.
3878 Old Town Avenue, Suite 202
San Diego, California 92110

Lynne Wasserman, Esq. (1988)
c/o Levine and Leonard
415 North Camden Drive
Beverly Hills, California 90210

Officers of The Trustees

Governor George Deukmejian
President

Mr. Roy T. Brophy
Chairman

Mr. George M. Marcus
Vice Chair

Chancellor W. Ann Reynolds
Secretary-Treasurer

Office of The Chancellor

The California State University
400 Golden Shore
Long Beach, California 90802
(213) 590-5506

Dr. W. Ann Reynolds
Chancellor

Dr. William E. Vandament
Provost and Vice Chancellor, Academic Affairs

Dr. Herbert L. Carter
Vice Chancellor, Administration

Mr. D. Dale Hanner
Vice Chancellor, Business Affairs

Dr. Caesar J. Naples
Vice Chancellor, Faculty and Staff Relations

Mr. Mayer Chapman
Vice Chancellor and General Counsel

The California State University

California State College, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93311-1099
Dr. Tomas A. Arciniega, President
(805) 833-2011

California State University, Chico
1st & ormal Streets
Chico, California 95929
Dr. Robin S. Wilson, President
(916) 895-6116

California State University, Dominguez Hills
Carson, California 90747
(213) 516-3300
Dr. Richard Butwell, President

California State University, Fresno
Shaw and Cedar Avenues
Fresno, California 93740
Dr. Harold H. Haak, President
(209) 294-4240

California State University, Fullerton
Fullerton, California 92634
Dr. Jewel Plummer Cobb, President
(714) 773-2011

California State University, Hayward
Hayward, California 94542
Dr. Ellis E. McCune, President
(415) 881-3000

Humboldt State University
Arcata, California 95521
Dr. Alistair W. McCrone, President
(707) 826-3011

California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, California 90840
Dr. Stephen Horn, President
(213) 498-4111

California State University, Los Angeles
5151 State University Drive
Los Angeles, California 90032
Dr. James M. Rosser, President
(213) 224-0111

California State University, Northridge
18111 Nordhoff Street
Northridge, California 91330
Dr. James W. Cleary, President
(818) 885-1200

California State Polytechnic University, Pomona
3801 West Temple Avenue
Pomona, California 91768
Dr. Hugh O. La Bounty, President
(714) 598-4592

California State University, Sacramento
6000 J Street
Sacramento, California 95819
Dr. Donald R. Gerth, President
(916) 278-6011

California State University, San Bernardino
5500 State College Parkway
San Bernardino, California 92407
Dr. Anthony H. Evans, President
(714) 887-7201

San Diego State University
5300 Campanile Drive
San Diego, California 92182
Dr. Thomas B. Day, President
(619) 265-5000
Imperial Valley Campus
720 Heber Avenue
Calexico, California 92231
(619) 357-3721

San Francisco State University
1600 Holloway Avenue
San Francisco, California 94132
Dr. Chia-Wei Woo, President
(415) 469-2141

San Jose State University
One Washington Square
San Jose, California 95192
Dr. Gail Fullerton, President
(408) 277-2000

California Polytechnic State University, San Luis Obispo
San Luis Obispo, California 93407
Dr. Warren J. Baker, President
(805) 546-0111

Sonoma State University
Rohnert Park, California 94928
Dr. David W. Benson, President
(707) 664-2880

California State University, Stanislaus
801 West Monte Vista Avenue
Turlock, California 95380
Dr. John W. Moore, President
(209) 667-3122

The Consortium of The California State University

The Consortium of the CSU—"The 1,000-Mile Campus"—is a separate, fully accredited, degree-granting entity of the CSU. It draws on the combined resources of the 19 campuses to offer external statewide and regional degree, certificate, and teaching credential programs.

The Consortium was established in 1973 to meet the needs of adults who find it difficult or impossible to participate in regular on-campus programs. Instruction is thus provided students in convenient places at convenient times. Currently, programs are offered in more than 50 sites throughout California.

Full and part-time CSU faculty, as well as qualified experienced practitioners, go where the students are, or provide opportunities for individualized home study. Programs can be tailored to meet the specific needs of employees in business, industry, education or government.

Consortium programs are upper division or graduate level. All courses offer residence credit leading to bachelor's or master's degrees. Credit and course work are transferable statewide. Programs are financed by student fees.

Academic policy for the Consortium is established by the statewide Academic Senate of the CSU. Degrees or certificates are awarded by the Consortium in the name of the Board of Trustees of the CSU. The Consortium is accredited by the Western Association of Schools and Colleges.

For more information contact: The Consortium of the California State University, 400 Golden Shore, Long Beach, California 90802-4275; (213) 590-5696.

The statewide Admissions and Records Office may be reached by dialing the following numbers: Los Angeles and Long Beach areas (213) 498-4119; all other areas in California toll free (800) 352-7517.



Sonoma State University

Sonoma State University Directory

The Advisory Board

Dr. Frederick A. Groverman
Mr. Gene M. Benedetti
Mr. C. C. Eddinger
Dr. Carl M. J. Aagaard
Mr. Haskell E. Boyett
Mr. Neil Ferguson
Mrs. Rochelle Fostmeier
Dr. Edward Lopez
Dr. Alexis Maximov
Mr. Robert Pantzer
Ms. Lois Prentice
Mrs. Helen Rudee
Mr. Henry Trione
Mr. David Viviani
Ms. Reggie Winner

The Administration

President
David W. Benson
Assistant to the President
Diane Abbey
Director, Affirmative Action
Barbara Lesch McCaffry
Director, Athletics
Ralph Barkey
Director, Campus-Community Relations
Gloria Oster
Public Information Officer
Barbara Foote

Vice President for Academic Affairs
Milton A. Gordon

Assistant to the Vice President
Bonnie J. Moody
Faculty Affairs Specialist
Louise F. Jensen

Dean, Academic Programs/Graduate Studies
Ardath Lee

Dean, Extended Education
David Walls

Dean, School of Arts and Humanities
William Babula
Associate Dean for the Performing Arts
William Sherman

Dean, School of Natural Sciences
Donald Farish

Dean, School of Social Sciences
Robert Karlsrud, Acting

Dean, School of Business and Economics
Jeffrey Doutt

Dean, School of Education
Carroll Mjelde, Acting

Director, Ruben Salazar Library
Ruth Hafter

Director, Sponsored Research
David Walls

Dean, Administrative Services
Richard Karas
Dean, Admissions and Records
Frank Tansey
Director, Financial Aid
George Urdzik
Registrar
Frederick Jorgensen
Director, Computing and Media Services
Eduard Glaaser

Business Manager
Benjamin Y. Quong

Director, Fiscal Services
Yolanda Nunez
Director, Personnel
I.R. "Ro" Reed
Director, Plant Operations/Campus Planning
William R. Mabry
Director, Procurement and Support Services
Alan K. Murray
Director, Public Safety
R. Richard Courier
Sonoma State Enterprises, Inc.
General Manager
Benjamin Y. Quong

Dean, Student Affairs
Rand Link

Associate Dean, Student Life
David Farrell
Director, Academic Advising
Barry Godolphin
Director, Career Development Center
Drew Calandrella
Director, Counseling
Vacant
Director, Educational Support Programs
William B. Clarke
Director, International Student Programs
Brian Shears
Director, Learning Center
Barbara Lesch McCaffry
Director, Office for Students with Disabilities
Anthony Tusler
Director, Student Health Center
James McKenna
Executive Director, Student Union
John Wright
Director, Testing Services
Gerald Alves



Degrees

Baccalaureate Degree Requirements

The University grants baccalaureate degrees for the successful completion of a coherent course of study at the University and the maintenance of appropriate levels of scholarship. The requirements which follow specify certain course work, unit distributions and levels of scholarship which the California State University and the faculty of Sonoma State University have determined provide an appropriate educational framework for all students pursuing a baccalaureate degree. These requirements, however, only provide a framework to define a significant and coherent program of study. It is critical that the student consult regularly with an academic advisor. Students who have declared a major are assigned an academic advisor in the department of their major. Students who have not yet declared a major will be assigned an academic advisor through the Advising Center. All students are welcome to use the services of the Advising Center for assistance in program planning or for referral to appropriate faculty.

Students are eligible for graduation when they are in good standing and have fulfilled the following requirements.

Faculty approval

The determination that students have achieved appropriate proficiency in any and all parts of the curriculum to warrant the granting of a degree is the responsibility of the faculty. A favorable vote of the faculty acting through the Academic Senate is required for the granting of any degree.

Completion of a General Education program

The effectiveness of an education in the Liberal Arts and Sciences is critically dependent upon the broad foundation of studies called General Education. Through a program of General Education, students learn a variety of basic skills and modes of disciplinary inquiry. General Education courses are not simply the preliminary and introductory studies of the various disciplines; rather, they provide the necessary context for the more specific study in the major and for the selection of appropriate electives.

Completion of a major

Through a concentration of studies in a particular major, students focus in depth upon a particular set of disciplines or subject areas. This focus is achieved through a plan of study specified as major requirements by the various departments. As major programs vary considerably in their requirements, students should consult with faculty advisors early in their academic programs. Descriptions of the majors are found with the department listing in the University Curricula section of the Catalog.

Completion of the Written English Proficiency Requirement

Students must demonstrate upper-level writing competency as a requirement for graduation. A test of competency in English composition (Written English Proficiency Test administered by the Testing Services Office) must be passed. The Written English Proficiency Test (WEPT) is required of all students in the junior year.

Students who fail the WEPT twice *must* take English 275 (College Composition) and pass the course with a C or better to fulfill this writing requirement; students who fail the WEPT *may* take English 275 and pass the course with a C or better to fulfill this writing requirement. The final examination in this course will be an in-class writing assignment similar to the WEPT.

As successful passage of the WEPT requirement is now also a prerequisite for the upper-division General Education communications course (Humanities 300), we recommend that students fulfill this graduation requirement *early in their junior year.*

Questions about this requirement should be directed to the English Department.

Maintenance of Scholarship

A grade point average of C (2.0) or better is required in work undertaken at Sonoma State University, as well as in the student's total undergraduate work and in the major field. The C (2.0) average for the major includes all classes listed on the Certification of Completion of Major Requirements form, except that supporting courses, while required for some majors, are not included in the major grade point average.

Course Requirements and Limitations

The following requirements and limitations with regard to course credit units must be observed.

1. A minimum of 124 semester units is required for graduation.

2. Completion of a minimum of 40 units of upper division work (courses 300–499) is required for the B.A.; 24 upper-division units in residence, 18 in the major for the B.S.

3. Completion of a minimum of 30 units in residence at Sonoma is required. Twenty-four of these units must be upper division, 12 must be in the major, and nine in General Education.

4. A maximum of 40 units of non-traditional credit may be allowed toward the degree.

Within that total, no more than one-third of the units required for the major may be non-traditionally graded. Students graduating from the Hutchins School of Liberal Studies may exceed this maximum with departmental consent. Other maximum limits of semester units to be applied toward degree requirements are:

Correspondence and Extension Studies	24 units
Community Involvement Project 295 and 395	6 units
Special Studies 495	12 units
Student-Instructed Courses (199 and 399)	12 units
College Level Examination Program credit	30 units
Community College transfer credit 70 units	
Challenge Examinations	30 units

Minor

A minor is not required for graduation. However, many departments offer programs leading to a minor and students are encouraged to consider pursuing a minor which complements their major. Minor programs ordinarily consist of approximately twenty units, six of which must be upper division, and require maintenance of a C (2.0) average. Faculty advisors in the department offering the minor will assist students in selecting appropriate courses. See also Career Minors (p. 69).

Electives

To complete the 124 semester units required for graduation after fulfillment of general education, statutory, and major requirements, students may choose from a broad spectrum of courses to broaden their education, deepen understanding of some aspect of their specialities, pursue work in related fields, and satisfy their curiosity and enthusiasm regarding particular areas of interest.

Double Major

Within the units required for the baccalaureate, it is sometimes possible for a student to complete the requirements for more than one major. The completion of additional majors will be noted at the time of graduation by appropriate entries on the academic record and on the commencement program. Second majors for a single baccalaureate degree must be selected from the same degree program (either Bachelor of Arts or Bachelor of Science) as the first major. Students who wish to complete requirements for a second major should consult with a faculty advisor early in their academic program.

Second Baccalaureate Degree

To earn a second baccalaureate degree at Sonoma, students must fulfill the requirements of the major, demonstrate competence in English composition, and satisfy the General Education-Breadth Requirements specified by Title V, Section 40405 of the California Administrative Code. Second baccalaureate candidates must complete thirty units of residence credit at Sonoma and should consult with their faculty advisors regarding the portion of those thirty units which must be earned in upper-division courses (minimum 24 for residency).

Awarding of Degrees

Degrees are awarded in January, June and August. (Diplomas are mailed approximately 3 months after the date of award of degree.) Commencement ceremonies are held once each year at the end of the Spring Semester. Candidates for graduation should file an "Application for Award of Degree" form at the Admissions Office two semesters prior to the anticipated date of graduation. This will enable the Evaluations Office to determine remaining requirements to be completed. See Academic Calendars (pp. 3–6) for filing dates.

Honors at Graduation

The University awards two types of honors to students at graduation: *cum laude* and "with distinction."

Cum laude is granted upon award of the baccalaureate degree to candidates whose entire collegiate scholastic record indicates a minimum grade point average of 3.50. In order to be considered for graduation *cum laude*, all candidates must earn a minimum of 45 letter graded semester units offered for the degree in resident study at Sonoma State University.

"With Distinction" is granted upon award of the baccalaureate degree to students who are judged by their departments to have made outstanding contributions to their disciplines. (The Psychology Department does not practice the award of graduation "with distinction.")

General Education Program

Goals and Objectives

The goal of the Disciplinary General Education Program is to provide an understanding of human nature and an appreciation of human achievements, and to instill in students a spirit of inquiry. The General Education Program is designed to provide students with basic skills and a common core of educational experience. Particularly, the purpose of this program is to provide means whereby graduates

- will have achieved the ability to think clearly and logically, to find and critically examine information, to communicate orally and in writing, and to perform quantitative functions;
- will have acquired appreciable knowledge about their own bodies and minds, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilizations;
- will have come to an understanding and appreciation of the methodologies, value systems, and thought processes employed in human inquiry.

The intent is that the General Education Program be planned and organized in such a manner that students will acquire the abilities, knowledge, understanding, and appreciation suggested as interrelated elements and not as isolated fragments.

Sonoma has developed two programs to meet these aims. The Disciplinary General Education program is organized according to the modes of inquiry and theoretical frameworks of the various academic disciplines in Humanities, Natural Sciences, and Social Sciences. It focuses upon the diversity of human experience both in time and across numerous cultures. The Hutchins School of Liberal Studies Interdisciplinary General Education program focuses on the interrelated nature of knowledge and bridges the traditional division among academic disciplines by organizing the general education seminars according to specific issues and themes. Readings from a variety of disciplines and from both Western and

non-Western sources provide the context for discussion of the perennial issues which mark both the delight and the despair of the human experience.

The coherence of education is dependent upon effective academic advising. Students are encouraged to make the fullest use of their advisors in selecting options within the program available, and in facilitating transfer between the programs. Sonoma State University General Education requirements may be partially met by completion of General Education programs at California Community Colleges and C.S.U. system campuses. General Education courses from other colleges and universities will also be accepted provided that those programs are consistent with the General Education goals of Sonoma and the guidelines of the California State University.

Students follow a General Education pattern appropriate to their Catalog year, which may be their year of admission, their year of graduation, or the year in which they began their latest period of continuous enrollment. The General Education patterns for the current year are found on this page.

Certain Sonoma State University General Education requirements may also be met through the following credit by examination programs:
College Level Examination Program (pp. 297 and 352)
College Board Advanced Placement (p. 297)
C.S.U. English Equivalency Exam and Science and Math Test (p. 297)
Departmental Challenge examinations (consult appropriate departments)

Option 1—The Disciplinary General Education Program

Distribution *

Each baccalaureate candidate shall complete a 48-unit General Education Program with the following distribution:

A. Communication and Critical Thinking 9 units
B. Natural Sciences and Mathematics 12 units
C. Arts and Humanities 12 units
D. Social Sciences 12 units
E. Integrated Person 3 units

One course in Ethnic Studies is required.** Courses which fulfill this requirements are listed and noted in the Humanities and Social Sciences sections (C and D) below.

At least nine of the 48 units must be earned in residence at Sonoma State University.

Nine of these units must be in upper-division level (300 and 400) courses and shall be taken no sooner than the term in which upper-division standing (completion of 60 semester units) is attained.

A. Communication and Critical Thinking

A minimum of nine semester units in communication in the English language and in critical thinking.

Instruction approved for fulfillment of the requirement in communication is designed to emphasize the content of communication as well as the form and provides an understanding of the psychological basis and the social significance of communication.

Instruction in critical thinking is designed to achieve an understanding of the relationship of language to logic, which leads to the ability to analyze, criticize, and advocate ideas, or reason inductively and deductively, and to reach factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief.

Select one course from each of the following three groups

1. WRITTEN AND ORAL ANALYSIS:
   HUM 300 Written and Oral Analysis (3 units)
   Prerequisites: a) satisfactory completion of the courses selected from groups 2 and 3 below; b) *either* passage of the Written English Proficiency Test or passage of ENG 375 College composition with a grade of C or better. HUM 300 may not be used to fulfill requirements for category C—Arts and Humanities.

2. FUNDAMENTALS OF COMMUNICATION:
   ENG 101 Expository Writing and Analytical Reading (3 units)

3. CRITICAL THINKING:
   PHIL 101 Critical Thinking (3 units)
   PHIL 200 Logic (3 units)

B. Natural Sciences and Mathematics

A minimum of twelve semester units (nine in science and three in mathematics) to include inquiry into the physical universe and its life forms, with some immediate participation in laboratory activity, and into mathematical concepts and quantitative reasoning and their applications, as well as the understanding of basic mathematical concepts. Students are strongly recommended to fulfill their mathematics requirement prior to, or concurrent with, their physical sciences requirement.

Select one course from group 1

1. MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING
   MATH 121 Introduction to Mathematical Analysis (3 units)
   MATH 131 Introduction to Discrete Mathematics (3 units)
   MATH 161 Calculus I with Analytic Geometry (4 units)
   MATH 217 Topics in Calculus for Management and the Social Sciences (3 units)

Select courses to total at least three units from each of the following two groups

2. PHYSICAL SCIENCES
   ASTR 100 Descriptive Astronomy (3 units)
   ASTR 200 Introductory Astronomy (3 units)
   ASTR 231 [1] Introductory Observational Astronomy (2 units)
   CHEM 102 [1] Chemistry and Society (3 units)
   CHEM 115A [1] General Chemistry (5 units)
   CHEM 125A [1] General Chemistry (5 units)

[1] meets laboratory requirement.

* Since General Education courses are subject to change, see current schedule of classes for up-to-date listing.
** Only *one* Ethnic Studies course may count towards fulfillment of General Education requirements.

GEOL 102 [1] General Geology (3 units)
GEOL 202 Rocks, Time and Evolution (3 units)
PHYS 100 Descriptive Physics (3 units)
PHYS 102 [1] Descriptive Physics Lab (1 unit)
PHYS 114 Introduction to Physics I (4 units)
PHYS 116 [1] Introductory Lab Experience (1 unit)
PHYS 209A [1] General Physics Lab (1 unit)
PHYS 210A General Physics (3 units)

3. BIOLOGICAL SCIENCES
BIOL 115 An Introduction to Biology (3 units)
BIOL 115L [1] Introductory Laboratory (1 unit)

To complete a minimum of nine semester units select additional courses from either group 2 or group 3 above or from group 4 following:

4. SPECIFIC EMPHASES
Biological Sciences
A TH 201 Introduction to Human Evolution (4 units)
BIOL 116 [1] Biology of Plants (4 units)
BIOL 117 [1] Biology of Animals (4 units)
BIOL 220 [1] Human Anatomy (4 units)
BIOL 224 Human Physiology (3 units)
BIOL 224L [1] Human Physiology Lab (2 units)
BIOL 312 Oceanology (3 units)
BIOL 314 [1] Field Biology (3 units)
BIOL 332 Plants and Civilization (3 units)
BIOL 385 Contemporary Issues in Biology (3 units)
Physical Sciences
ASTR 303 Extraterrestrial Intelligence and Interstellar Travel (3 units)
ASTR 305 Frontiers in Astronomy (3 units)
ASTR 350 Cosmology (3 units)
GEOG 204 Physical Geography (4 units)
GEOL 120 [1] Regional Field Geology (3 units)
GEOL 233 Geology of the Mountains (3 units)
GEOL 303 [1] Advanced Principles of Geology (4 units)
PHYS 300 Physics of Music (3 units)
PHYS 342 Popular Optics (3 units)

[1] Meets laboratory requirement.
** Current offerings include French, German, Latin, Italian, and Spanish in the Department of Foreign Languages, and Hindi in the India Studies Program. Foreign Language courses do not meet the Ethnic Studies requirement.

C. Arts and Humanities

A minimum of twelve semester units among the arts, literature, philosophy and foreign languages.

Instruction approved for the fullfillment of this requirement cultivates intellect, imagination, sensibility and sensitivity. It is meant in part to encourage students to respond subjectively as well as objectively to experience and to develop a sense of the integrity of emotional and intellectual response.

Select one course from each of the following four groups

1. THE FINE ARTS
ART 210 Introduction to Art History (3 units)
ART 211 Introduction to Art History (3 units)
ART 212 Introduction to World Film History (3 units)
ART 418B History to Modern Art (3 units)
MUS 250 Introduction to Masterworks (3 units)
MUS 252 Introduction to Masterworks (3 units)
MUS 350 Musics of the World (3 units)
MUS 372 A Social History of Music (3 units)
THAR 100 Introduction to History of Theatre and Dance (3 units)
THAR 300 Theatre in Action (3 units)

2. WORLD LITERATURE
ENG 214 Literature of the World (3 units)
FLIE 214 Intro to World Lit (3 units)

3. WORLD PHILOSOPHY
PHIL 100 Introduction to Philosophy (3 units)
PHIL 302 Ethics and Value Theory (3 units)

4. COMPARATIVE PERSPECTIVES
Courses marked with an asterisk (*) meet the Ethnic Studies requirement.
AMCS 255 * Ethnicity in the Humanities (4 units)
AMCS 360 Ethnic Literature (4 units)
FOR. LANG. (Any college level course of language instruction. Maximum 3 units) **
INDS 301A Indian Civilization: The Sacred Tradition (4 units)
INDS 301B Indian Civilization: The Secular Tradition (4 units)
MAMS 220 * Mexican-American Arts and Literature (4 units)
MAMS 451 Chicano Humanities (4 units)
NAMS 205 * Introduction to Native American Arts (4 units)
NAMS 346 * Philosophic Systems and Sacred Movements in Native North American (4 units)
SOC 431 Sociology of Religions (4 units)
MUS 370 Music of the World's Religions (3 units)

D. Social Sciences

A minimum of twelve semester units dealing with human, social, political, and economic institutions and behavior and their historical background.

Instruction approved for the fulfillment of this requirement reflects the fact that human, social, political and economic institutions and behavior are inextricably interwoven. Problems and issues in these areas are examined in their contemporary as well as historic setting, including both Western and non-Western contexts.

Select one course from each of the following four groups

1. SOCIAL STRUCTURE AND SOCIAL BEHAVIOR
Courses marked with an asterisk (*) meet the Ethnic Studies requirement
AMCS 210 * Ethnic Groups in America (4 units)
ANTH 203 Introduction to Cultural Systems (4 units)
ANTH 300 Nature and Culture: The Growth of Anthropology (4 units)
ECON 201A Introduction to Macroeconomics (4 units)
ECON 201B Introduction to Microeconomics (4 units)
GEOG 202 World Regional Geography (4 units)
GEOG 203 Cultural Geography (4 units)
GEOG 391 Regional Geography (3-4 units)
MAMS 219 * Mexican-American Culture (4 units)
NAMS 200 * Introduction to Native Americans (4 units)

POLS 201 Ideas and Institutions (4 units)
POLS 315 Democracy, Capitalism, Socialism (4 units)
PSY 250 Introduction to Psychology (4 units)
SOC 201 Introduction to Sociology (4 units)
SOC 375 Survey of Sociological Theory (4 units)

NOTE: Students may not use a course from their major field to fulfill the general education requirement in Social Structure and Social Behavior.

2. WORLD HISTORY
HIST 201 Foundations of World Civilization (3 units)
HIST 202 Development of the Modern World (3 units)

3. UNITED STATES HISTORY*
HIST 241 History of Americas to Independence (3 units)
HIST 242 History of Americas Since Independence (3 units)
HIST 251 History of the U.S. to 1865 (3 units)
HIST 252 History of the U.S. Since 1865 (3 units)

This requirement may also be fulfilled by successful passage of an examination administered by the History Department.

4. U.S. CONSTITUTION AND CALIFORNIA STATE AND LOCAL GOVERNMENT
POLS 200 American Political System (3 units)
POLS 202 Basic Issues in Twentieth Century American Politics (4 units)

This requirement may also be fulfilled by successful passage of an examination administered by the Political Science Department.

The Integrated Person

One course (a minimum of three semester units) designed to equip human beings for lifelong understanding and development of themselves as integrated physiological, social, and psychological organisms.

* If requirement met by exam without units, additional units in categories 1 and 2 will be required to bring the total number of units in Social Sciences to 12.

Select one course from the following
ANTH 318 Human Development: Sex and the Life Cycle (4 units)
ANTH 340 Living in a Pluralistic World (4 units)
BIOL 318 Biology of Aging (3 units) Prereq.: BIOL 115 (or equivalent or consent of department chair)
GEOG 338 Social Geography (3 units)
GERN 300 Basic Gerontology (3 units)
PSY 302 Development of the Person (4 units)
WOMS 350 Gender, Sex and Family (4 units)

Option 2—The Hutchins School of Liberal Studies Interdisciplinary General Education Program

The lower-division General Education requirements can be met by taking the four Hutchins School interdisciplinary seminars of 12 units each, and three units of mathematics. The seminars are: LIBS 101, The Human Enigma; LIBS 102, Exploring the Unknown; LIBS 201ABL, In Search of Self/The American Experience; LIBS 202, Challenge and Response in the Modern World.

In addition, nine units of upper-division General Education courses must be completed. The Multiple-Subject Option in the Hutchins major leads to automatic completion of these nine units. For other options within the Hutchins major three of the nine units are to be met with LIBS 401B. The remaining six units must be selected from upper-division courses in areas A–D of the Disciplinary General Education Program (Option 1).

Post-Baccalaureate Degrees

Graduate education at Sonoma provides opportunities for students to enhance their professional competence, develop the ability to conduct independent study and research, and prepare for significant participation in society. In order to accommodate students who are unable to pursue graduate work on a full-time basis, many master's programs at the University are scheduled to allow completion of degree requirements on a part-time basis over several semesters. Students interested in obtaining a second B.A. should refer to p. 17 for information.

Detailed descriptions of the following graduate programs are contained in academic department listings.

RESIDENCE MASTER'S DEGREE PROGRAMS
Biology
Counseling
Cultural Resources Mgt. (Anthropology)
Education (five options)
- Curriculum
- Early Childhood Education
- Educational Administration
- Reading
- Special Education

English
History
Management
Nursing
Physical Education
Public Administration
Psychology
Special Major (Interdisciplinary)

EXTERNAL MASTER'S DEGREE PROGRAM
Psychology

Admission Requirements

Admission requirements and procedures for graduate students are described under the general admissions section in this Catalog. Admission to the University with unclassified postbaccalaureate standing does not in anyway constitute admission to, or assurance of, consideration for admission to graduate degree, credential, or certificate programs. Two admissions procedures are involved in pursuing graduate work at the University: (1) admission to the University; and (2) admission to the department offering the degree or credential program in which the student is interested. Students should, therefore, contact both the relevant department and the Admissions Office.

Before being advanced to classified graduate standing, candidates must take one or more of the following examinations as specified by individual master's programs:
- Graduate Record Examination (Aptitude)
- Graduate Record Examination (Advanced)
- Graduate Management Admissions Test
- Miller Analogies Test
- Other departmental tests.

Scores on such tests serve as an aid in advising, which students should obtain in relevant departments, and may be used by individual programs as criteria for advancement to classified standing. Further information may be obtained from the University Testing Office.

Advancement to Classified Standing

Most students are admitted in unclassified or conditionally classified standing, neither of which guarantees the student a space in a graduate degree program. Such a guarantee is obtained by advancement to classified standing in the program in question. Each department has its own procedures for advancement, which become final at the University level upon the filing of Form G-1/G-2 (Advancement to Graduate Standing/Graduate Study Plan) in the Graduate Studies Office. It is the student's responsiblity to see that these and other forms are filed by deadlines given each semester in the Schedule of Classes.

Completion of the Written English Proficiency Requirement

In order to assure that graduate students possess the ability to communicate effectively in written English and the skills to write a thesis or comprehensive examination in a particular discipline, advancement to classified standing will be contingent upon fulfillment of the WEPT requirement, or fulfillment of departmentally-administered review procedures as designated by the Anthropology, English and History Departments and approved by the Graduate Studies Committee.

WEPT *Procedures* will be as follows:
1. SSU graduates who have passed the WEPT during the past five years will be considered to have completed the requirement.
2. Students who present evidence of passing an equivalent examination at another institution within the past five years (certifying writing proficiency at the upper division or graduate level) will be considered to have met the requirement.
3. All other students entering graduate programs will be required to take the test in their first semester at the University.
4. Students who pass the test with a score of 7 or above are qualified to move to classified standing, providing other University and departmental requirements have been met.
5. Students who fail the WEPT with a score of 5–6 will be required to take English 375, or to pursue some other appropriate means of remediation, and to retake the test.
6. Students who fail the test with a score of 4 or below will be denied admission to the graduate program but may, upon recommendation of the department, be directed into an appropriate writing course.
7. Prospective graduate students will take the WEPT on the regular, campus-wide administration dates.

General Requirements for the Master's Degree

Requirements for the master's degree include a minimum of 30 semester units of approved upper-division and graduate coursework with maintenance of a B (3.0) minimum grade point average. No course for which a final grade below "C" (2.0) is assigned may be used to satisfy requirements for an advanced degree. All course work to be applied to the requirements for a graduate degree must have been completed within seven years of the date of award of the degree.

Additional regulations are:

1. No fewer than one-half of the units shall be in graduate (500-level) courses.
2. Form G-2 must be filed before enrollment in final 15 units.
3. No fewer than 21 semester units shall be completed in residence.
4. No fewer than 18 semester units shall be completed in the major.
5. No more than six semester units shall be allowed for a thesis.
6. No more than nine units of extension or transfer credit (or combination of the two) may be allowed, subject to the approval of the department or division concerned.
7. No credit toward a master's degree will be given for student teaching.
8. The candidate must complete a master's thesis, creative project, investigative project, comprehensive examination, or any combination thereof for approval by the candidate's committee and the Graduate Dean. A public defense of the thesis or project is required.
9. Graduate students at Sonoma State University may, at the discretion of the department, take up to one-third of the total units applied to the master's degree in a nontraditional grading mode.

Provisional Unclassified Graduate Status for Senior Students

When applications for award of the baccalaureate degree are filed, students who plan to complete during their final semester upper-division and graduate level coursework that is not required for the baccalaureate degree may petition for provisional unclassified post-baccalaureate credit for such work. The petition must be filed at the same time as the application for award of the degree. Teaching credential candidates should consult the Education Department regarding the advisability of such a petition.

Provisional unclassified post-baccalaureate credit can only be granted for upper-division and graduate courses and will be recorded in the student's academic record as earned prior to the award of the baccalaureate degree. Such credit is applicable to graduate objectives at the discretion of the relevant academic department. Should requirements for the baccalaureate degree not be completed by the date specified on the application, the petition for post-baccalaureate credit becomes null and void.

Courses which may be included in Graduate Study Plan

* 300–499 Upper division courses *may be* acceptable for graduate credit.
500–599 Graduate courses.

* Although all courses numbered 400–499 are acceptable for salary increment credit for teachers, the acceptability of these courses as a part of a master's degree program is entirely dependent upon approval of the degree candidate's committee.



Career Planning

Career Planning

An education in the Liberal Arts and Sciences provides an excellent foundation for numerous career possibilities after graduation. In today's world, it is more and more common for people to switch careers several times during their working years. A liberal education offers the kind of training which fosters the flexibility and broadly-based skills needed to adapt to career change and to capitalize upon new opportunities as they present themselves.

It is a good idea to think about career planning and academic planning together, so that they can reinforce each other. The University provides students opportunities to explore the relationship between their course of study and career possibilities: the Career Development Center (described on p. 319); a specially designated Career Advisor in each academic department; courses in many departments which relate the major to careers in the field and courses focusing on career planning offered by the departments of Management and Psychology. In addition, academic advisors can assist in career planning.

The University also offers curricula specifically designed to address career preparation:

Pre-Law Program (see p. 255)
Pre-Medical Program (see p. 255)

Career Minors (see p. 69)

Arts Management
Health Systems Organization
Information & Research
Recording Technology
Science/Technical Writing
Teaching English as a Second Language

Advisory Plans/Options

Advisory Plans and Options in many majors are designed for a specific career orientation.

Departmental Minors

Many departments offer minors which can be utilized to enhance career objectives.



University Curricula

University Curricula

Bachelor of Arts Degrees

Major Programs	Page
Afro-American Studies	31
Anthropology	35
Art	46
Concentrations:	
Art History	
Art Studio	
Biology	59
B.A. Concentrations:	
Botany	
Cell Biology	
Ecology	
Marine Biology	
Medical Laboratory Technician	
Microbiology	
Zoology	
Chemistry	74
Communication Studies	81
Criminal Justice Administration	96
Economics	99
English	120
Concentrations:	
Literature	
Creative Writing	
Media/Communication	
Environmental Studies	128
Concentrations:	
Environmental Studies	128
Planning	128
French	137
Concentrations:	
Literature	
Language and Linguistics	
French Area Studies	
Geography	149
Cultural Studies	
Earth Sciences	
Geology	154
German	139
Concentrations:	
German History and Culture	
German Language and Literature	
International Affairs	
History	163
Hutchins School of Liberal Studies	171
India Studies	143
Liberal Studies (B.A.L.S.)	58
Management	190
Concentrations:	
Accounting	
Business Economics	
Finance	
International Management	
Management Science	
Management Systems Theory	
Marketing	
Organizational Theory and Human Resources	
Mathematics	201
Mexican American Studies	209
Music	214
Concentrations:	
Music Education	
Performance	
Jazz and Commercial	
Philosophy	239
Physical Education	245
Concentrations:	
Adapted PE	
Exercise Science	
Interdisciplinary	
Teacher Preparation	
Physics	254
Political Science	261
Psychology	271
Sociology	284
Spanish	145
Concentrations:	
Hispanic Literature and Culture	
International Affairs	
Linguistics	
Special Major	181
Theatre Arts	289
Concentrations:	
Dance	
Drama	

Bachelor of Science Degrees

Major Programs	Page
Chemistry	74
Computer Science	85
Concentrations:	
Computer Systems	
Computer Applications	
Geology	154
Mathematics	201
Concentrations:	
Applied Mathematics	
Computer Science	
Statistics	
Nursing	230
Physics	254
B.S. Concentrations:	
Applied Physics	
Special Major (Interdisciplinary)	181

Minor Programs *

	Page
American Ethnic Studies	32
Anthropology	38
Applied Arts	44
Art	48
Astronomy	55
Biology	60
Career Minors	69
Arts Management	
Health Systems Organizations	
Information and Research	
Recording Technology	
Science-Technical Writing	
Teaching English as a Second Language	
Chemistry	76
Communication Studies	82
Computer Theory and Applications	87
Criminal Justice Administration	97
Economics	100
English	122
Environmental Studies and Planning	130
French	137
Geography	150
Geology	155
German	140
Gerontology	159
History	163
India Studies	143
Integrative Studies	175
International Studies	185
Linguistics	187
Management	191
Mathematics	203
Mexican American Studies	211
Music	219
Native American Studies	227
Philosophy	241
Physical Education	247
Physical Science	253
Physics	256
Political Science	261
Psychology	273
Sociology	285
Spanish	145
Theatre Arts	290
Women's Studies	296

* Although a minor is not required for the bachelor's degree, many students find it to their advantage to complete one or more minors.

Master of Arts Degrees

	Page
Biology	61
Counseling	91
Concentrations:	
Marriage, Family, and Child Counseling	
School Counseling	
Cultural Resources Management (Anthropology)	38
Education	109
Concentrations:	
Administrative Services	
Curriculum	
Early Childhood Education	
Reading	
Special Education (includes)	
English	122
History	164
Management	192
Physical Education	248
Psychology	274
Special Major (Interdisciplinary)	182

Master of Sciences Degree

	Page
Nursing	233
Concentration:	
Family Nurse Practitioner	
Special Major (Interdisciplinary)	182

M.P.A. (Public Administration) 262

Course Numbering System

0–99	No academic credit/remedial course
100–299	Lower Division
300–499	Upper Division/*may* be acceptable for graduate credit
500–599	Graduate courses

School of Arts and Humanities

Dean: William Babula

The School of Arts and Humanities is one of three schools at Sonoma State University. This unusually diverse school combines education in the arts and humanities with a recognition of student career goals. In the arts, instructional programs include Applied Arts, Art, Creative Writing, Music and Theatre Arts. Programs in the humanities include American Multi-Cultural Studies, English, Foreign Languages, India Studies, Communications Studies, Mexican-American Studies, Native-American Studies, and Philosophy. The School of Arts and Humanities also houses the Hutchins School of Liberal Studies, the Special Major Program, and several Pre-Law programs.

Related to the School are the Center for Performing Arts, the Art Gallery, The Center for Critical Thinking and Moral Critique, the Sonoma Film Institute, the Writers Lecture Series, the campus radio station, the student newspaper, and the literary journal *Mandala*.

The faculty of the School is committed to excellence in teaching and a strong advising program. Special emphasis is placed on programs that combine traditional arts and humanities majors with career-oriented minors. Such programs include Art and the Performing Arts with Management, English with Science and Technical Writing, Foreign Languages with International Studies, Music with Recording and Computer Theory, American Multi-Cultural Studies with Criminal Justice Administration and Management among others. Supporting career goals while building upon the arts and humanities, the School provides an education that allows students to develop their ability to think and communicate, the best preparation for a changing future.

Center for Critical Thinking and Moral Critique

The Center conducts advanced research, in-service educational programs, professional conferences, and disseminates information on critical thinking and moral critique. It is premised on the democratic ideal as a principle of social organization, that is, "that it is possible so to structure the arrangements of society as to rest them ultimately upon the freely given consent of its members. Such an aim requires the institutionalization of reasoned procedures for the critical and public review of policy; it demands that judgments of policy be viewed not as the fixed privilege of any class or elite but as the common task of all, and it requires the supplanting of arbitrary and violent alteration of policy with institutionally channeled change ordered by reasoned persuasion and informed consent."*

It conducts its research through an international network of fellows and associates as follows:

Honorary Fellows

Max Black, Professor of Philosophy, Cornell University, Ithaca
Robert Ennis, Director, Illinois Thinking Project, University of Illinois, Urbana
Edward M. Glaser, Psychologist, Founder, Watson-Glaser Critical Thinking Test, Los Angeles
Matthew Lipman, Professor of Philosophy, Institute for the Advancement of Philosophy for Children, Montclair, N.J.
Israel Scheffler, Thomas Professor of Education and Philosophy, Harvard University
Michael Scriven, Professor of Philosophy, University of Western Australia, Nedlands, Australia

Research Associates

J. Anthony Blair, Professor of Philosophy, University of Windsor, Canada
Carl Jensen, Professor of Communication Studies, Sonoma State University
Ralph Johnson, Professor of Philosophy, University of Windsor, Canada
Don Lazere, Professor of English, California Polytechnic State University, San Luis Obispo
Perry Weddle, Professor of Philosophy, California State University, Sacramento
Ian Wright, Professor of Education, University of British Columbia, Canada

Teaching Associates

Robert Ennis, Center Fellow and Director, Illinois Thinking Project
Carl Jensen, Center Research Associate and Professor of Communication Studies
Robert Karlsrud, Professor of History
Don Lazere, Center Research Associate and Professor of English
Richard Paul, Director, Center for Critical Thinking and Moral Critique
Dianne Romain, Assistant Professor of Philosophy
Eugene Soules, Professor of English
Joel Rudinow, Lecturer in Philosophy

The work of the Center includes an annual International Conference on Critical Thinking and Education; a Master Teacher Program in Verbal Reasoning and Critical Thinking; a Supplementary Authorization Program in the teaching of critical thinking (under the Single Subject Waiver Credential Program of the State of California); in-service programs in the teaching of critical thinking; a Research Intern Program (for graduate students in the field of critical thinking and moral critique); a clearing house for the distribution of tests, documents, position papers, and research; research in the field of critical thinking and moral critique and in the reform of education based upon the teaching of reasoning and critical thinking skills across the curriculum. Other recent contributors include the historian Henry Steele Commager and George H. Hanford, President of the College Board.

* Israel Scheffler, *Reason and Teaching* (1973, Bobbs-Merrill Co., Inc.), page 137.

School of Natural Sciences

Dean: Donald Farish

The curriculum offered in the School of Natural Sciences meets the professional needs of students planning a career in science or mathematics, as well as the needs of students in fields as diverse as the arts or business. For example, art students may benefit from courses in optics (which includes the study of light and color), lasers and holography (a technology with extensive artistic possibilities), and anatomy. Students with career goals in fields such as management, law, and urban planning may find courses in mathematics, statistics or computing essential to their future. In addition, the School of Natural Sciences offers a rich selection of studies which can enhance a student's entire life. Courses in physical education, astronomy, and geology can provide a basis for life-long pursuits and enrichment.

Students preparing for careers in science or mathematics may follow quality programs in any of the School's seven departments. Former students in these programs have established excellent records—some have earned national awards, many have gone on to earn advanced degrees, and virtually all have found excellent.employment oportunities. In keeping with expressed student and community interest, the School of Natural Sciences now offers degree programs in Computer Science.

The School also offers a highly respected pre-health profession program which draws on the resources of several departments. The Health Professions Advisory Committee, composed of faculty from the departments of Chemistry, Biology, Physics, Mathematics, and Health Sciences & Physical Education, assists and advises students as they prepare for admission to Medical, Dental, Veterinary and other graduate schools in the health professions. Sonoma State students have won admission to these programs at rates well above national averages.

The School's dedicated faculty of professional scientists and mathematicians are proud of the education they provide and of the accomplishments of their students.

ENGINEERING

Sonoma State University does not offer degree programs in Engineering. It is possible, however, for students to take the courses in Mathematics, Physics, Chemistry, and Computer Science that are part of most engineering programs. Interested students should consult an advisor in the Department of Physics and Astronomy.

School of Social Sciences

Robert Karlsrud, Acting Dean

The social sciences are intimately concerned with human behavior in all of its complexity and with the many kinds of social relationships which influence us as we grow and change as unique individuals throughout our lives. In order to comprehend adequately the state of the human condition, we need to examine the interaction of man and environment—past, present, and future. Social scientists are interested in discovering the ways in which people are affected by their associations with various human groups, both large and small, including the multiplicity of organizations and institutions that characterize modern society. Through the social sciences, we also study the history of social institutions and seek to understand the continuing process of social change.

The School of Social Sciences at Sonoma State encompasses a particularly interesting combination of departments and programs. A student can choose from a variety of opportunities, ranging from the core of "traditional" social science fields with their emphases on applications (Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology), to various cross-disciplinary programs (Environmental Studies and Planning, Gerontology, Linguistics, Women's Studies), to our professional elements (Counseling Criminal Justice Administration, Education, Management Studies).

At Sonoma State, we have developed a special working relationship between the liberal arts and sciences and professional social science fields. We hope to help meet the needs of the world for sensitive and skills leaders and involved and concerned citizens who will strive toward the achievement of a more enlightened society.

All of our programs in Social Sciences permit enough flexibility to allow the student to select some course work from other areas of the social sciences; in some cases, special arrangements have been established to allow students to pursue a double major (e.g., in Management and Economics). Students in the social sciences have opportunities to study with faculty members who are working in a wide spectrum of interests, including such areas as: human services; refugee populations; bilingual education; energy studies; and the management and administration of organizations.

School of Business and Economics

Dean: Jeffrey Doutt

The School of Business and Economics prepares students for professional careers in business and economics by offering majors which incorporate an understanding of the theories, procedures, and practice of management. Students are exposed to alternative viewpoints concerning the analysis of organizational problems, including both qualitative and quantitative approaches. Emphasis is placed upon the role and responsibilities of decision-makers within a complex and ever-changing environment.

The School of Business and Economics includes the Department of Management and the Department of Economics. Through the Management major, the school provides students with a broad program of study which involves an integrative set of required core courses, a field of concentration for focus in a a sub-discipline, and a choice of electives. The Economics major offers students a firm foundation of undergraduate study in Economics, serving as sound preparation for graduate school, as well as for professional careers.

The undergraduate programs in the School of Business and Economics are intended

principally for those seeking entry into appropriate professional fields. Graduate study in Business at Sonoma State is designed to contribute to the professional advancement of those individuals interested in the intensive study of business administration at the post-baccalaureate level.

School of Education

Associate Dean: Carroll V. Mjelde

The School of Education, formerly the Department of Education, was recently established as a separate major School within Sonoma State University. The new administrative structure was formed to emphasize and facilitate the University-wide administrative and instructional responsibilities for the academic preparation of teachers within the University's teacher education credential programs. The School of Education is very actively associated with the many State, federal, county and community agencies in the on-going preparation of teachers.

The School of Education is committed to excellence in the professional preparation of teachers and other educational specialists. Programs offered by the School are based on a solid foundation of liberal arts and sciences and emphasize experiences which are both practical and theoretical. All programs are fully accredited.

While programs are designed primarily for positions in public schools, students receive preparation which is applicable to a variety of non-teaching positions in education or related human service fields within both the public and private sectors.

Two basic credential programs are offered within the School of Education—the Multiple Subject Credential, and the Single Subject Credential.

The Multiple Subject Credential, designed for the elementary school level teacher candidate authorizes the holder to teach all subjects required in the public school curriculum in a self-contained classroom, preschool through grade 12. In addition, a Multiple Subject Credential program with an emphasis in the area of Bilingual Education, and a Multiple Subject Credential program with an emphasis in Early Childhood Education are available for teacher candidates who desire to specialize within the Multiple Subject Credential Program.

The Single Subject Credential authorizes the holder to teach a particular subject in a school organized by subject departments, preschool through grade twelve. Since most elementary schools are not departmentalized, the Single Subject Credential, in practice, is appropriate for the secondary school teacher candidate.

The School of Education also offers programs leading to specialists credentials, service credentials, certificate programs and Master's Degree Programs.

The Department of American Multi-Cultural Studies is devoted to the interdisciplinary study of ethnic and minority groups in the United States. A variety of courses focus on the historical, sociological, cultural, and ideological aspects of American ethnicity.

The degree Program prepares individuals to function more effectively in the fields of education, personnel administration, business, public health, social service, and environmental planning. It also provides a sound foundation for graduate work in many of the traditional disciplines.

Department Chair:

James E. Gray

Faculty:

William Clarke, Herminia Menez

Part-Time Faculty:

Gayle Davis, Nakissa Modir, Victoria Strowbridge

Department Office:

Nichols Hall 214, phone (707) 664-2486

Major

	Units
General Education	48
Core requirements	24
Electives	13
Total needed for Major	36
Supporting Electives or 2nd Major	39
Total needed for Graduation	124

Core Requirements

AMCS 335 Historical Perspectives and Ethnicity	4
AMCS 405 The Family Comparative Perspectives or	
AMCS 345 Folklore and Ethnicity	4
And add one of the following:	
AMCS 425 Men/Women: Power in Interpersonal Relations	4
AMCS 432 Health and Culture	4
MAMS 445 Chicano History	4
WOMS 470 Sexism and Racism in the United States	4
AMCS 481 Seminar: Special Topics and Issues	
NAMS 301 Native California History & Culture	4
Total	24

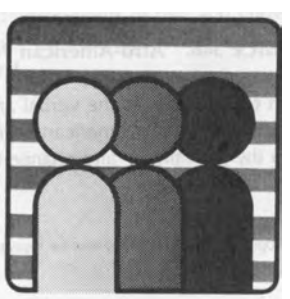
Elective Emphasis Within The Major

Twelve units must be selected from one of the two following lists. Additional units may be selected from either list or from other courses in the department.

Humanities Plan

AMCS 315 Arts, Music and Dance *	
AMCS 471 Afro-American Children's Literature	4
AMCS 390 Ethnic Theater	3
AMCS 392 Images in Film	4
AMCS 315 Ethnic Arts & Music	4
AMCS 320 Performing Arts Workshop	2
Total	12

* Topics subject to change. May be repeated for credit.



American Multi-Cultural Studies

Social Science Plan

AMCS 335 Historical Perspectives and Ethnicity	4
AMCS 405 Comparative Perspective	4
AMCS 432 Health and Culture	4
AMCS 433 Aging and Ethnic Minorities	4
Total	12

The Minor in American Ethnic Studies

Total Units Required	20

The minor is designed to provide multi-cultural perspectives for majors in the social sciences and the humanities. The minor as designated below may be altered only in consultation with faculty in American Multi-Cultural Studies Department:

	Units
AMCS 320 Performing Arts Workshop	4–8
AMCS 345 Folklore and Ethnicity	4
AMCS 433 Aging and Ethnic Minorities	4
AMCS 481 Special Topics	4

and one of the following:

MAMS 445 Chicano History	4
NAMS 301 Native California History and Culture	4
WOMS 470 Sexism and Racism in the United States	4
Total units needed for minor	20

American Multi-Cultural Studies Courses

AMCS 201. Career Planning for Non-Traditional Students (1)

This course is aimed at providing students interested in employment or continued education upon graduation with information about job opportunities and the necessary skills for job seeking. Current trends in the labor market will be reviewed. Resume preparation, interviewing skills, presentation of self and the importance of follow-up action will be stressed.

210. Ethnic Groups in America
(4)

A survey and analysis of the diverse experiences of major ethnic groups in their present socioeconomic and political position in American society as depicted in literary, historical, anthropological, and sociological studies.

220. Immigrants from Europe
(4)

An introductory survey of the causes, processes, and results of immigration to the United States from the countries of Europe. Emphasis will be upon the "new immigration" from 1880 to 1925 in the course of which the matrix of Euro-American ethnicality was established in the United States.

255. Ethnicity in the Humanities
(4)

A general survey of the major political, social, cultural, and economic developments in the United States with reference to native and nascent ethnic minority populations.

301. Experimental Courses
(1–4)

Refer to current schedule of classes.

AMCS 305. Contemporary Rock and Soul Music (4) (cross-listed as Music 480)

An historical overview and analysis of contemporary rock and soul musical styles, including critiques of musical content.

315. Ethnic Arts Music and Dance *
(4)

An in-depth study of the artistic, musical, and dance traditions of major ethnic groups in the U.S.

320. Performing Arts Workshop
(1–2)

The objective of this course is to present musical, dramatic, and dance performances with ethnic themes. Emphasis will be different from semester to semester.

330. Nationality, Ethnicity and History
(4) (cross-listed with History 330)

The interplay of ethnicity and nationality are studied from a historical perspective including: cyclical developments, cross cultural organizations and institutions.

335. Historical Perspectives and Ethnicity *
(4) (Topics subject to change)
(Cross listed as History 354)

An historical examination of the social, economic and political evolution of ethnic minorities within American society.

345. Folklore and Ethnicity
(4) *

Methods and materials dealing with the traditional expressive culture of American ethnic groups: oral literature, festivals, children's games, customs and beliefs, etc. Includes training in collecting oral traditions and in the analysis of folklore texts and context.

AMCE 346. Afro-American Folklore (4)

An examination of the verbal and musical traditions of Afro-Americans, with emphasis on their continuity and change from Africa to the Americas.

* Topics subject to change; may be repeated for credit

355. Language and Ethnicity
(4) * (Cross listed with MAMS 326)

A study of language as an ethnic marker; language and ethnic identity; language and national revival; bilingualism and bi-dialectism; standard and non-standard speech; foreign accents; linguistic assimilation vs. language retention.

360. Ethnic Literature
(4) *

A survey of the representative novels, short stories, essays, biographies and poetry of various ethnic authors in the United States. Thematic focus will vary from semester to semester.

370. Asian-Americans
(4) *

A description and an analysis of the history and culture of Chinese-, Japanese-, and Filipino-Americans, with emphasis on their ethnic experience in California.

389. Jazz Improvisations
(1–2) (Cross-listed with Music 389)

The study of the basic tonal and rhythmic principles used by jazz musicians from Buddy Bolden to John Coltrane.

390. Ethnic Theater
(3) *

A general introduction to the history of ethnic theater in the United States and the relationship between developments in theater and current political and socio-cultural events.

392. Images in Film
(4) *

An examination of representative and significant films tracing the evolution of ethnic minorities in cinema. The relationship between developments in film and current political and socio-cultural events will be emphasized.

395. Community Involvement Program
(1–4)

This course is intended to provide students with practical experience in various ethnic community organizations and health and social service agencies, including recreation programs, day care centers, senior citizen centers, etc.

AMCS 400. Pan-African Cultures (4) (Cross-listed as Anthropology 369)

The history of third world people in their African and Caribbean nation-states as well as in America has been shaped by the twin forces of imperialism and neo-colonialism. These two models as well as an in-depth examination of Afro-American cultures in the Western Hemisphere will be addressed.

405. The Family: Comparative Perspectives
(4) * †

An analysis of family structure and function from a multi-cultural perspective. Sociological and anthropological literature on ethnic families will be examined to show the range of variation of family systems in the U.S. and its implications for health and social services.

420. Sexism and Racism in the United States
(4) (Cross listed as Women Studies 470)

A historical overview of racism and sexism as they affect women of color, focusing on issues in which racism and sexism intersect, e.g., affirmative action, abortion, forced sterilization, violence against women and other issues.

432. Health and Culture
(4) * †

An analysis of cultural and ethnic influences on health and health behavior, with an emphasis on developing strategies for bridging cultural disjunctions between health professionals and their clients, and for improving health care delivery to an ethnically diverse population.

433. Aging and Ethnic Minorities
(4) * †

An examination of the aging experience of ethnic minorities in American society, cultural/ethnic attitudes towards aging and the aged, cultural and ethnic support systems for the aged in ethnic communities, and strategies for improving health and social services for the elderly. Student involvement in a senior citizen center is required.

450. Multi-Cultural Resources Development
(4)

An analysis of philosophical and definition issues related to pluralistic education; developing resources germane to this philosophy and the guidelines constituting the foundation from multi-ethnic programs and practices.

455. Immigration and Ethnicity
(4)

A study of ethnic minorities in the United States and the socio-cultural, political, and economic factors which influence our multi-cultural society.

471. Children's Literature
(4) * †

A study of multi-ethnic literature for children. Selected stories from folklore and literature will be used to exemplify cultural images and traditions.

AMCS 472. Contemporary Afro-American Literature (4)

A study of Black writers and their works, e.g., Richard Wright, Ernest Gaines, Cecil Brown, Ronald Fair, Alice Walker, and other contemporary authors.

480. Senior Seminar
(4) * †

The application of research techniques and methodology in the examination of cross cultural themes, problems and institutions.

AMCS 481. Special Topics (1–4)

Refer to current schedule of classes.

* Topics subject to change; may be repeated for credit.
† Prerequisite: Consent of instructor.

490. Research and Methodology
(4) * †

Survey of research and methodological tools used in the study of American ethnic groups. Special attention is given to the problems of objectivity and bias and the political and moral implications of field research. It is recommended that majors complete this requirement as early as possible.

495. Special Studies
(1–4)

Prerequisite: AMCS 210 or 255; a core upper-division course; approval of supervising faculty member and approval of department chair.

* Topics subject to change; may be repeated for credit.
† Prerequisite: Consent of instructor.

As part of a liberal arts education the study of Anthropology illuminates the coherence which underlies the apparently arbitrary nature of human society, and provides individuals with a broad perspective for viewing themselves and others. Training in Anthropology can be invaluable in preparing students for careers either in research professions or vocations involving human services or planned change. Some of these are cultural resources management, environmental planning, nursing, teaching, public health, administration, business, public relations, law, community development, and international service.

The Anthropology department offers several alternative B.A. degree programs as well as minor programs in Anthropology. The general Anthropology B.A. Program provides a balanced grounding in the theoretical approaches and the body of knowledge central to the discipline of Anthropology. Four subdisciplines make up the core of the Anthropology curriculum.

Biological Anthropology deals with the evolution of the human body, mind, and behavior as inferred through study of fossils and comparisons with behavior of other primate species.

Archaeology deals with the reconstruction of past ways of life through the interpretation of material remains.

Cultural Anthropology explores the diversity of existing human ways of life and the dynamics of change in cultural systems.

Anthropological Linguistics examines the structure and diversity of language and related human communication systems.

The Archaeology Advisory Plan in the Major prepares students for careers in public and private environmental and planning agencies, as well as providing a general liberal arts background.

The Health and Illness Advisory Plan focuses on medical anthropology and related areas. This Program prepares students for careers in medical anthropology, public health, public health nursing, international health, mental health, and related fields, with a cross-cultural focus.

The Special Emphasis Advisory Plan provides students with an opportunity to design an individualized course of study emphasizing a particular sub-field of anthropology.

The department also offers a Master of Arts degree in Cultural Resources Management which involves the identification, evaluation and preservation of cultural resources, as mandated by cultural resources legislation and guided by scientific standards within the planning process. The primary objective of the Master's Program in Cultural Resources Management is to produce professionals competent in the methods and techniques appropriate for filling cultural resources management and related positions, and with the theoretical background necessary for research design, and data collection and analysis.

Guided by the principle that research and teaching are inseparable at the university level, the department encourages both graduate and undergraduate students to meet professional standards of achievement in their work and research. The faculty assists students in developing and executing individual research projects. Students often present the results of their work in professional meetings, research publications, and public documents.



Anthropology

The department's Anthropological Studies Center houses archaeology and ethnographic laboratories, a cultural resources management facility, and the California State Regional Archaeological Center for the North Coast Counties. The Studies Center maintains collections of artifacts, archaeological site records and maps, photographs, manuscripts, tapes, and a specialized research library. In addition the Center provides facilities for specialized processing techniques such as obsidian hydration.

Other facilities include a physical anthropology laboratory, an ethnographic and primate film library, human relations area files and computer services.

Anthropology Scholarship

The Department offers an Anthropology Scholarship, awarded each academic year to an undergraduate major, on the basis of academic achievement and commitment to the discipline. For further details, contact the Department Office.

Department Chair:

David W. Peri

Department Office:

Secretaries: Yvonne Thompson, Rose Bravo
Stevenson 2026, Phone (707) 664-2312

Faculty:

JAMES BENNYHOFF: Archeology of California, archeological methods; Mesoamerica.

MILDRED DICKEMANN: Human social biology, human ecology, educational anthropology; Oceania, North America.

DAVID A. FREDRICKSON: Cultural resource management, archeology, social anthropology; North America.

SUE TAYLOR PARKER: Physical anthropology, evolutionary biology, comparative primate development, cognitive ethnology.

DAVID W. PERI: Educational anthropology, history and theory, ethnographic method, anthropological film, cultural resource management, ethnohistory, economic anthropology; North America, California.

R. THOMAS ROSIN: Culture change, anthropological theory, peasant societies, political anthropology; South Asia.

SHIRLEY K. SILVER: Descriptive and comparative linguistics, linguistic anthropology, second language learning/acquisition teaching; North America, California.

ALBERT L. WAHRHAFTIG: Anthropological theory and method, applied anthropology, psychological anthropology, sacred processes and ritual systems, identity and cultural persistence; North America, Middle America, American culture.

Part-Time Faculty:

DWIGT D. SIMONS: Zooarchaeology, Quarternary Studies, Paleoenvironmental Analysis, Western North America and California Archaeology.

Degrees Offered: B.A. and M.A. The Anthropology curriculum is designed to provide students with a strong background in the principles of anthropology and rigorous upper division instruction in a number of basic areas. This combination of breadth and in-depth instruction allows students to develop the intellectual foundations and the anthropological skills necessary to deal with the specific anthropological concerns of today and the flexibility to meet the needs of the profession. From this base any of the following concentrations may be pursued.

B.A. Concentrations

Archaeology
Health and Illness

Bachelor of Arts in Anthropology

Note: Interested students should consult with the Department as to new programs, and courses, as well as changes in existing programs, which may not be included in this 2-year catalog.

General Anthropology Major

	Units
General Education	48
Anthropology Courses	40
Foreign Language and/or Electives	36
Total	124

Note: A maximum of 9 transfer units in lower division courses can be used to complete the 40-unit Anthropology major options and concentrations.

Course Requirements

INTRODUCTORY:
- Anth 201—Introduction to Human Evolution
- Anth 203—Introduction to Cultural Anthropology

These two courses must be completed during the student's first year in the major.

SYNTHESIS:
- Anth 300—Nature and Culture: The Growth of Anthropology

This course should be completed during the first semester of upper division instruction.

UPPER DIVISION:
- Course in Archaeology.
- Course in Cultural Analysis and Theory *or* an Ethnographic Area.
- Course in Biological Anthropology.
- Course in Anthropological Linguistics.

Other Anthropology upper division courses to complete a total of 40 units in Anthropology.

Special Emphasis Major

The Special Emphasis B.A. in Anthropology is designed for students whose academic and/or professional aims are not satisfied by the Department's existing degree Program. The purpose of the Special Emphasis Major is to provide students with an opportunity to design, in consultation with an advisor, an individualized course of study emphasizing a particular subfield of anthropology, leading to a Bachelor of Arts Degree. In this respect, the Program provides students with the option to pursue special intellectual directions in anthropology, and to respond to career and employment potentialities. Such directions include, among others, anthropological linguistics, economic and ecological anthropology, prehistory, applied anthropology, and human biology, etc.

The Special Emphasis Major consists of 40 units selected from three course areas: 16 units in Core Courses; 12 to 20 units in Special Emphasis Courses; and 4 to 12 units in Supporting Courses, all selected in consultation with and approved by a faculty advisor.

Procedures

Students should carefully review their reasons for pursuing the Special Emphasis Major, identify a special interest, and make a tentative selection of courses (application forms are available from the Department Office). Students should then select appropriate advisors, who will review the proposed Program. Upon approval by the advisor, the Program will be submitted to the Department for action. Departmental approval is required for all Special Emphasis Programs, and regular consultation with the faculty advisor is mandatory. Any changes in an authorized course of study must meet with the advisor's approval.

Course Requirements

Students must take a minimum of 12 units in Special Emphasis Courses and a minimum of 4 units in Supporting Courses. Any units then lacking to make up the 40 unit requirement may be chosen from either of these categories.

Core Courses (16 units)

Introductory (8 units)

Anthropology 201 Introduction to Human Evolution (4)
Anthropology 203 Introduction to Cultural Anthropology (4)

History and Theory (4 units)

Anthropology 300 Nature and Culture: The Growth of Anthropology (4)

Methods (4 units, select one)

Anthropology 389 Language and Communication (4)
Anthropology 422A/B Archaeological Methods (4)
Anthropology 441 Laboratory in Ethnographic Field Methods (4)
Anthropology 482A/B Linguistic Field Methods and Laboratory (4)

Special Emphasis Courses

12–20 upper division units of anthropology courses in support of the special emphasis in consultation with an advisor. A maximum of 4 units may be taken in Special Studies and/or Internships.

Supporting Courses

4–12 upper division units in supporting courses outside Anthropology in support of the special emphasis and in consultation with an advisor.

Major in Anthropology with an Advisory Plan

B.A. in Anthropology with an Advisory Plan in Archaeology

This plan is designed for students planning a career with various public and private agencies involved with environmental planning. It also provides the necessary background for graduate work in this field as well as in prehistory.

In addition to the Introductory Course Requirements the following shall be taken:

1. Upper Division (32 units):
   a. Anthropology 300. Nature and Culture: The Growth of Anthropology (4)
   b. Anthropology 302. Human Ethology and Sociobiology (4)
   c. Anthropology 321. Archaeology and Society (4)
      or:
      Anthropology 332. Prehistory of California (4)
   d. Anthropology 345. Human Ecology (4)
   e. Anthropology 382. Language Change (4)
   f. Any three of the following, chosen in consultation with the advisor:
      Anthropology 422A. Archaeological Methods: Lab (4)
      Anthropology 422B. Archaeological Methods: Field (4)
      Anthropology 499. Anthropology Internship (4)
      Anthropology 528. Methods in Cultural Resources Management (4)
2. Supporting Courses—While not required for completion of this plan, students are strongly urged to broaden their knowledge and capabilities by taking *at least four of the following electives:*
   Anthropology 301. Fossil Man and Race (4)
   Anthropology 342. Organization of Societies (4)
   Anthropology 350. Applied Anthropology (4)
   Anthropology 361. Indians of California (4)
   ENSP 315. Environmental Impact Reporting (4)
   ENSP 318. Land Resource Planning (3)
   ENSP 333. Nature of Soils (4)
   Geography 380. Map and Air Photo Intepretation (4)
   Geography 385. Introductory Cartography and Graphics (4)
   History 363. The Redwood Empire (4)

B.A. in Anthropology with an Advisory Plan in Health and Illness

This plan is designed for students planning careers in medical anthropology, public health and public health nursing, international health, mental health and related fields, with a cross-cultural focus. It provides a strong background for graduate training at the M.A. and Ph.D. levels in these fields.

In addition to the introductory Course Requirements the following shall be taken:

1. Upper Division: (32 units):
   a. Anthropology 300. Nature and Culture: The Growth of Anthropology (4)
   b. Anthropology 302. Human Ethology and Sociobiology (4)
   c. Anthropology 318. Human Development: Sex and the Life Cycle (4)
   d. Anthropology 345. Human Ecology (4)
   e. Anthropology 350. Applied Anthropology (4)
   f. Anthropology 357. Medical Anthropology (4)
   g. Anthropology 441. Laboratory in Ethnographic Field Methods (4)
   h. One additional 4 unit course in cultural analysis, an ethnographic area or linquistics, to be chosen in consultation with the major advisor.
2. Supporting Courses: (Total 13–16 units) (Please see Catalog for prerequisites)
   a. One course in statistics for the social sciences (3–4) (See offerings in Mathematics, Management, Politics and Psychology)
   b. Any two of the following:
      Biology 224. Human Physiology (3)
      Biology 322. Human Genetics (4)
      Biology 380. Principles and Problems in Human Nutrition (4)
   c. Any two of the following:
      Sociology 318. Sociology of Mental Illness (4)
      Gerontology 319. Aging and Society (4)
      Gerontology 332. Death and American Culture (4)
      Gerontology 452. Health Care and Illness (4)
      Amer. Multi-Cultural Studies 432. Health and Culture (4)
      Economics 393. Economics of Health Systems (4)

Minor in Anthropology

The Anthropology minor consists of 20 units in Anthropology chosen in consultation with an Anthropology Department advisor.

Elementary and Secondary Teaching Credentials Preparation

A major in anthropology is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, students must pass the General Knowledge portion of the National Teacher's Examination. For a secondary teaching credential, students must pass the National Teacher's Examination in Social Science. Anthropology majors seeking a teaching credential are encouraged to consult with the Department's Credentials Advisor, and review the University's special bulletin on programs in teacher education.

Pre-Law

Students interested in developing a pre-law program with a major in Anthropology should see the Department's Pre-Law Advisor.

Master of Arts in Cultural Resources Management

The Program in Cultural Resources Management provides its graduates with the following:

1. Training and experience in developing projects and programs in Cultural Resources Management.
2. Training and experience in conducting analyses of archaeological, linguistic and sociocultural data for purposes of assisting public and private sectors in the implementation of environmental protection and historic preservation legislation.
3. Training in the professional traditions of inquiry within anthropology and history to enable the student to assess the research significance of archaeological and ethnohistorical resources.
4. Training in and experience with anthropological techniques of field and laboratory analysis, and archival and museum preparation.
5. Training in and experience with existing Cultural Resources Management data-keeping facilities.

Persons with a Master's degree in Cultural Resources Management will be qualified to hold positions within the United States and its territories. Such individuals will also be qualified to serve outside of the United States in an advisory capacity in establishing and managing Cultural Resources Programs within environmental protection and preservation contexts of other nations. Each candidate, with the assistance and supervision of a faculty adviser, develops a plan of study and thesis project which reflects his/her special interest in Cultural Resources Management.

Admissions Procedures

1. Acceptance by the Anthropology Department Graduate Admissions committee as a participating student in the Cultural Resources Management M.A. Program.
   The applicant must:
   a. Submit a letter of application briefly describing his/her interests in the Program and career objectives.
   b. Attain at least a 3.0 grade point

average in undergraduate and unclassified graduate courses completed. Under unusual circumstances, this requirement may be waived for students who satisfy the University requirement of a 2.5 grade point average for the last 60 units of all work attempted. Such waiver requires the unanimous approval of the Graduate Admissions Committee of the Anthropology Department.

c. Submit an example of the candidate's written work (term paper, technical report, article or equivalent) to evaluate as an example of the candidate's writing ability.
d. Submit recommendations from two persons familiar with the applicant's professional potential.
e. Take the Graduate Record Examination Aptitude Test. Scores will be reviewed for purposes of advising but will not determine admission to the Program. The GRE should be taken at the earliest opportunity.
f. Submit a resumé detailing previous experience in archaeological and/or anthropological or environmentally related activities.
g. Complete a course of study equivalent to a minor in Anthropology; that is, a minimum of 20 units with one course in (1) archaeology, (2) cultural analysis and theory, (3) anthropological linguistics, and (4) human evolutionary and/or ecological theory, or human osteology. These requirements may be met while in conditional status prior to admission to classified status. The courses are an admissions requirement and do not count toward completion of the M.A. degree.

2. Admission to conditional postbaccalaureate standing by Sonoma State University (See p. 308 for requirements).
3. Admission by Sonoma State University to classified postbaccalaurate standing. The Graduate Advisor will collaborate with each student in developing the required study plan.

Applications for classified status must be completed by the tenth week of the semester prior to registration as a classified graduate student.

To apply for admission to Sonoma State University as an unclassified postbaccalaureate student write directly to the University Admissions Office.

To apply for admission to the Cultural Resources Management Program, write to:

Graduate Advisor
Anthropology Department
Sonoma State University
Rohnert Park, CA 94928

Refer to Section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Requirements

To complete the Program the candidate must:

1. Maintain a graduate grade point average of at least 3.0.
2. Complete thirty units of approved graduate study.
3. Complete a thesis project acceptable to the candidate's graduate committee.

Course Pattern	*Units*
Anthro. 500—Proseminar	4
Hist. 501—Seminar in Culture, Society, and Policy Analysis	4
Anthro. 502—Seminar in Ecology and Prehistory	4
Anthro. 503—Seminar in Cultural Resource Management	4
Anthro. 504A/B—Thesis	6
Supporting Courses	8
	30

While not required for the Master of Arts, completion of appropriate internships (Anthropology 599) is strongly recommended.

Community College Instructor Credential

Graduate students, including CRM and Special M.A. candidates, are encouraged to consult with the Departmental Graduate or Credential's Advisor about obtaining the California Community College (Junior College) Instructor Credential in Anthropology, simultaneously with the Master of Arts in Cultural Resources Management, or the Special M.A. degree.

Anthropology Courses

Lower Division Courses

INTRODUCTORY COURSES

*** 201. Introduction to Human Evolution**
(4) (Fall and Spring) Parker

An introduction to the evolutionary biology of human and nonhuman primates; evolutionary perspectives on form and function, behavior, population and social structure are focused on reconstructing human evolution and explaining human adaptations. Concurrent enrollment in Biology 115 is recommended.

202. Introduction to Prehistory
(4) (Spring) Dickemann

A survey of world prehistory from the earliest evidences of culture to the rise of urban civilizations in the Near East and the Americas. Emphasis on the reconstruction of human social and technical life and its relation to environmental settings. Brief attention to methods of investigation and reconstruction.

**** 203. Introduction to Cultural Anthropology**
(4) (Fall and Spring) Staff

Examination of the anthropological approach to the study of human behavior. Emphasizes understanding human dependence on learned, socially transmitted behavior through consideration of ways of life in a broad range of societies.

* Fulfills General Education requirement in Specific Emphases (Biological Sciences).
** Fulfills General Education requirement in Social Science.

Upper Division Courses

***** 300. Nature and Culture: The Growth of Anthropology**
(4) (Fall) Staff

The nature of science, disciplinary inquiry, and the changing intellectual, institutional, and material context of the development of anthropology in the modern world. Identification of significant issues, schools of thought, and historic persons. Training in scholarly procedure, library research, bibliography, and professional format and style.

BIOLOGICAL ANTHROPOLOGY

301. Fossil Man and Race
(4) (Alternate Spring) Parker

Investigations of human populations and races; their ages, their relative sizes; their geographic distributions; their genetic and morphological variations.
Prerequisite: Upper division standing and Biology 115 or Anthropology 201 or equivalent, or consent of instructor.

302. Human Ethology and Sociobiology
(4) (Spring) (Cross-listed with Psych. 484—Human Ethology) Parker

Ethological and sociobiological perspectives on human rituals, aggression, bonding, and bodily and behavioral displays of age, sex, status, and emotion.
Prerequisite: Upper division standing and Biology 115 or Anthropology 201 or equivalent, or consent of instructor.

****** 318. Human Development: Sex and the Life Cycle**
(4) (Fall) (Cross-listed with Psych. 409—Developmental Psychology) Parker

An examination of developmental and evolutionary aspects of human reproductive biology and behavior from fetal through adult stages. Sexual selection and life history perspectives on fetal sex differentiation, infantile sexuality, gender identity, sex role development, puberty and secondary sexual characteristics, mate choice, courtship, marriage, and copulation in primate and human societies.

*** Fulfills upper-division General Education requirement in Integrated Person.
**** Fulfills upper-division General Education requirement in Social Sciences.

ARCHAEOLOGY

320. Archaeology of the Redwood Empire
(4) (Alternate Fall) Fredrickson

Survey of substantive results of archaeological work in the North Coast Range in the context of California Archaeology; consideration of the relationships of archaeology to contemporary society.

321. Archaeology and Society
(4) (Alternate Fall) Fredrickson

Introduction to archaeological theory; discussion of methods employed in the study of prehistory with emphasis upon methods of arriving at inferences concerning social behavior.

332. Prehistory of California
(4) (Spring) Bennyhoff, Fredrickson

Survey of cultural sequences in prehistoric California; examination of adaptations, technological and stylistic change, and relationships to other North American cultures; application of anthropological, linguistic and archaeological method and theory to California materials.

335. Ancient Civilizations of Mesoamerica
(4) (Fall or Spring) Staff

A survey of the cultural prehistory of selected regions of Mexico, Guatemala, and Honduras, from the terminal Pleistocene to the Spanish Conquest. The development of agriculture and the emergence of civilization will be emphasized, with particular attention devoted to the Olmec, Monte Alban, Teotihuacan, and Maya traditions.

CULTURAL ANALYSIS AND THEORY

***** 340. Living in a Pluralistic World**
(4) (Fall and Spring) Rosin, Wahrhaftig

A comparative exploration of the major differences in human experience and life cycle on the level of the individual and the community in three major cultures of the world, one of which will be the culture(s) of the United States.

341. Origins of Civilization
(4) (Spring) Rosin

A presentation of theory and data related to the development and characteristic features of civilization. Such crucial issues as the domestication of plants and animals, the development of scientific thought, emergence of urban life, and the appearance of stratified societies will be addressed from a comparative perspective. Specific regions (e.g. Africa, the Middle East, South Asia, the Americas, etc.) will be selected for concentrated study each semester.

342. Organization of Societies
(4) (Fall) Rosin, Wahrhaftig

Examination of the structure and organization of bands, tribes, chiefdoms, and ancient states and urban industrial societies from a cross-cultural perspective. Discussion of kinship, family, and larger social group formation in relation to subsistence systems, technological development and decision making.

345. Human Ecology
(4) (Alternate Spring) Dickemann

An investigation of the interrelations between human societies and their environments. Human biological and cultural responses to environmental influences and human impact on the ecosystems.
Prerequisite: Junior Standing or consent of the instructor.

346. Economic Anthropology
(4) (Fall or Spring) Staff

Comparative, cross-cultural study of non-western economic systems and their relationships to the larger cultural systems of which they are an integral part. Examination of the involvement of these societies in national or world economies. Treats systems of production, distribution and exchange, and consumption of material and non-material goods and services.

348. The Role of the Sacred
(4) (Fall) Wahrhaftig

An anthropological examination of religious phenomena in cross-cultural persepective. Discussion of the roles of shamans, curers, visionaries, and priests in tribal and contemporary cultures. Analysis from the perspectives of functional, semiotic and cybernetic theory.

350. Applied Anthropology
(4) (Fall) Peri, Rosin, Wahrhaftig

A study of historical attempts to apply anthropological principles to the direction of socio-cultural change in both western and non-western nation-states. A case-study approach will seek to uncover the reason(s) for the successes and the failures of directed socio-cultural change. The ethical question of the anthropologist as an agent of change, and the efficacy of an applied anthropology will be examined.

352. Special Topics in Culture Change
(4) (Fall or Spring) Staff

Topic varies with each offering; may be repeated for credit. Topics may include: theories of cultural change and cultural evolution; revitalization movements; transformation in traditional communities; tradition and change in Mexico.

353. Psychological Anthropology
(4) (Spring) (Cross-listed with Psych. 487) (Interdisciplinary Seminar) Fredrickson, Wahrhaftig

Examination of the psychological implications of alternative culture patterns; cross-cultural survey of such concepts as world view, value orientation, personality, cognition, deviant behavior, social control, and indigenous psychotherapy.

355. Anthropology of Women
(4) (Alternate Spring) Dickemann

A cross-cultural investigation of women in human societies, the biological and socioeconomic bases of their roles, statuses, relations with men and involvement in cultural life. Discussion of theories of female role, status and evolution; readings in the ethnography and biography of women in a variety of societies.

357. Medical Anthropology
(4) (Alternate Fall) Dickemann

Survey of anthropological approaches to disease: paleopathology and the cultural history of disease; cross-cultural and epidemiological studies of the biocultural context of genetic, nutritional and infectious disease; the role of culture in causation, definition and treatment of physical and mental illness.

359. Art in Cultural Context
(4) (Fall) Wahrhaftig

An introduction to a variety of art forms occurring in prehistoric and in existing traditional societies. Special attention to art as a vehicle to symbolic communication of culturally defined meaning, and broad consideration of the significance of art and artist in terms of social structure and ecology.

CULTURE AREAS

361. Indians of California
(4) (Spring) Peri, Silver

Survey of the Indian cultures of California; discussion of linguistic diversity, varieties of customs, and relationships between Indians and Europeans.

370. Peoples and Cultures of the Pacific
(4) (Alternate Fall) Dickemann

An introduction to the cultures of Melanesia, Micronesia and Polynesia; their prehistory and the settlement of the Pacific basin; their ecological adaptations and sociocultural variety and their responses to contact with Western society.

375. Civilizations of India
(4) (Alternate Spring) Rosin

An introduction to the urban and rural peoples of India, Pakistan, Sri Lanka, Bangladesh and Nepal, the institutions of family and caste, and the literate and nonliterate traditions of the area.

ANTHROPOLOGICAL LINGUISTICS

380. Language in Cultural Context
(4) (Altenate Fall) Silver

Survey of basic issues concerning language as a part of human behavior; the unconscious patterning of behavior; the symbolic nature of human communication; the social nature of language; the acquisition of language. Discussion of language vs. speech, the interrelation of verbal and non-verbal forms of communication, language as an interpretive model for culture, linguistic behavior as social behavior.
Prerequisite: Linguistics 200 or junior standing.

382. Language Change
(4) (Alternate Spring) Silver

Study of the processes of language change and of language contact; methods of language classification and how language families are established; history of writing systems, and writing as evidence for reconstruction of linguistic change. Investigation of how to reconstruct histories of languages with no written traditions and how knowledge of linguistic prehistory offers insights into cultural prehistory.
Prerequisite: Linguistics 200 or junior standing.

386. American Indian Languages
(2–4) (Alternate Spring) (Cross-listed with NAMS 440—Native Amer. Language and Culture) Silver

Survey of the history, diversity and complexity of languages spoken in the Americas before European contact. Consideration of processes and effects of bilingualism and linguistic acculturation.

389. Language and Communication
(4) (Alternate Fall) Silver

Introduction to descriptive study of the social and psychological environments in which people manipulate language and nonverbal communication systems. Focus on cross-cultural investigations of communicative behavior as social interaction.
Prerequisite: Linguistics 200 or junior standing.

SPECIAL COURSES

390. Colloquium: Current Topics in Anthropology
(Fall and Spring) Staff

A series of lectures designed to acquaint the student with the interests, activities and research of anthropologists and related professionals. May be repeated for up to four (4) units of credit.

395. Community Involvement Program
(1–4) (Fall and Spring) Coordinator: Rosin

An opportunity for experience in applied anthropology, involving the application of anthropological method and theory to community service work. Requirements: Approval of a project of anthropological relevance, a minimum of 30 hours per unit of credit in the actual working situation, regular consultation with a faculty sponsor, and a paper to be determined by the student and faculty member in charge. Prerequisite: Majors only. Consent of instructor required.

396. Experimental Courses
(1–4) (Fall and Spring) Staff

399. Student Initiated Course
(1–3) (Fall and Spring) Staff

Student initiated and instructed courses on topics which enrich or extend current departmental offerings.

METHODS

400. Anthropology Praxis
(1–4) (Fall and Spring) Staff

Supervision and assessment of curriculum construction and execution for students in instructional or faculty adjunct roles. May be repeated once for credit.

422A. Archaeological Methods: Laboratory
(4) (Alternate Spring) Fredrickson

Survey of laboratory methods in archaeology, using California materials, including cataloging and analysis of archaeological site constitutents. Emphasis upon research design and interpretation. Lecture, 1 hour; laboratory, 9 hours. May be repeated once for credit.

422B. Archaeological Methods: Field
(4) (Alternate Spring) Fredrickson

Field methods in archaeology, including archaeological site survey and excavation techniques; emphasis upon research design and archaeological ethics. Laboratory 12 hours. May be repeated once for credit.

441. Laboratory in Ethnographic Field Methods
(1–4) (Spring) Staff

Field and lab methods in the analysis of human behavior and culture; problems of access, rapport, and ethics in conducting research; data gathering through interviewing, participant observation, personal documents, photos, tapes, video-tapes, remote-sensing; data collection and retrieval; computer applications; and lab analysis and interpretation in the context of theory, problem formulation, and research design. Lecture, 1 hour; laboratory, 9 hours. May be repeated once for credit.

482AB. Linguistic Field Methods and Laboratory
(4) (Fall and Spring) Silver

Training in elicitation of linguistic data for purposes of phonological, morphologic-syntactic and semantic analysis. Lecture, 1 hour; laboratory 9 hours. Prerequisites: Linguistics 310 and Linguistics 311 or consent of instructor. Laboratory fee may be charged, as published in class schedule. May be repeated once for credit.

ADVANCED UNDERGRADUATE STUDIES

490. Topical Seminars in Anthropology
(4) (Fall and Spring) Staff

Prerequisite: Senior standing or consent of instructor.

495. Special Studies
(1–4) (Fall and Spring) Staff

Students interested in Special Studies in Anthropology must submit a written proposal and an outline of projected work during the first week of the semester to a faculty sponsor for approval. Each unit of credit requires a minimum of 45 hours of work per semester which includes regular consultation with and evaluation by the faculty member in charge.
Prerequisite: Anthropology 201 or 203; or an appropriate upper division course in Anthropology; or an upper division course, relevant to the proposed topic, from another discipline.

499. Anthropology Internships
(1–4) (Fall and Spring) Staff

Students in the intern program will have an opportunity to apply anthropological theory and methods to a variety of situations in public and private agencies. Internships require faculty approval, a minimum of 45 hours of work per unit per semester including regular consultation with and evaluation by the faculty sponsor. May be taken for credit/no credit only. May be repeated.

GRADUATE COURSES:

500. Proseminar
(4) (Fall) Staff

Introduction to research methods in anthropology; design and implementation of research; use of library and archival materials; guide to preparation of professional anthropological papers.

502. Seminar in Ecology and Prehistory
(4) (Alternate Spring) Dickemann

The rise of theoretical archaeology, with emphasis on the application of ecological theory to the reconstruction of human prehistory.

503. Seminar in Cultural Resource Management
(4) (Alternate Spring) Fredrickson

Evaluation of significance of resources. Review of federal, state, and local legislation pertinent to archaeological evaluation. Review of cultural resources management programs and their premises.

504A/B. Thesis
(2-4) (Fall and Spring) Staff

Planning and execution of a research program culminating in the completion of a thesis. (6 units maximum for 504A plus B). An authorized "Thesis Prospectus Approval Form" is required before enrolling in 504B.

528. Methods in Cultural Resources Management
(4) (Alternate Spring) Fredrickson

A survey of cultural resource methods pertinent to the regulatory context and required to obtain data to assess significance of cultural resources. Identification of relevant Native American and other ethnic values. Examination of approaches to reconcile management and research goals. Review of the relationships between cultural resource technicians and public agencies (Lecture 2 hrs., Field 4 hrs.)
Prerequisites: Graduate standing in Cultural Resources Management, Public History, or related fields; or advanced undergraduate standing and consent of instructor; 20 units of Anthropology including Anth. 499 or 599, Anth. 503 (Anth. 328 for undergraduates) and/or consent of instructor. Required course(s) may be taken concurrently.

590. Advanced Seminars in Anthropology
(1-4) (Fall and Spring) Staff

In-depth consideration of specific anthropological, applied anthropology or anthropologically related topics. Topics will vary from semester to semester.
Prerequisite: Graduate standing or consent of instructor.

595. Special Studies
(1-4) (Fall and Spring) Staff

Students interested in Special Studies in Anthropology must submit a written proposal and an outline of projected work during the first week of the semester to a faculty sponsor for approval. Each unit of credit requires a minimum of 45 hours of work per semester which includes regular consultation with and evaluation by the faculty member in charge.
Prerequisite: Graduate level standing, approval of advising faculty member and Department Chairman.

597. College Teaching in Anthropology
(1-4) (Fall and Spring) Staff

Designed to meet the needs of graduate students preparing for a career at the college level. Includes supervised classroom observation and participation. Open to graduate students only. Offered for credit/no credit only.

598. Teaching Assistant in Anthropology
(1-4) (Fall and Spring) Staff

Provides experience by assisting the instructor in an anthropology course. Open only to advanced students for specific anthropology courses approved by the Department.
Prerequisite: Graduate standing and consent of instructor.

599. Anthropology Internships
(1-4) (Fall and Spring) Staff

Students will have an opportunity to apply anthropological theory and methods and/or cultural resources management procedures as interns with public and private agencies. Internships require faculty approval, a minimum of 45 hours of work per unit per semester including regular consultation with and evaluation by the faculty sponsor. May be taken for credit/no credit only. May be repeated.

The applied arts curriculum provides practical and theoretical training in at least three of the following arts areas: Art, English (with an emphasis on creative writing), Music and Theatre Arts (drama and/or dance). The minor is intended for any student interested in acquiring a broad background in the arts, but is particularly appropriate for Liberal Studies majors who intend to complete the multiple subject credential Program. The Applied Arts Minor will provide these students with practical skills appropriate to their future work as classroom teachers at the elementary grade level.

To fulfill the minor students are expected to complete 9 units of Activity Courses—3 units in each of three fields selected from Art, English, Music and Theatre Arts—as well as a concentration consisting of 9 additional units in one of three fields selected.

ART, Activity Courses; 3 units selected from:
- Any beginning level faculty-instructed studio course including Art 200
- Art 400, Elementary Art School Techniques (3)

ART, Concentration Courses; 9 units selected from:
- Art 400 if not taken previously (3)
- Art 210 or 211, Introduction to Art History (3)
- 3 units of activity courses in addition to those previously taken
- One upper-division Art History course (3)

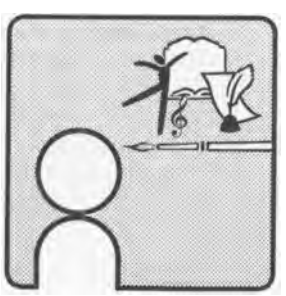
ENGLISH, Activity Courses; 3 units selected from:
- English 342, Childrens' Literature (3)
- English 343, Youth and Literature (3)
- One literary genre course selected from:
  - English 367, Introduction to Short Story (3)
  - English 369, Introduction to Poetry (3)
  - English 371, Introduction to Novel (3)
  - English 373, Introduction to Drama (3)

ENGLISH, Concentration Courses, 9 units selected from:
- Any three upper-division creative writing courses including at least two genres
- English 342, or 343 if not taken previously

MUSIC, Activity Courses; 3 units selected from:
- Music 400, Music in the Elementary Schools (3)
- Any combination of the following totaling 3 units:
  - Music 101, 102, 103, 104 Piano Classes (1 each)
  - Music 325 Chorus (1) May be repeated for credit
  - Music 115/415, 128/428, Voice Classes (1 each)

MUSIC, Concentration Courses; 9 units selected from:
- Music 400 (if not taken previously—3 units)
- Music 250 or 252 Masterworks (3)
- Music 350, Non-Western Music (3)
- Performance classes totaling not more than 3 additional units

THEATRE ARTS, Activity Courses; 3 units selected from:
- THAR 300 Theatre in Action: Performance, Analysis and Criticism (3)
- THAR 460 Drama for Children (2) and THAR 170, Mime (1)
- THAR 470 Dance for Children (2) and THAR 110, Beginning Modern Dance (1)



Applied Arts

THEATRE ARTS, Concentration Courses; 9 units selected from:

- THAR 302A, Drama Ensemble Workshop (3)
- THAR 301A, Dance Ensemble Workshop (3)
- 3 units of history/theory not taken as an activity course
- 3 units of Technique (which may include THAR 460 or THAR 470 if not taken as an activity course)

Total number of units in the minor: 18, of which 6 must be upper-division. Students embarking on the Applied Arts Minor will be expected to develop and file a contract stipulating courses to be taken to fulfill the minor. Certain course substitutions to the above stated requirements may be allowed with sufficient justification and approval of the student's advisor and department chair, both of which will be members of the department of the student's concentration.

Advisors:

Susan Moulton, Art Department
Gardner Rust, Music Department
William Sherman, Theatre Arts Department
Donald Patterson, English Department



Art

The study of art makes possible a deeper appreciation of one's cultural heritage, clarification of attitudes and values, and a fuller realization of one's own potentials. Programs in the Art Department foster these principles and offer preparation for advanced work in various fields, for graduate study, teaching, and careers in museum or gallery management.

It is the departmental philosophy that a grasp of the history and theory of art is indispensable for the studio major and that creative activity is invaluable to the student of art history.

Students may pursue studies leading to the B.A. degree with concentrations in either Art History or Studio. Within the Studio concentration emphases are available in Painting, Printmaking, Photography, Drawing, Sculpture or an Interdisciplinary Option by special arrangements with cooperating departments. A Career Minor in Arts Management is offered jointly with the Management Department for those interested in preparing for work in galleries or museums (See p. 69). A Program for students working toward a teaching credential is included within the curriculum, as are courses appropriate for General Education requirements.

Designed specifically for the pursuit of art practices and the study of art history, the Art Department facilities are located in one of the most well-equipped physical plants in the country. The Program is nurtured by a faculty and staff devoted to the recognition of individuality and unique accomplishments.

The Art Department is a fully accredited member of the National Association of Schools of Art and Design.

The B.F.A. in Studio Art is in the planning stages; check with department for details.

Department Chair: Susan Moulton

Faculty:

Kathryn Armstrong, Marsha Red Bailey, Mary Bates, Leland Gralapp, Robert Gronendyke, Walter Kuhlman, Susan McKillop, William Morehouse, Bob Nugent, Shane Weare.

Part-Time Faculty:

Babette Bohn, Gary Denmark, Philip, Jameson, Anthony Reveaux, George Rodetis, Inez Storer.

Department Office:

Art 128, Phone (707) 664-2151

General Regulations

1. Students desiring to major in art will be accepted on the basis of their interest and ability in one of the following areas of concentration:
   Art History
   Art Studio
   1. Painting
   2. Sculpture
   3. Printmaking
   4. Photography
   5. Drawing
   6. Interdisciplinary Option
2. Entering freshmen or lower division transfer students will be accepted by the University in the status of art major. Upper division transfer students who have fulfilled requirements equivalent to those for lower division art majors at Sonoma State University will be accepted as art majors.

3. Grades in the Art Department are assigned on the following bases:
   A: Outstanding Achievement
   B: Commendable Achievement
   C: Satisfactory Achievement
   D: Minimum Performance for Credit
   F: Failure to meet minimum requirements
4. Courses in the major cannot be taken for CR/NC.
5. Certain studio courses require payment of lab fees at time of class sign-up.
6. Students must obtain approval of their course programs from advisors prior to registration each semester.

Bachelor of Arts Art

Major

Concentration: Studio

	Units
General Education	49
Major	45
Electives	30
Total	124

General Course Requirements

The Art major with studio concentration is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course offerings in studio and associated areas which allow for the development of an emphasis in one or more of the following: Painting, Sculpture, Printmaking, Drawing, Photography and Interdisciplinary Option.

Freshman and Sophomore Years	*Units*
Art 101, 102—Art Fundamentals	6
Art 210, 211—Intro to Art History #	6
Art 202—Beginning Drawing Art 204—Beginning Life Drawing Any combination to total	4
Art 206—Pastel Art 208—Basic B/W Photography Art 220—Beginning Painting Art 222—Beginning Watercolor Art 229—Beginning Pottery Art 230—Beginning Clay Sculpture Art 231—Beg Wood Sculpture Art 232—Beg Metal Sculpture Art 234—Metal Casting Art 238—Beginning Papermaking Art 240—Beg Etching and Woodcut Art 242—Beginning Lithography Art 244—Beginning Silkscreen Art 270—Beg Experimental Art Art 281—Mixed Media Art 282—Monotype Art 283—Graphic Design A min of 3 courses selected from among these studio courses *	6
Subtotal	22

Sophomore or Junior Year

Art 418AB—History of Modern Art	6

Junior and Senior Years

Art 302—Intermediate Drawing Art 304—Int Life Drawing Art 401—Advanced Life Drawing Art 402—Advanced Drawing Any combination to total	5
Art 308–498—Upper Division Studio Courses in Area of Emphasis (see below)	12
Subtotal	17
Total for Studio Major	45

Minimum Requirements for Areas of Emphasis

Painting:

Art 320/420—Intermediate/Advanced Painting Art 322/422—Intermediate/Advanced Watercolor	*Units*
Any Combination to total **	12

Sculpture:

Art 335/430—Intermediate/Advanced Clay Sculpture Art 336/431—Intermediate/Advanced Sculpture Art 434—Advanced Metal Casting	
Any Combination to total **	12

Printmaking:

Art 340/440—Intermediate/Advanced Etching and Woodcut Art 343/442—Intermediate/Advanced Lithography Art 344/444—Intermediate/Advanced Silkscreen	
Any Combination to total **	12

A 3 unit substitution of Art 212 or 218 should be made by the studio major whose Area of Emphasis is Photography.

* Each course may be repeated for elective credit up to 6 additional units in each subject area.

Drawing: ***

Art 302/402—Intermediate/Advanced Drawing Art 304/401—Intermediate/Advanced Life Drawing	
Any Combination to total **	12

Photography:

Art 308 Photographic Darkroom Processes Art 458 Photography Seminar	
Any Combination to total **	12

Recommended as Electives For All Studio Majors:

Art 338—Intermediate Papermaking
Art 404, 407–419—All Art History Period Courses
Art 438—Advanced Papermaking
Art 450C—Contemporary Criticism
Art 460—Gallery and Museum Methods
Art 481—Advanced Mixed Media
Art 482—Advanced Monotype
Art 483—Advanced Graphic Design
Art 491—Art Colloquium
Art 497—Selected Topics—Lecture/Seminar
Art 498—Selected Topics—Studio

Bachelor of Arts Art

Major

Concentration: Art History

	Units
General Education	49
Major	43
Electives	32
TOTAL	124

Note: Although the Art Department does not specify a unit requirement, reading comprehension of at least one foreign

* Each course may be repeated for elective credit up to 6 additional units in each subject area.

† May include Selected Topics in Art History for variable units.

** Each course may be repeated for credit.

*** When Drawing is the student's Area of Emphasis, it is required the 5 upper division units required in drawing be concentrated instead in another emphasis such as painting, printmaking, sculpture, or photographic arts.

language is considered essential for students who plan to pursue master's or doctoral degrees in the field of art history. Such students are advised to develop competence in French, Spanish, Italian and/or German; however the prospect of eventual specialization may make other languages advisable in particular instances.

Course Requirements

Freshman and Sophomore Years	*Units*
Art 102—Art Fundamentals	3
Art 202, 204—Beginning Drawing	2
Art 210, 211—Introduction to Art History	6
Art 208–298—Beginning Studio Courses	2
A minimum of 1 course selected from among the studio courses	
Subtotal:	13
Junior and Senior Years	
Art 418AB—History of Modern Art	6
Art 407–419—Upper Division Period Courses in History of Art †	21
Art 450A—Pro-seminar in Art Historical Method	3
Subtotal:	30
Total	43

Recommended for Electives:
Art 450C—Contemporary Criticism
Art 460—Gallery and Museum Methods
Art 491—Art Colloquium
Art 497—Selected Topics (Art History)

With advisor's consent a maximum of 6 units of comparable courses in other departments (e.g., Anthropology, Ethnic Studies) may be included as part of the 21 units of upper division period courses in the History of Art.

† May include Selected Topics in Art History for variable units.

Interdisciplinary Option

Part of the Studio Art Concentration, the Interdisciplinary Option emphasis is designed for art students who wish to study art and who also have a special interest in another discipline. It enables the student to focus his/her study of art in those areas and courses particularly relevant to his/her special disciplinary interest, and to integrate and coordinate these interests. Prior approval of proposed program and a written contract is required. Consult art advisor.

Freshman and Sophomore Years	*Units*
Art 101, 102—Art Fundamentals	6
Art 210, 211—Introduction to Art History	6
Art 202—Beginning Drawing Art 204—Beginning Life Drawing Any combination to total	4
Art 208–298—Beginning Studio Courses A minimum of 3 courses selected from among the beginning level studio courses *	6
Subtotal	22
Junior and Senior Years	
Drawing (any 300 or 400 level courses)	3
Art 418A or B	3
Upper Division Studio Courses	5
Upper Division Courses in the Adjunct Discipline Approved by Both Departmental Advisors	12
Subtotal	23
TOTAL	45

Teaching Credential Program

The Art Major with a studio concentration generally fulfills the California Commission for Teacher Preparation and Licensing guidelines for the single subject credentials. For the multiple-subject (elementary) credential students must pass the General Knowledge portion of the National Teachers Examination. Students interested in a teaching career are encouraged to consult with coordinators in the Art Department as well as the Education Department with reference to legally required Education courses, along with field experience, leading to graduate or second degree studies in Art and Education with a teaching credential.

The public school art instructor usually is expected to possess a vast range of aptitudes in two and three dimensional art forms, materials and techniques, and have a strong sense of the conceptualization and philosophies for art education for younger learners. A broadly based Studio Arts, Art History, and Education Department course-work Program including field experience in a concurrent pattern is recommended after arrangements with both the Art Department and the Education Department. For further information, see pp. 42 of this Catalog, contact departmental advisors, and review the University's special bulletin on *Programs in Teacher Education.*

Students seeking the Multiple Subjects Credential may also wish to pursue a minor in Applied Arts (see p. 42).

Art Minor—Studio	*Units*
Art 101 and 102—Art Fundamentals	6
Art 210 or 211—Intro to Art History	3
Lower Division or any level studio courses	5
Upper Division studio courses	6
	20

Recommended Electives:
Upper Division Art History or Criticism Courses

Art Minor—Art History	
Art 101 or 102—Art Fundamentals	3
Art 210 and 211—Intro to Art History	6
Upper Division Art History Period Courses (min. 2) 407–417	8
Studio Courses (min. 1)	3
	20

Recommended Electives:
Upper Division Studio or Criticism Courses

Career Minor—Arts Management

The Career Minor in Arts Management provides students of the arts with education, training and experience in the practical, business side of their fields. Art, Music and Theatre Arts majors completing this career minor will be in much stronger positions to find work and support themselves in fields within or closely related to their majors. The Arts Management Career Minor, combined with a minor in one of the three arts fields mentioned, also serves the needs of

Management majors who wish to specialize in the arts.

Internships are available at local art galleries, museums, the Santa Rosa Symphony and other music and theatrical organizations.

Career Opportunities Relating to the Major

Art majors graduating from Sonoma State University have entered careers as diverse as those of advertising designer, museum curator, art therapist and teaching of art therapy, photographer, slide curator, archaeological technician, archivist, art appraiser, art auctioneer, art gallery director and salesperson, art designer, jeweler, lawyer (art and law), librarian museum director, museum guide, printer, professional artist, publisher, research assistant, portrait painter, art conservator, cartoonist, teacher, technician in University art department, television designer, biological and medical illustrator.

Advising

Each student must consult an advisor in the Art Department before beginning work as an art major and each semester thereafter. All courses are not offered every semester and consultation with an art advisor will allow for timely completion of art major requirements.

N.B. Numbers in parenthesis are course unit value and may vary from semester to semester. Consult class schedule for unit offering and for name of faculty teaching courses scheduled each semester.

Art Courses

101. Art Fundamentals
(3)

Basic design. A studio course in the study of form, color and composition in two dimensional art; rendering of three dimensional objects from observation using line and values, and principles of perspective. Basic requisite course for studio courses on the 200 level.

102. Art Fundamentals
(3)

A studio course emphasizing studies in 3-dimensional design. Basic principles of sculpture will be explored through a series of projects. Concepts such as line, plane, volume, and texture will be examined using clay, plaster, wood, matboard, and other 3-dimensional media. Basic requisite course for studio courses on the 200 level.

199. Student-instructed course
(1–4)

See current schedule of classes for details.

200. Crafts
(1–4)

Assorted experiences in approaching art activities and concepts relevant to elementary and secondary classroom educational levels with two and three dimensional forms.

202. Beginning Drawing
(1–4)

A beginner's studio course in drawing from imagination and observation employing several media. Includes a unit on objective drawing.

204. Beginning Life Drawing
(1–4)

An introductory studio course in drawing from nature, including the human figure. Basic problems in dealing with the figure as subject matter.

206. Pastel
(1–4)

A studio course to introduce beginning students to problems in hard, soft, and oil pastel drawing. Directed problems including still life, landscape, and work from imagination.

*** 208. Basic Black & White Photography**
(1–4)

A studio introduction to basic photographic processes, including in-class lecture, lab work and critique. Techniques of handling the camera, previsualization, history, exposure control, lighting, perceiving and working with light, roll film processing, print enlarging, and finishing for presentation, balancing technique and individual creativity.
Co-requisite: 1 unit of student-taught lab.

210. Introduction to Art History
(3–4)

A lecture course covering painting, sculpture, and architecture of prehistoric and primitive cultures, ancient, classical, and medieval civilizations. May be used to fulfill part of Humanities G.E. requirement.

211. Introduction to Art History
(3–4)

A lecture course covering painting, sculpture, and architecture from the Renaissance to the present. May be used to fulfill part of Humanities G.E. requirement.

212. Introduction to World Film History
(3)

A chronological survey of historically representative and significant films tracing the evolution of the cinema as an art form . . . and its relation to other visual media. May be used to fulfill part of Humanities G.E. requirement. One hour lecture, two hours films.

220. Beginning Painting
(1–4)

Studio course in painting in acrylic or oil media. Directed problems. Work from imagination, still life and the figure. Group and individual criticism.
Prerequisite or corequisite: Art 101 and 102 or equivalent.

222. Beginning Watercolor
(1–4)

Studio course with directed problems in opaque or transparent watercolor painting.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 229. Beginning Pottery**
(1–4)

A studio course in learning to throw on the potter's wheel. Glazing and firing.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 230. Beginning Clay Sculpture**
(1–4)

A studio course on the properties of clay, fabrication, firing and finishing techniques, and moldmaking.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 231. Beginning Wood Sculpture**
(1–4)

A studio course on the properties of wood, joining and finishing, and use of hand and machine woodworking tools.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 232. Beginning Metal Sculpture**
(1–4)

A studio course on the properties of metal, use of hand and machine metal working tools, mechanically joining, oxygen/acetylene, arc and TIG welding, and finishing.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

234. Metal Casting
(1–4)

A beginning studio course covering safety and use of foundry equipment. Topics include mold construction, sand casting, wax and clay properties, plaster, tuffy, styrofoam, metals, investment, patina, chasing and cleanup of cast metal.
Prerequisite: Art 101 and 102.

*** 238. Beginning Papermaking**
(1–4)

A studio course to include lecture, discussion, demonstrations and laboratory work covering handmade sheets for watercolor stock, printmaking papers; sculpture pulp, techniques of lamination, embedment, natural plant fibers, use of hydropulper, vacuum-form techniques for cellulose sculpture.
Prerequisite: Art 101 and 102 or equivalent.

*** 240. Beginning Etching and Woodcut**
(1–4)

Studio course with directed problems in various printmaking media including woodcut and linocut, etching, embossing, monotype, collagraph and engraving.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 242. Beginning Lithography**
(1–4)

Studio course covering the lithograph as an art medium. Basic work with creating an image on stone, etching, proofing and printing a lithographic edition. Experience with black and white processes. Lecture, demonstration and laboratory work.
Prerequisite: Art 101 and 102 or equivalent.

*** 244. Beginning Silkscreen**
(1–4)

Studio course covering the fundamentals of the silkscreen medium, emphasizing image development, edition printing, and use of color. Technical methods to include cut, direct, and photographic stencils.
Prerequisite or co-requisite: Art 101 and 102 or equivalent.

281. Mixed Media
(1–4)

Studio and field work in the use and manipulation of ideas and images in 2-D and 3-D forms. A variety of processes will be examined. May be repeated for credit up to a maximum of 12 units.
Prerequisite or co-requisite: Art 101 and 102.

282. Monotype
(1–4)

A studio course focusing on the creation of single and multiple images derived from a variety of original sources which may include painting, hand painted prints, collographs, chine collé and multiple manipulated prints.
Prerequisite or co-requisite: Art 101 and 102.

283. Graphic Design
(1–4)

A studio introduction to design of artworks for reproduction, including exploration of styles, forms, content of layout, from idea to finished project. May include type design, trademark, page orientation and sleeve illustration.
Prerequisite or co-requisite: Art 101 and 102.

297. Selected Topics in Art
(1–4)

A lecture course dealing with intensive study of a particular art topic which will vary from semester to semester.
Prerequisite or co-requisite: Art 101and 102 or equivalent.

298. Selected Topics in Art Studio
(1–4)

A beginning studio course dealing with intensive study of a particular art topic which may vary from semester to semester. May be repeated and applicable to requirements for a major in art.
Prerequisite or co-requisite: Art 101 and 102 equivalent.

* Laboratory fee is charged in connection with this course. It is payable at class sign-up.

300. Graded Assistance Projects
(1–4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classrooms or exhibition projects. Work under supervision of faculty or staff. Each unit requires three hours of work per week. Grade only.

301. Assistance Projects
(1–4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classrooms or exhibition projects. Work under supervision of faculty or staff. Each unit requires three hours of work per week. CR/NC only.

302. Intermediate Drawing
(1–4)

Directed problems in drawing for the advanced student. Work from imagination or nature.
Prerequisite: Art 202 or 204 courses or equivalent.

304. Intermediate Life Drawing
(1–4)

A workshop in drawing the human figure for students who have fulfilled the beginning drawing prerequisite or are at intermediate skills levels. Group and individually directed special problems, related to drawing the live model.
Prerequisite: Art 204 or equivalent.

*** 308. Photographic Darkroom Processes**
(1–4)

A studio course with continued individualized development of photographic skills and theory. Various processes derived from and expanded upon basic black and white technology, darkroom experimentation, assigned readings and discussions. May be repeated up to a maximum of 12 units.
Prerequisite: Art 208 or equivalent.

* Laboratory fee is charged in connection with this course. It is payable at class sign-up.

312. Principles of Arts Management
(3)

A survey of the social, historical, legal and economic aspects of the arts in the U.S., including evolution of U.S. and California cultural policy, rights and responsibilities of administrators and artists, non-profit law and taxation, agreements and contracts, current legal issues, fund-raising, grantsmanship and marketing.

320. Intermediate Painting
(1–4)

A studio course on the intermediate level in painting in acrylic or oil media. Directed problems. Work from imagination, still life and the figure. Group and individual criticism. May be repeated for credit up to maximum of 12 units.
Prerequisite: Art 220 or equivalent.

322. Watercolor Painting
(1–4)

Studio course in opaque and transparent watercolor: Emphasis in concepts related to the media. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 222 or equivalent.

*** 335. Intermediate Clay Sculpture**
(1–4)

A studio course with directed projects. Emphasis on content. May be repeated for credit up to a maximum of 12 units.
Prerequisite: 230.

*** 336. Intermediate Sculpture**
(1–4)

A studio course with directed projects. Emphasis on content. May be repeated for credit up to maximum of 12 units.
Prerequisites: Art 230, 231 or 232.

*** 338. Intermediate Papermaking**
(1–4)

A studio course continuing with techniques explored in the beginning class. More emphasis on individual instruction, development of personal style, watermark, body casting large scale works, and/or cellulose sculpture. Up to 4 upper division units may be applied to printmaking *or* to sculpture emphasis.
Prerequisite: Art 238 or equivalent.

*** 340. Intermediate Etching and Woodcut**
(1–4)

A studio course on the intermediate level in various printmaking aspects, including woodcut, linocut, embossing, engraving, collagraph, photo-engraving, monotype and etching. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 240

*** 342. Intermediate Lithography**
(1–4)

Continued studio work at the intermediate level in lithographic methods, including color technology and conceptual development. Lecture, demonstration and studio work. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 242.

*** 344. Intermediate Silkscreen**
(1–4)

Continued studio work at the intermediate level in silkscreen methods. Emphasis on conceptual development, lecture, demonstration and studio work. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 244

* Laboratory fee, payable at time of class signup.

395. Community Involvement Program
(1–4)

Student directed creative activities in behalf of nearby off-campus community agencies. One to four units of credit, based on 30 hours of contributed effort per unit per semester. Art education assistance and selected private enterprises. Six C.I.P. units may be applied toward a degree.
Prerequisite: Prearranged program with community host-sponsored, consent of instructor.

399. Student-instructed course
(1–4)

See current schedule of classes for details.

400. School Art Techniques
(2)

A combined lecture-lab course designed for the teaching credential candidate, essentially grades K–6. The skills, methods and ideas for introducing art education will be discussed and practiced. Based on the California Framework for Art Education and intended to stress the necessity of art instruction and learning for the young.

401. Advanced Life Drawing
(1–3)

An advanced studio life drawing class with directed special problems related to drawing the live model, and to drawing from nature.
Prerequisite: Art 304.

402. Advanced Drawing
(1–4)

Independent work from imagination or nature for the advanced student. Can be arranged as correlative drawing problems done in conjunction with advanced studio projects in area of emphasis.
Prerequisite: At least 4 units of 202, 204 or equivalent and 3 units of 300 series drawing courses or equivalent, or consent of instructor.

406. Advanced Pastel
(1–4)

A studio course providing continued work with all types of pastel, conté, and charcoal. Advanced projects with emphasis on imaginative drawing and concepts relating to other media. Up to a maximum of 2 upper division units may be applied toward drawing emphasis.
Prerequisite: Art 206.

407. Pre-Classical Art
(3–4)

History of the arts and architecture of Egypt, Crete, and the Near East before the conquests of Alexander the Great.

408. Greek Art
(3–4)

History of Greek art and architecture from the Geometric through the Hellenistic periods (ca. 1000 B.C.–100 A.D.).

409. Roman Art
(3–4)

Etruscan and Roman art and architecture from the early Republic through the age of Constantine.

410. Early Christian Byzantine and Early Medieval Art
(3–4)

Christian art from its origins in the Third Century through the fall of Constantinople in the East and the rise of the Romanesque in the West (ca. 1050).

411. Romanesque and Gothic Art
(3–4)

Western Medieval art and architecture of the Romanesque, and the Early and High Gothic periods.

413. Northern Renaissance Art
(3–4)

Painting, printmaking, sculpture, and architecture of the Fifteenth and Sixteenth Centuries in Europe apart from Italy.

414. Baroque Art
(3–4)

A lecture course on Italian and Northern European painting, architecture, and sculpture of the Seventeenth Century, Content emphases may vary. May be repeated with consent of instructor.

415AB. Italian Renaissance Art
(3–4)

Painting, sculpture, and architecture in Italy of the Fifteenth and Sixteenth Centuries.

417. Oriental Art
(3–4)

The arts of India, China, and Japan from their beginnings to the present. Emphasis on sculpture and painting.

418A. History of Modern Art–19th C
(3–4)

A survey of painting and sculpture in Europe from the rediscovery of Pompeii through the end of the 19th Century (ca. 1750–1900).

418B. History of Modern Art–20th C
(3–4)

A survey of painting and sculpture of the Western World in the Twentieth Century. May be used to fulfill part of Humanities G.E. requirement.

418C. History of Modern Art
(3–4)

American Art covering the period from Colonial times to the present, with an emphasis on recent developments.

420. Advanced Painting
(1–4)

Continued studio work in painting in oils and/or acrylics. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 320 or equivalent.

422. Advanced Watercolor
(1--4)

An advanced studio course in opaque and transparent watercolor. Emphasis in concepts related to the media. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 322.

*** 430. Advanced Clay Sculpture**
(1--4)

Continued studio work emphasizing individual projects in clay including advanced work in all methods covered in Art 230 and Art 335. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 335 or 336.

*** 431. Advanced Sculpture**
(1--4)

Studio and field work with a maximum of self-direction. Individual and/or group criticism. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 335 or 336.

434. Advanced Metal Casting
(1--4)

A studio course at the advanced level emphasizing individualized instruction. Continued concentration on mold construction, sand casting, wax and clay properties, plaster, tuffy, styrofoam, metals, investment, patina, chasing and cleanup of cast metal.
Prerequisite: Art 234.

*** 438. Advanced Papermaking**
(1--4)

A studio course with continued emphasis on development of personal style, two-part mold construction, mould construction, and independent work in techniques explored in beginning/intermediate classes.
Prerequisite: Art 338.

* Laboratory fee is charged in connection with this course. It is payable at time of registration.

*** 440. Advanced Etching and Woodcut**
(1--4)

Advanced studio problems in relief and intaglio printmaking methods, including woodcut, linocut, embossing, engraving, photo-engraving, collograph, monotype and etching. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 340 or equivalent.

*** 442. Advanced Lithography**
(1--4)

Advanced studio work in the lithography medium. Work with images on stone or metal plates involving black and white and some color processes, printing of limited editions and single proofs. Lecture, demonstration and laboratory work. May be repeated for credit up to a maximum of 12 units.
Prerequisite: 342 or equivalent.

*** 444. Advanced Silkscreen**
(1--4)

Advanced studio problems. Concentration on individual and conceptual progress using techniques previously taught. Lectures, demonstrations and laboratory work.
Prerequisite: Art 344.

450A. Pro-Seminar in Art Historical Method
(3)

A seminar concentrating on the discipline and philosophy of art historical studies. Emphasis will be placed on formal and stylistic problems. Readings designed to stress the variety of relevant approaches possible to a given problem. Approval of instructor required of non-majors.

450C. Contemporary Criticism
(3)

A seminar course offering students the opportunity to enter the professional world of the artist, focusing on practical application of art. Preparing portfolios for presentations to galleries, planning one's own exhibitions, preparing slide/audio documentaries and integrating information for art criticism, will be covered, as well as studying folk, primitive, and contemporary artists and their world.

*** 458. Photography Seminar**
(1--4)

A seminar, with emphasis on continued student dialogue and critiques in conjunction with outside of class darkroom work. Objectives are to foster development of critical thinking and to explore the student's vision as creative resource.
Prerequisite: Art 208, 308 or permission of instructor.

460. Gallery and Museum Methods
(4)

An advanced lecture and activity course in methods and techniques of gallery and museum practices. Discussions concerning the nature and function of art galleries and museums, their relationship to the artist and his/her work. In addition, the class will assist in show designs, installations, publicity, gallery management and record keeping. May be repeated for credit for a maximum of 12 units.
Prerequisite: 418A, B, or C and 102.

470. Advanced Experimental Art
(1--4)

A studio course with extended inquiry into a variety of media not traditionally considered fine art media. Prerequisite: 270

481. Advanced Mixed Media
(1--4)

An advanced studio course in the use and manipulation of ideas and images in 2-D and 3-D forms. A variety of processes will be examined. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 281 or equivalent. A maximum of 4 upper division units may be applied to area of emphasis with prior consent of departmental advisor and department chair.

482. Advanced Monotype
(1--4)

An advanced studio course emphasizing single and multiple images derived from a variety of original sources including painting, hand-painted prints, collographs, chine collé and multiple manipulated prints.
Prerequisite: Art 282.

483. Advanced Graphic Design
(1–4)

An advanced studio course emphasizing techniques in commercial applications in the professional world. Continued explorations in layout, letter, design skills, presentation, and portfolio development.
Prerequisite: Art 283 or equivalent.

491. Art Colloquium
(1–3)

A seminar, lecture demonstration series offered by guest artists and critics for advanced art students. Lecture open to public.

495. Special Studies
(1–4)

For upper division art majors only. Consult department faculty in your area of emphasis. The University contract form with required signatures of student, instructor, faculty advisor and department chair must be completed before registering for special studies units. Available for CR/NC only.

497. Selected Topics in Art
(1–4)

A seminar course dealing with intensive study of a particular art topic. The topic will vary from semester to semester. The course may be repeated and may be applicable to the requirements for a major in art.
Prerequisites: Art majors with advanced standing by consent of instructor.

498. Selected Topics in Art Studio
(1–4)

A studio course dealing with intensive study of a particular art topic which may vary from semester to semester. May be repeated and applicable to requirements for a major in art.
Prerequisite: Art majors with advanced standing by consent of instructor.

499. Internship
(1–4)

Students in the intern program will have an opportunity to gain practical skills by working in a variety of graphic design or gallery and museum situations including private and public sectors. Credit will be given for completion of 3 hours of work per week per unit, by prior arrangement with department coordinator.
Prerequisite: Consent of Instructor

595. Special Studies
(1–4)

For postbaccalaureate art students. Consent of instructor. Available for CR/NC only.



Astronomy

Astronomy, offered as a minor in the Department of Physics and Astronomy, is the study of the universe beyond the earth's atmosphere. The field today deals with some of the most important questions in science, such as the origin of the universe, the processes by which the elements are formed, and the life cycles of stars and galaxies. Modern astronomy leans heavily on the concepts and techniques of physics and mathematics. A result of this dependence on other fields is that degrees in astronomy are generally granted at the graduate, not the baccalaureate, level. The Minor in Astronomy, with a B.S. in Physics, is an excellent preparation for graduate study in astronomy.

Career fields for which an astronomy minor would be beneficial include aerospace, atmospheric science, education, planetary geology, and geophysics.

A variety of courses are available within the Minor, including laboratory work that utilizes the on-campus observatory, rigorous courses in astrophysics, and a number of descriptive courses for students whose major interests lie in other fields.

Selected Topics courses which have been offered in the past include: Variable Stars, Binary Star Systems, Photoelectric Photometry, Stellar Spectroscopy, and Applications of uvby Photometry.

The SSU Observatory, in operation since 1976, houses three telescopes (14-inch, 10-inch and 8-inch Schmidt–Cassegrains), and auxiliary instrumentation for photoelectric photometry, photography, and spectroscopy. It is used by students in laboratory and lecture courses and for independent study and research.

Minor in Astronomy

Completion of a minimum of twenty units in astronomy and physical science courses, at least twelve of which must be in astronomy, constitutes a minor in astronomy. Interested students should consult with an advisor in the Physics and Astronomy Department regarding their programs.

Department Office:

Darwin 121, phone (707) 664-2119

Department Chair:

Samuel L. Greene, Jr.

Faculty:

Samuel L. Greene, Gordon G. Spear, Joseph S. Tenn

Astronomy Courses

100. Descriptive Astronomy
(3) (Fall and Spring)

Lecture, 3 hours. Greek and medieval astronomy; Newton's Laws; gravitation; atomic structure, light and telescopes. The solar system; spaceflight; stars and stellar evolution; interstellar matter; star clusters; galaxies; the universe. A survey designed primarily for non-science majors; not open to physics, chemistry or mathematics majors, except by special permission. Satisfies part of the general education requirement in natural science.

200. Introductory Astronomy
(3) (Fall)

Lecture, 3 hours. General principles of astronomy. A survey designed primarily for mathematics and natural science majors. Satisfies part of the general education requirement in natural science.
Prerequisite: Mathematics 107, and Physics 210A or 114, or equivalent; or consent of instructor.

231. Introductory Observational Astronomy
(2) (Fall)

Lecture, 1 hour; laboratory, 3 hours. Principles of astronomical measurement techniques with field and laboratory studies of astronomical objects. Identification of constellations, astronomical coordinates, use of the telescope, techniques in spectroscopy and photography.
Prerequisite: Previous or concurrent enrollment in Astronomy 100 or 200.

303. Extraterrestrial Intelligence and Interstellar Travel
(3) (Spring)

A largely descriptive survey. Theories of the origin of life; conditions for extraterrestrial intelligence; problems of communication; spaceflight and interstellar travel.
Prerequisite: Astronomy 100 or equivalent.

305. Frontiers in Astronomy
(3) (Fall)

Lecture, 3 hours. A survey of recent developments in astronomy: man's exploration of the solar system; attempts to detect neutrinos from the sun; interstellar molecules, pulsars, quasars, x-ray and ultraviolet astronomy; new trends in cosmological thinking. Satisfies part of the general education requirement in natural science.
Prerequisite: One course in astronomy.

331. Astrophotography
(2) (Spring)

Lecture, 1 hour; laboratory, 3 hours. An introduction to the methods and techniques of photography as applied to astronomy. The course will offer a practical approach to photography of the sun, moon, planets, stars, and nebulae. Experience will be gained using telescopes of small to moderate size in the SSU observatory. Topics to be covered include filter techniques, selection of films and exposure times, and an introduction to darkroom techniques. There will be special instruction in the use of Schmidt cameras and cooled emulsion cameras. Previous knowledge of photography is not required.
Prerequisites: Astronomy 231 or equivalent, or consent of instructor.

350. Cosmology
(3) (Fall)

A largely descriptive survey. Theories of the universe, as advocated by the Greeks, Newton, Einstein, Lemaitre, Gamow, Hoyle, etc. Cosmological implications of black holes, quasars and other recent discoveries.
Prerequisite: Astronomy 100 or equivalent.

356. Discovering the Galaxies
(2) (Spring)

Lecture, 2 hours. An historical survey: Early theories on the Milky Way and the nebulae. Developments in the late 19th and 20th centuries; astronomy's great debate. The structure of our Galaxy. Hubble and "extragalactic nebulae", Einstein and the static universe. The birth of modern cosmology. Epilogue: Today's great debate—the redshift controversy.
Prerequisite: Astronomy 100 or equivalent.

380. Astrophysics: Stars
(3)

A quantitative study of the structure and evolution of stars, including stellar interiors and atmospheres, nucleosynthesis, and late stages of stellar evolution.
Prerequisites: Physics 314, Math 211.

390. Astrophysics: Galaxies and Cosmology
(3)

A quantitative study of galaxies, quasars, and the universe, including black holes, galactic structure, and current cosmological models.
Prerequisites: Physics 314, Math 211.

396. Selected Topics in Astronomy
(1–3)

Lecture, 1–3 hours. A course of lectures on a single topic or set of related topics not ordinarily covered in the Astronomy curriculum. The course may be repeated for credit with a different topic.
Prerequisite: Consent of instructor.

411. Laboratory Instruction Practicum
(1)

Laboratory, 3 hours. Presentation of experimental techniques and guidance of student activities in a lower division physics laboratory under the supervision of the instructor in charge of the laboratory. Development and application of instructional experiments in astronomy. May be repeated for up to 3 units credit with different subject matter in each repetition.
Prerequisites: Junior standing in Physics and consent of instructor.

482. Advanced Observational Astronomy
(2) (Spring)

Lecture 1 hour; laboratory 3 hours. The course offers an introduction to astronomical spectroscopy, photometry, and astrometry with emphasis on techniques at the telescope, and data reduction. Observing program preparation, use of telescopes with auxiliary instrumentation, photographic and photoelectric techniques. Statistical treatment of data and the method of least squares.
Prerequisites: Astronomy 231; Physics 209B, 210B; Mathematics 161 or consent of instructor.

495. Special Studies
(1–4) (Fall and Spring)

The Physics and Astronomy Department encourages independent study and considers it to be an educational undertaking. Students wishing to enroll for Special Studies are required to submit proposals to their supervising faculty members which outline their projects and exhibit concrete plans for their successful completion.

The Bachelor of Arts in Liberal Studies Program is designed to provide students with the opportunity to earn a B.A. degree in studies broader than those traditionally presented within one discipline. A program of study in Liberal Studies is presently available in Ukiah.

Major Requirements:

For students on campus, Liberal Studies programs are available in the School of Environmental Studies and Planning, the Hutchins School of Liberal Studies, and the Department of Mexican-American Studies. These three programs meet the academic requirements for the multiple-subject credential.



Bachelor of Arts Liberal Studies



Biology

The Biology Department offers undergraduates a broadly based major in the biological sciences leading to opportunity for numerous concentrations (see below). The department also offers a Master of Arts degree in biology. A congenial atmosphere is engendered by small classes which allows students to develop a close relationship with faculty. Heavy emphasis is placed on laboratory and field courses to give students practical experience.

The field courses draw upon an unparalleled diversity of habitats, including rivers, estuaries, the ocean, chaparral, redwood groves, oak woodlands, thermal springs, vineyards, orchards, freshwater storage reservoirs, and geothermal steam fields, all in proximity to the campus. In addition, the North Coast Herbarium of California; extensive lower plant, invertebrate, entomological and vertebrate collections; greenhouses; animal facilities for maintaining live specimens of vertebrates and invertebrates; and an oceangoing vessel are all available for classroom use and research.

Laboratory courses are designed to focus on structure and development, physiology, microbiology, and genetics and recombinant DNA. Small class sizes provide students with "hands on" opportunities with physiological monitoring equipment, ultracentrifugation, electrophoresis, light and electron microscopy, and microbiological techniques. A radio isotope laboratory and a darkroom are also available.

Biology graduates are prepared to enter the job market in a variety of careers, including government service, park service, research, teaching or medical technology. Students seeking a teaching credential may elect biology as their single subject major. For further information on requirements, see page 106 of this catalog. SSU biology graduates have an outstanding record of acceptance in advanced degree programs at technical, dental, medical and graduate schools, as well as in fifth-year hospital traineeships in medical technology.

Department Chair:

Galen E. Clothier

Faculty:

John Arnold (Emeritus), Paul Benko, Joe Brumbaugh, Ralph Bushnell (Emeritus), James Christmann, Wesley W. Ebert, David Hanes, Colin Hermans, John Hopkirk, Donald Isaac, Chris K. Kjeldsen, Philip T. Northen, Thomas R. Porter (Emeritus), Joseph H. Powell (Emeritus), Charles Quibell, Robert Sherman, Joyce Yamada.

Department Office:

Darwin 125 Phone (707) 664-2189

Degrees Offered: B.A. and M.A.

The biology curriculum is designed to provide students with a strong background in the principles of biology and rigorous upper division instruction in a number of basic areas. This combination of breadth and in-depth instruction allows students to develop the intellectual foundations and the skills necessary to deal with the specific biological concerns of today and the flexibility to meet the needs of the profession. From this base any of the following concentrations may be pursued.

B.A. Concentrations

Biology majors may select, in consultation with their advisor, one of the following concentrations. Upon completion of specified coursework, that concentration will be designated on their transcript and diploma. Students should contact the Biology Department for specific requirements.

Botany
Cell Biology
Ecology
Marine Biology
Medical Laboratory Technician*
Microbiology
Zoology

B.A. Advisory Plans

In addition to the above concentrations, the following curricular advisory plans are available:

Aquatic Biology and Water Quality
Electron Microscopy
Environmental Impacts Analysis and Assessment
Fish and Wildlife
Molecular Biology
Medical Science
- Pre-Dentistry
- Pre-Genetic Counseling
- Pre-Medical
- Pre-Medical Technology and Public Health Microbiology
- Pre-Pharmacy
- Pre-Veterinary

Natural History
Park Naturalist
Teaching Credential

M.A. Options

Thesis
Exam
1. General Biology
2. Environmental Biology

Advisory plans for each of these options may be obtained by writing or calling the department office.

* Requires an internship arranged by student at a local cooperating medical laboratory.

Bachelor of Arts Biology

MAJOR

	Units
General Education	48
Physical science (15 units, 6 applied in G.E., Chem. 115AB)	9
Biological sciences (40 units, see course requirements below)	40
Electives	27
	124

COURSE REQUIREMENTS

Lower Division

An introduction to the unifying principles of biology, to the Five Kingdoms of living organisms, and to the cellular and molecular mechanisms underlying the fundamental processes of life. The intention is to develop an awareness of the broad scope of modern biology.

Biol 115—An Introduction to Biology (3 units, applied in G.E.)	*Units*
Biol 116—General Botany	4
Biol 117—General Zoology	4
Biol 215—Introduction to Molecular Biology	3

Biology majors are encouraged to complete all of the lower division core requirements before attaining junior standing (60 units). This maximizes flexibility in upper division course selection by assuring that essential prerequisites will have been completed.

Upper Division

A minimum of 29 units of upper division courses, to include one course from each of the following groups:

A. Ecology, Natural History and Systematics (4 units)
- Biol 300 Ecology
- Biol 330 Plant Taxonomy
- Biol 338 Phycology
- Biol 350 Natural History of Invertebrates
- Biol 355 Entomology
- Biol 360 Natural History of Vertebrates

B. Genetics (4 units)
- Biol 320 General Genetics
- Biol 322 Human Genetics

C. Organismal Physiology (4 units)
- Biol 324 Animal Physiology
- Biol 334 Plant Physiology

D. Anatomy, Morphology and Development (4–5 units)
- Biol 325 Cell Structure
- Biol 335 Plant Nonvascular Morphology
- Biol 336 Plant Vascular Morphology
- Biol 337 Plant Anatomy
- Biol 340 General Bacteriology
- Biol 370 Comparative Anatomy of Vertebrates
- Biol 372 Vertebrate Embryology
- Biol 451 Functional Morphology of Marine Invertebrates I
- Biol 452 Functional Morphology of Marine Invertebrates II

Additional courses in upper division Biology should reflect students' interests, areas of specialization, or career objectives. Courses should be selected in consultation with the student's advisor.

All courses in biology which are to be applied to the biology major must be taken under the traditional grading mode (A–F).

MINOR IN BIOLOGY

The Minor consists of a minimum of 20 units in Biology with a grade point average of 2.0 or more. Its purpose is to provide the student with an understanding of general Biology and to supplement the student's major with pertinent Biology courses. Several specific plans for the Minor have been developed and include the following (see Biology Department for specific course recommendations):

General Biology
Zoology
Botany
Field Biology
Marine Biology
Human Biology
Biology and Society
Cellular and Molecular Biology

Students may structure other programs in consultation with the department minor advisor. The general requirements that must be met in any plan are:

	Units
Biol 115—An Introduction to Biology	3
At least two of the following courses:	
Biol 116—General Botany	4
Biol 117—General Zoology	4
Biol 215—Introduction to Molecular Biology	3

Additional biology courses to a minimum total of 20 units, which must include at least 6 units chosen from upper division courses applicable to the Biology Major. Students are urged to seek approval of their minor program by the departmental minor advisor not later than the junior year.

All courses in biology which are to be applied to the biology minor must be taken under the traditional grading mode (A–F).

Elementary and Secondary Teaching Credential Preparation

A major in biology is acceptable preparation for an elementary or secondary teaching credential. To meet the academic requirements for the Elementary Teaching Credential, students must pass the General Knowledge Portion of the National Teacher's Examination. For the Secondary Teaching Credential, students must complete the Single Subject Waiver Program in Life Sciences. Biology majors seeking a teaching credential are encouraged to consult with the Department's credential advisor, and review the University's special bulletin on *Programs in Teacher Education.* For further information on credentials and professional education requirements see pp. 106 of this Catalog.

Master of Arts In Biology

Sonoma State University has offered a program leading to the Master of Arts in Biology since 1966. The degree can be pursued via two options. The THESIS OPTION requires an original thesis and benefits those students intending to continue in biological research. The EXAMINATION OPTION, which has two *advisory plans,* requires completion of a comprehensive written examination regarding the basic concepts of biology. The *General Biology Advisory Plan* benefits those students whose goals are to gain more biological information and more experience in communicating biological concepts. The *Environmental Biology Advisory Plan* involves completion of Biology 596, a team project course, and other course work as outlined below. It is designed for students who wish to apply their knowledge to the solution of environmental problems. These programs are explained fully in a brochure available from the Biology Department. The graduate coordinator will assist in the selection of a plan.

Admission Procedures

1. Apply for admission to the University at the Office of Admissions.
2. Unclassified Postbaccalaureate Standing—Applicants who desire only postbaccalaureate course work and who do not intend to pursue an M.A. degree need only obtain acceptance by Sonoma State University. The Biology Department does not review these applications.
3. Conditionally Classified Graduate Standing—Applications are submitted to the Office of Admissions and must include *two* copies of official transcripts of all college work showing a B.A. degree or equivalent in biological science, a grade point average (G.P.A.) of at least 2.5 for the last 60 units attempted, and a letter stating the applicant's long-range professional goals and outlining his/her area of interest in Biology. These are forwarded to the Biology Department for consideration and approval.

Refer to section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

The Biology Graduate Coordinator serves as advisor to all conditionally classified graduate students until selection of a major advisor and advancement to classified status. The General Biology Assessment Examination is to be taken during the second week of the semester of admission by all students seeking eventual advancement to classified status.

Application Dates

Application for graduate study in the Biology Department must be submitted to the Office of Admissions no later than May 1 for admission the following fall semester, and no later than November 1 for admission the following spring semester.

Classified Graduate Standing

Classified graduate students are those who have submitted scores for the aptitude and advanced biology sections of the Graduate Records Examination; submitted at least two letters of recommendation; submitted a letter from the applicant stating long range professional goals and the immediate area of interest; selected a Biology advisory committee; accepted a program contract; and have been approved by the departmental faculty for the Master of Arts Program. Classified students must be registered each semester while working toward the degree unless a leave of absence has been approved by the departmental graduate committee.

Procedures for Advancement to Classified Graduate Status

A minimum of 15 of the required 30 units for the M.A. degree must be completed *after* attainment of classified standing. Therefore, form G-1/G-2 should be filed with the Graduate Studies Office before enrolling in the final 15 units of the graduate study plan.

Advancement to classified standing involves the completion of a number of steps and requirements involving both the Biology Department and the Graduate Studies Office. A full list is available in the Biology Department Office.

Biology Courses

GENERAL EDUCATION COURSES
GENERAL PERSPECTIVES

115. An Introduction to Biology
(3) (Fall and Spring) Department Faculty

Lecture. 3 hours. A course for majors and non-majors in which unifying concepts of biology are presented. Topics include the chemical and physical basis of life; cellular structure and function; molecular and Mendelian genetics; the reproduction, development, structure and function of representative multicellular plants and animals; and evolution and ecology. Required for major, applied as G.E. credit.

†115L. Introductory Laboratory
(1) (Fall and Spring) Department Faculty

Laboratory, 3 hours. A course to complement Biology 115. Laboratory work includes artificial and natural ecosystems; cellular structure and function; cell division; Mendelian genetics; and the biology of organisms.

SPECIFIC EMPHASES

†116. General Botany
(4) (Fall and Spring) Kjeldsen, Quibell, Sherman

Lecture, 2 hours; laboratory, 6 hours. An introduction to plant science emphasizing the reproduction, growth, structure, evolution, and ecology of the major organismal groups traditionally covered in general botany texts.
Prerequisite: Biology 115 or equivalent.

†117 General Zoology
(4) (Fall and Spring) Brumbaugh, Hermans, Hopkirk

Lecture, 2 hours; laboratory, 6 hours. An introduction to the characteristics, organ systems and major groups of the animal kingdom.
Prerequisites: Biology 115 or equivalent.

† Laboratory fee may be charged, as published in class schedule.

†202. Natural History of the North Bay Region
(3) (Fall or Spring) Department Faculty

Lecture, 3 hours; or 2 hours of lecture and 3 hours of laboratory/field trips. Designed to acquaint the student with local plants and/or animals and aspects of their interrelationships and relationships with the environment. Specific biological groups emphasized will vary from semester to semester. (Most frequent offerings have involved the study and identification of local plants, with showy "wildflowers" emphasized in spring, and both wild-growing and ornamental woody plants emphasized in the fall.) Not applicable to the major.
Prerequisite: Biology 115 or equivalent.

†220. Human Anatomy
(4) (Spring) Hopkirk

Lecture, 2 hours; discussion, 1 hour; laboratory, 3 hours. A course surveying the body systems. Designed for Health Science and Physical Education Majors. Not applicable to the major.
Prerequisite: Biology 115 or equivalent.

224. Human Physiology
(3) (Fall) Clothier, Hanes

Lecture, 3 hours. An introductory course in the principles of physiology as they relate to the processes, activities, and phenomena of the living human body. Designed for Health Science and Physical Education Majors. Not applicable to the major.
Prerequisites: Biology 115 or equivalent.

†224L. Human Physiology Laboratory
(2) (Fall) Clothier, Hanes

Laboratory, 6 hours. A laboratory course designed to accompany and complement Biol. 224. Experiments and demonstrations illustrating the principles of human function discussed in Human Physiology lecture. Not applicable to the major.
Prerequisite: Biology 224 (or concurrent with biology 224) or equivalent.

312. Oceanology
(3) (Fall or Spring) Kjeldsen, Staff

Lecture, 3 hours. A course designed to give a broad general background in the science of oceanology, with emphasis on the relationships between oceanology and other fields. One or more field trips will be scheduled.
Prerequisite: Biology 115 or equivalent. Not applicable to the major.

†314. Field Biology
(3) (Usually offered Spring semester) Department Faculty

Lecture, 2 hours; laboratory, or field, 3 hours. A course emphasizing the ecology and identification of local plants and animals. Not applicable to the major.
Prerequisite: Biology 115 or equivalent.

318. The Biology of Aging
(3) (Fall or Spring) Benko

Lecture 3 hours. A lecture course which examines and analyzes the gradual and inexorable biological processes occurring in a cumulative fashion as the human organism ages. The course includes a consideration of the changes in the connective tissue, cardiovascular, renal, hematopoietic, endocrine, nervous, reproductive and immune systems. A discussion of the cell cycle and genetic regulation of life span and cell death is included as well as consideration of future possibilities for reversing or retarding the aging process and extending the human life span. Not applicable to the major.
Prerequisite: Biology 115 or equivalent.

332. Plants and Civilization
(3) (Fall) Quibell

Lecture, 3 hours; field trips. An introduction to the historical and evolutionary interrelationships between man and his domesticated plants. Topics covered include: the origins of agriculture and its development into the 20th century and beyond; the influences of man on plants and of plants on human history; plus the botanical and cultural origins of the principal cultivated plants. A library research paper (or oral report) is required. One or more field trips to be planned in consultation with the class. Not applicable to the major.
Prerequisite: Biology 115 or equivalent.

385. Contemporary Issues in Biology
(3) (Fall or spring) Department Faculty

Lecture, 3 hours. Selected topics related to the quality of life today and the search for a perspective for the future. (Frequent offerings have included The Biology of Cancer and Environmental Toxicology.)
Prerequisite: Biology 115 or equivalent.

LOWER DIVISION

CORE COURSES FOR BIOLOGY MAJORS AND MINORS

Biology majors are encouraged to complete all of the lower division core requirements before attaining junior standing (60 units). This maximizes flexibility in upper division course selection by assuring that essential prerequisites will have been completed.

100. Credit by Examination
(3–6) (Fall and Spring)

The General Education requirement in Biology may be satisfied by passing exams such as the CLEP Examination in Biology. Credit toward the General Education requirement in Biology will be awarded for passing of this exam. Passing of the exam does not waive the laboratory requirement. See the Credit by Examination section of this Catalog for more information.

†116. General Botany
(4) (Fall and Spring) Kjeldsen, Quibell, Sherman

Lecture, 2 hours; laboratory, 6 hours. An introduction to plant science emphasizing the reproduction, growth, structure, evolution, and ecology of the major organismal groups traditionally covered in general botany texts.
Prerequisite: Biology 115 or equivalent.

†117. General Zoology
(4) (Fall and Spring) Brumbaugh, Hermans, Hopkirk

Lecture 2 hours; laboratory, 6 hours. An introduction to the characteristics, organ systems and major groups of the animal kingdom.
Prerequisites: Biology 115 or equivalent.

215. Introduction to Molecular Biology
(3) (Fall and Spring) Benko, Christmann

Lecture, 3 hours. A molecular approach to basic cellular biology including cellular physiology, macromolecular synthesis and regulation, cellular bioenergetic relationships (photosynthesis and respiration), and molecular genetics.
Prerequisites: Biol. 116 or 117 and Chem. 115AB or equivalent.

UPPER DIVISION COURSES APPLICABLE TO THE BIOLOGY MAJOR

†300. Ecology
(4) (Fall) Northen, Sherman

Lecture, 3 hours; laboratory or field, 3 hours. Study of general principles relating to populations, natural communities, and ecosystems. Laboratory analysis on plant and animal sampling, measurement of physical factors, and quantitative data analysis. Methods of field study in aquatic and terrestrial systems, including field trips to local ecosystems.
Prerequisites: Biology 116 or 117, or consent of instructor.

†302. Biological Techniques
(3) (Fall) Hermans

Lecture, 1 hour; laboratory, 6 hours. Techniques for preserving, studying, and describing the macro- and microscopic structure of animals or plants will be taught; emphasis may vary from semester to semester.
Prerequisites: Biology 116 or 117 and three units in physical sciences.

320. General Genetics
(4) (Fall) Ebert

Lecture, 3 hours; labortory, 3 hours. A study of the principles of heredity, including topics in classical and molecular genetics, cytogenetics and population genetics.
Prerequisites: Biology 215 or consent of the instructor.

322. Human Genetics
(4) (Spring) Ebert

Lecture, 3 hours; discussion, 1 hour. An introduction to basic principles of genetics and their application to human heredity.
Prerequisite: Biology 215 or consent of the instructor.

†324. Animal Physiology
(4) (Spring) Hanes

Lecture. 2 hours; laboratory, 6 hours. Basic principles and concepts of animal function with emphasis on organ systems, environmental adaptations and comparative homeostatic mechanisms.
Prerequisites: Biology 117 and 215, Chemistry 115AB or Chemistry 125AB.

†325. Cell Structure
(4) (Fall) Ebert

Lecture, 3 hours; laboratory, 3 hours. An integration of the structural and molecular organization of cells as it is related to cell function.
Prerequisites: Biology 215 or equivalent.

†330. Plant Taxonomy
(4) (Spring) Quibell

Lecture, 2 hours; laboratory or field, 6 hours. An introductory course in plant taxonomy with emphasis on the California flora. At least one weekend field trip.
Prerequisites: Biology 116 or consent of instructor.

†334. Plant Physiology
(4) (Fall) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours. Basic concepts and fundamental principles of the various aspects of plant physiology. The following areas are investigated in detail: photosynthesis, water relations, mineral nutrition, and plant growth regulation.
Prerequisites: Biology 116 and 215 and Chemistry 115AB or Chemistry 125AB.

† Laboratory fee may be charged, as published in class schedule.

†335. Nonvascular Plant Morphology
(4) (Alternate Fall, odd years) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours. A comparative study of the morphology of photosynthetic prokaryotes, algae, fungi, and bryophytes, emphasizing comparative development, morphological adaptations and evolution of representative examples.
Prerequisite: Biology 116.

†336. Vascular Plant Morphology
(4) (Alternate Spring, even years) Sherman, Quibell

Comparative structure and phylogeny of Pteridophytes, Gymnosperms, and Angiosperms.
Prerequisite: Biology 116.

†337. Plant Anatomy
(4) (Alternate Fall, even years) Quibell

Lecture, 2 hours; laboratory, 6 hours. Comparative, developmental and systematic anatomy of seed plants. Cell, tissue and organ development, from meristems to mature elements are considered; along with some practical applications of anatomical data to taxonomic, phylogenetic, and archeological/ethnobotanical problems.

†338. Phycology
(4) (Spring) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours. The study of marine and freshwater algae, their structure, reproduction, ecology, taxonomy, physiology, and economic importance.
Prerequisites: Biology 116.

† 339. Mycology
(4) (Alternate Fall, even years) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours. Introduction to the fungi. Life cycles, reproduction and structure. The last third of the course spent on basidiomycete taxonomy.
Prerequisite: Biology 116.

† 340. General Bacteriology
(5) (Usually Fall) Benko

Lecture, 3 hours; laboratory, 6 hours. A survey of the fundamental principles and techniques of bacteriology.
Prerequisites: Biology 116 and 215 and Chemistry 115AB or Chemistry 125AB.

344. Cellular Physiology
(4) (Spring) Benko

Lecture, 2 hours; laboratory 6 hours. Cellular nutrition, metabolic pathways, growth and regulation, membrane transport mechanisms; macromolecular regulation in eukaryotic and prokaryotic cells and modern techniques of cell physiology.
Prerequisites: Biol 215 and Chem 115AB.

† 350. Natural History of the Aquatic Invertebrates
(4) (Spring) Brumbaugh

Lecture, 2 hours; laboratory or field, 6 hours. Identification and ecology of local marine and freshwater invertebrates. Habitats studied include protected and unprotected rocky seashores, sandy beaches, bay tidal flats, lakes, ponds and streams. Feeding habits and structural, physiological and behavioral features used by the various invertebrate groups to cope with stresses posed by environments are studied.
Prerequisites: Biology 117.

† 355. Entomology
(4) (Fall) Brumbaugh

Lecture, 2 hours; laboratory, 6 hours. Fundamental principles of the study of insects. Major areas investigated include the taxonomy, morphology, development, ecology, and physiology of insects.
Prerequisite: Biology 117.

† 360. Natural History of the Vertebrates
(4) (Fall) Hopkirk, Isaac

Lecture, 2 hours; laboratory, 6 hours, at least one weekend field trip. Studies of the characteristics, ecology, systematics, and evolution of vertebrate animals—fish, amphibia, reptiles, birds, and mammals.
Prerequisites: Biology 117.

† 370. Comparative Anatomy of Vertebrates
(4) (Fall) Hopkirk

Lecture, 2 hours; laboratory, 6 hours. Morphogenesis and evolutionary development of vertebrate structure.
Prerequisites: Biology 117.

† 372. Vertebrate Embryology
(4) (Spring) Clothier

Lecture, 2 hours; laboratory, 6 hours. Developmental morphology and physiology of the vertebrates.
Prerequisites: Biology 117.

380. Principles and Problems in Human Nutrition
(4) (Fall or Spring) Benko

Lecture, 3 hours; discussion, 1 hour. An introduction to basic concepts of modern nutrition including some discussion of principal nutritional problems and modern food processing methods.
Prerequisites: Biology 115 and one course in beginning chemistry.

383. Virology
(3) (Fall) Yamada

Lecture, 3 hours. Study of viruses: their nature, classification, replication and genetics, immunology and pathogenesis. Discussion of properties, detection, epidemiology, prevention and control of the more common pathogens, especially of humans.
Prerequisites: Biology 116 or 117, and 215.

† Laboratory fee may be charged, as published in class schedule.

385. Contemporary Issues in Biology
(3) (Fall or Spring) Department Faculty

Lecture, 3 hours. Selected topics related to the quality of life today and the search for a perspective for the future. (Frequent offerings have included The Biology of Cancer and Environmental Toxicology.)
Prerequisite: Biology 115 or equivalent.

390. Biology Colloquium
(1) (Fall and Spring) Department Faculty

Lecture, 1 hour. A series of lectures by faculty and invited guests on current research and issues in contemporary biology. Attendance only for CR/NC; written paper(s) and upper division status required for grade. All majors and graduate students are encouraged to enroll each semester, although no more than two units are applicable to the upper division major requirement.
Prerequisite: Biology 115 or equivalent.

395. Community Involvement Program
(1–4) (Fall and Spring) Department Faculty

CIP involves students in basic community problems related to biology—performing such tasks as tutoring, reading to the blind, service to local, county, and state agencies, service as teacher aides to elementary schools, etc. Students receive 1–4 units depending on the specific task performed. A total of 6 units of CIP credit may be applied toward a degree. May be taken by petition only and *does not* fulfill any requirement of the biology major or minor.
Prerequisites: Completion of introductory biology sequence.

† 401. Marine Ecology
(4) (Alternate Spring, even years) Kjeldsen, Staff

Lecture, 2 hours; laboratory or field, 6 hours. The marine environment and the biology of the organisms therein. The course embraces broad aspects of the interrelations of organisms and their enviroment.
Prerequisite: Biology 338 or 350

† 402. Plant Ecology
(4) (Alternate Spring, odd years) Sherman

Lecture, 2 hours; laboratory or field, 6 hours. The developmental dynamics of plant communities (synecology) and the interrelations between individuals and their environment (autecology). Emphasis on field study with required field trips and field research projects.
Prerequisite: Biology 300 or equivalent; Biology 330 and 334 recommended.

415. Evolution
(3) (Spring) Ebert

Lecture, 3 hours. A study of the organic processes of evolution with major emphasis on the "how" and "why" of evolution.
Prerequisite: Biology 320 or 322.

† 416. Biogeography
(4) (Alternate Fall, odd years) Isaac

Lecture, 2 hours; laboratory, 6 hours; some overnight field trips. Study of patterns of geographic distribution of terrestrial plants and animals with explanations based on ecology and evolution.
Prerequisite: Biol 300 or equivalent.

424. Biological Action of Drugs and Poisons
(3) (Alternate Fall, odd years) Hanes

The physiological effects of common medicinals, abused drugs, commercial poisons, plant and animal poisons and research poisons on mammals.
Prerequisites: Biology 324 or 224 and Chemistry 340 or equivalent.

† 451. Functional Morphology of Marine Invertebrates I
(4) (Alternate Spring, odd years) Brumbaugh

Lecture, 2 hours; laboratory, 6 hours. Structure and function of adaptations which have enabled members of a phylum or major group to occupy new environments or take on a way of life different from closely related forms. Major emphases are given to sponges, cnidarians, flatworms, nemerteans, bryozoans, brachiopods, echinoderms, and invertebrate chordates. Evidences of evolutionary relationships between and among groups are drawn from comparative anatomy, embryology, biochemistry and paleontology.
Prerequisite: Biology 350 or consent of the instructor.

† 452. Functional Morphology of Marine Invertebrates II
(4) (Alternate Spring, even years) Brumbaugh

Lecture, 2 hours; laboratory, 6 hours. Continuation of Biology 451. Major emphases are given to molluscs, annelids, arthropods, and allied phyla. While the two courses form a continuous sequence, either may be taken separately.
Prerequisite: Biology 350 or consent of the instructor.

† 460. Ichthyology
(4) (Alternate fall, odd years) Hopkirk

Lecture, 2 hours; laboratory or field, 6 hours. At least one weekend field trip. The biology of fishes: comparative morphology, classification, distribution, ecology and evolutionary history.
Prerequisite: Biology 360 or 370 or consent of instructor.

† Laboratory fee may be charged as published in class schedule.

465. Ornithology
(4) (Alternate Spring, even years)
Department Faculty Arnold

Lecture, 2 hours; laboratory and field, 6 hours. This course progresses from basic avian anatomy through a study of feathers and plumages to the life histories of birds including such topics as molts, distribution, migration, breeding habits, etc. Basic classification is learned in the laboratory and in the field.
Prerequisite: Biology 360 or 370 or consent of the instructor.

† 468. Mammalogy
(4) (Alternate Fall, even years)
Isaac

Lecture, 2 hours; laboratory and field, 6 hours. Studies of the characteristics, classification, physiological ecology, habitats, behavior, reproduction, distribution, and evolution of mammals.
Prerequisite: Biology 360 or 370, or consent of the instructor.

† 475. Animal Behavior
(4) (Alternate Spring, even years)
Northen

Lecture, 2 hours; laboratory, 6 hours. A consideration of the classical concepts of innate behavior; the endogenous and exogenous mechanisms that control behavior; sociobiology and the ecological adaptations of behavior patterns.
Prerequisite: Biology 324. Biology 350 or 360 strongly recommended.

480. Immunology
(3) (Spring) Yamada, Clothier

Lecture, 3 hours. The component elements of the immune response; antigens and antibodies; theories of antibody synthesis, cellular reactivities, hypersensitivity; immunogenetics.
Prerequisites: Biology 117, 215, and 324. Biology 340 strongly recommended.

480L. Immunology Laboratory
(2) (Spring) Yamada, Clothier

Laboratory, 6 hours. Laboratory exercises to demonstrate qualitative and quantitative techniques of immunology and properties of the immune system, including antigen antibody interactions and cellular immunity. Independent research project required.
Prerequisite: Biology 480 or concurrent enrollment.

† 481. Medical Microbiology I
(3) (Fall) Yamada

Lecture, 3 hours. Study of the mechanisms of infectious diseases (primarily of humans) caused by bacteria, mycoplasma, and rickettsia. Emphasis is placed on understanding host-parasite interactions and the characteristics of each which contribute to, and participate in, the disease process. Includes discussions of therapeutic modalities and infection control, principally of infectious diseases of current interest.
Prerequisites: Biology 215 and 340.

481L. Medical Microbiology Laboratory I
(2) (Fall) Yamada

Laboratory, 6 hours. Laboratory techniques for the cultivation, isolation and identification of pathogenic bateria. Emphasis will be on methods and procedures currently utilized in diagnostic laboratories.
Prerequisites: Biology 481 or concurrent enrollment.

† 482. Medical Microbiology II
(3) (Spring) Yamada

Lecture, 3 hours. Study of infectious diseases (primarily of humans) caused by parasites, yeasts and fungi. This course forms a continuous sequence with Biology 481, however, either may be taken separately.
Prerequisites: Biology 117 and 215. Biology 481 strongly recommended.

482L. Medical Microbiology Laboratory II
(2) (Spring) Yamada

Laboratory, 6 hours. Laboratory techniques for the preparation of specimens and methods for identification of protozoan and helminth parasites. The latter half of the semester will be devoted to the cultivation, isolation and identification of pathogenic yeast and other fungi.
Prerequisite: Biology 482 or concurrent enrollment.

† 484. Hematology
(4) (Fall) Hermans

Lecture, 3 hours; laboratory, 3 hours. A basic couse in the study of blood that covers the normal and abnormal structure and function of red cells, white cells, and hemostatic mechanisms.
Prerequisite: Biology 215.

† 485. Molecular Biology
(4) (Fall) Christmann

Lecture, 2 hours; laboratory, 6 hours. The molecular structure and function of prokaryotic and eukaryotic chromosomes. Emphasis on those features exploited in recombinant DNA technology. Laboratory exercises will illustrate specific techniques.
Prerequisites: Biology 320 or 322; Chemistry 340 or Biology 340.

† 495. Special Studies
(1–4) Department Faculty

Prerequisites: A major or minor in biology with upper division standing and consent of instructor and department chairman.

† 497. Selected Topics in Biology
(1–4) Department Faculty

A course dealing with intensive study of a particular biological topic. The topic will vary from semester to semester. The course may be repeated for credit and may be applicable to the requirements for a major in biology.
Prerequisites: Consent of instructor.

† Laboratory fee may be charged, as published in class schedule.

498. Biology Practicum
(1–4) (Fall and Spring) Department Faculty

Application of previously studied theory through supervised instructional work experience in biology. Intended for professional growth. A course evaluation is required for all students taking the course. May be repeated for up to a total of 4 units. Prerequisites: Upper division standing in Biology; consent of the instructor in whose course the student will be working.

499. Internship in Biology
(1–4) (Fall and Spring) Department Faculty

Work that provides training in the use of biological skills in the community. Requires written agreement among students, faculty, and community sponsor: see Department Office for details. May be repeated for up to 8 units of credit; 3 hours per week for each unit. CR/NC grading only. Not applicable to the Biology Major.

GRADUATE COURSES

Up to 15 units of upper division courses, selected in consultation with the student's Advisory Committee, may be included n the 30-unit requirement. (See information available in the Biology Department Office.)

500. Seminar in Biological Research
(1–2)

Scientific research will be examined from various points of view; personal, practical, historical, philosophical and sociological.

† 510. Selected Topics in Biology
(2–4)

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate or last semester senior standing with consent of instructor.

† 511. Selected Topics in Physiology
(2–4)

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

† 512. Selected Topics in Systematics, Genetics and Evolution
(2–4)

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

† 513. Selected Topics in Ecology
(2–4)

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

† 514. Selected Topics in Morphology and Development
(2–4)

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

† 515. Selected Topics in Cellular and Molecular Biology
(2–4) Department Faculty

Prerequisites: Adequate undergraduate preparation in the topics under consideration and graduate standing or last semester senior with consent of the instructor.

† 524. Neurobiology
(3) (Alternate Fall, even years) Hanes

Lecture, 3 hours. A study of nerve cells, nerve networks and behavior, nervous development and differentiation, and functional anatomy of nervous systems, both vertebrate and invertebrate.
Prerequisites: Biology 324.

† 525. Electron Microscopy
(4) (Fall) Hermans

Lecture, 2 hours; laboratory, 3 hours. A study of the techniques of transmission, and scanning electron microscopy with laboratory experience including the preparation of biological materials, photographic techniques, and data presentation.
Prerequisites: Biology 325, Physics 210B, and Chemistry 115B, or consent of the instructor.

† 526. Scanning Electron Microscopy
(2) (Spring) Hermans

Lecture, 1 hour; laboratory, 3 hours. A study of the techniques of scanning electron microscopy with laboratory experience in the preparation of biological and other materials, photographic techniques, and data presentation.
Prerequisites: Chemistry 115B, Physics 210B

595. Special Studies in Biology
(1–3) Department Faculty

Prerequisites: Graduate standing and consent of instructor and major advisor.

596. Coordinated Project in Environmental Biology
(4) (4) Northen, Sherman

A two-semester, interdisciplinary team project approach to the study of ecosystems and their management.
Prerequisites: Admission to Classified Standing for the Environmental Biology Advisory Plan of the Examination Option of the Master's Degree in Biology and permission of instructor.

598. M.A. Essay Examination
(4) (Fall) Department Faculty

Independent study and consultation with biology faculty in preparation for the M.A. Essay Examination. Detailed synthetic answers are prepared to eight broadly integrative questions which individually and collectively attempt to unify many of the various facets of biology. (See "M.A. Degree in Biology—Policies and Procedures" and "M.A. Essay Exam—Pool Questions" available in the Biology Department Office.)

† Laboratory fee may be charged, as published in class schedule.

599. M.A. Thesis
(1–3)

An authorized "Thesis Prospectus Approval Form" is required before enrollment in Bio. 599.

Career Minors

The Career Minors Program allows students from a variety of majors to pursue a coherent sequence of courses in order to acquire insight into the ways the major may be applied in particular careers. Each minor culminates in an internship giving the student practical experience in the field.

Information about a Career Minor may be obtained from the faculty advisor. Students interested in pursuing a minor should plan well in advance in order to integrate the course work into their plan of study.

Current Career Minors are:

Arts Management

The Career Minor in Arts Management provides students of the arts with education, training and experience in the practical, business side of their fields. Art, Music and Theatre Arts majors completing this career minor will be in stronger positions to find work in fields within or closely related to their majors—areas such as gallery director, theatre or concert manager, performer's agent, etc.

Additionally, the proposed minor-combined with a minor in one of the three arts fields mentioned above—will also serve the needs of Management and other majors who wish to specialize in the field.

The Course of Study:
Mgt 230 Accounting Fundamentals (4)
Mgt 360 Marketing Environment (4)
Mgt 370 Introduction to Managerial Finance (4)
ART/MUS/or THAR 312 Principles of Arts Management (3)
Specific area course (complete one field):
Art 460 Gallery and Museum Methods (4)
Art 499 Internship (4)
or
THAR 463 Theatre Management (3)
THAR 499 Internship (4)
or
MUS 463 The Business of Music (3)
MUS 499 Internship (4)
Total number of units required for the minor: 22–23

Students in the Arts Management Career Minor must also complete a major or minor in either Art, Music, or Theatre Arts. The combination of an Arts Management minor with a major in any one of these fields is the best preparation for a career in arts management. The Career Minor in Arts Management may also be combined with any other major provided that the student also completes at least a minor in Art, Music or Theatre Arts.

Advisors:
Bob Nugent, Art Department
Joann Feldman, Music Department
William Reynolds, Management Studies Department

Information and Research

This minor will train Liberal Arts majors in research and information (e.g., accessing information, fundamentals of computer techniques, research design, qualitative and quantitative analysis, the politics of information systems). As emphasis increases on the understanding, collection, storage, and interpretation of data in all sectors of society Liberal Arts majors trained in technical research skills will enhance their opportunities for employment in business, government and other agencies.

Prerequisite:
Successful completion of one college-level statistics course.



Career Minor

Core (16–17 units)
1. English 292—Introduction to Library Research (2)
2. Management 218—Introduction to Computer Data Processing (4)
3. English 375—College Composition (3)
4. Sociology 376—Research Design (4)
   or
   Mathematics 466—Applied Statistics (3)
5. Sociopolitics of Information (4)
   (See advisor for details)

Computer Language

Students are required to be able to program in at least one computer language of their choice. One of several courses can be taken to meet this requirement. Consultation with a faculty advisor is mandatory in determining how this requirement will be met.

Capstone Course
Sociology 499—Internship Program (4)

Advisor: Dr. Joseph Frasca
Computer and Information Science, 664-2344/2368

Health Systems Organizations

The Health Systems Organizations career minor is an interdisciplinary program which provides students with an opportunity to focus on either of two significant dimensions of health care: technical and managerial problems or preparation for direct service. The minor outlines a course of study within a liberal arts framework that provides each student with a basic understanding of: 1) health systems as significant social, cultural and economic institutions within the society, 2) cultural relativity in views of health and illness and 3) the social and psychological implications for those who are served by health systems.

The supporting courses will be chosen with the assistance of the faculty advisor to prepare the student for specific career objectives. The Health Systems Organizations Minor complements a number of traditional majors such as ethnic studies, management, nursing, politics, psychology and sociology besides programs in medical anthropology, gerontology, and women's studies. This career minor will increase the employment opportunities in the health field of students from the above majors and programs. The minor also provides an excellent background for those who plan to obtain graduate professional training in fields such as medicine, social work or public health.

Core (12 units)
- A. American Multi-Cultural Studies 432—Health and Culture (4)
- B. Gerontology 452—Health Care and Illness (crosslisted as Sociology 452—Health Care and Illness) (4)
- C. Economics 393—Managing Health Systems (4)

Electives (8 units)—related courses selected in consultation with faculty advisor.

Capstone Course: Gerontology
499—Internship Program (4 units)

Advisor: Dr. Kathleen Charmaz
(Gerontology Program, St. 2089, phone 664-2456/2561)

In addition, the Career Minor in Health Systems Organization offers a track focusing on Women's Health. Its goal is to provide students with well-organized and highly marketable degree alternatives. The curriculum is organized toward enhancing students' opportunities for employment in a specific and stable arena of medical care, and women's health. It relies upon well-established courses in Women's Studies and in many other departments, focusing course requirements and internships on the particular issues and organizations in women's health care. Career needs of both health care providers (e.g. nurses) and liberal arts and sciences majors are addressed by the program.

Core (12 units)
- A. Women's Studies 325—Feminist Perspectives on Women's Health (4)
- B. Gerontology 452—Health Care and Illness (4)
- C. Arnerican Multi-Cultural Studies 432—Health and Culture (4) or Anthropology 357—Medical Anthropology (4)

Electives (8 units)—related courses selected in consultation with faculty advisor.

Capstone Course—Women's Studies
499—Internship Program (4 units)

Advisor: Dr. Kay Trimberger (Women's Studies Program, C.S. 31/32, phone 664-2840)

Recording Technology

The Career Minor in Recording Technology offers preparation to those seeking work in the recording industry or in areas of the communications field which require expertise in studio recording (science, teaching, business, advertising). The program is also useful to performers who seek to employ recording as a tool in their own work.

The course of study:
Total units required: 20–23
Physics 210A-B General Physics (3–3)*
Physics 300 Physics of Music (3)**
Physics 311 Elements of Electronics (4)***
Music 262A-B Recording I and II (2–2)
Music 462 Recording III (2)****
Music 499 Internship (4); may be combined with Music 495, Senior Project (1–2)*****

A Senior Project, if selected, is designed by the student in conjunction with a faculty advisor as a culminating experience involving recording in a primary way in the completion of an extensive project in the student's area of interest.

All required courses should be completed prior to enrollment in the Internship.

* Math 107, Algebra and Trigonometry (4), is a prerequisite for Physics 210A. The algebra and trigonometry prerequisite may alternately be met by Math 107T, Math 161, or by high school courses and demonstration of equivalent knowledge and skills.
** Physics 210A is a prerequisite for Physics 300 and may be used to satisfy part of the General Education requirement in Natural Science.
*** Physics 210A and B are prerequisites for Physics 311. It is recommended that the accompanying laboratory courses, Physics 209A and 209B, be taken concurrently with the lecture courses Physics 210A and 210B respectively.
**** Students should complete Physics 300 before enrolling in Music 462.
***** The Internship component is an important part of the Minor. The Internship is an actual work experience in a setting normally off-campus which involves the student using his/her skills in recording in a primary way; the particular setting is chosen to be appropriate to the student's own career goals.

Where possible and appropriate, students will be placed in actual internships to provide the most direct experience possible in using their recording skills in a work setting. In some cases, though, particular student interests in recording may also be served by the Senior Project format which may be combined with the Internship for a total of 4 units for both projects.

Students who seek to work in the music recording industry are strongly advised to major in music and to complete the Recording Technology Minor.

Students whose primary interest is in technology are advised to take additional coursework in Physics (Physics 312, Elements of Digital Electronics; Physics 412, Microprocessor Applications) and various Computer and Information Science courses.

Students planning to work in communications are advised to seek a major in Communications Studies or in English with a Communications Emphasis.

Students with other career objectives should plan to augment the Recording Minor with other courses which will support recording as a component of their major program.

Advisors:
Prof. Will Johnson, Music Department
Ives 62—664-2134
Dr. Richard Karas, Physics Department
Darwin 2-B—664-2532

Science-Technical Writing

This minor will provide the skills needed to present highly technical material in logically ordered, intelligible prose. As the need for communication between scientists and non-scientists becomes even more critical, students with strong writing skills and the ability to put technological material into a broad societal context will find many opportunities ranging from preparation of educational manuals to promotional materials in a variety of industries and organizations.

Advisor: Prof. Stanley McDaniel, Philosophy Department.

Teaching English as a Second Language

This career minor in applied linguistics has a specific focus. The application of (socio) linguistic principles and methods to the teaching of American English as a second/foreign language. The program's course of study, specifically designed to enhance (post) baccalaureate programs in education (including programs of persons with provisional credentials), English, Foreign Languages and Liberal Studies, also functions as a practical complement to other curricula in the humanities and social sciences.

The course of study:

	Units
Linguistics 310 Phonological Analysis	4
Linguistics 311 Grammatical Analysis	4
Liberal Studies 327A The English Language	2
Linguistics 357 Dialects and Sociolects	4
Linguistics 441 Linguistics and Second Language	3
Linguistics 442 Teaching English as a Second Language	3
Linguistics 499 Internship in Applied Linguistics	4
	24

Persons intending to pursue the above program of study must consult with the Coordinator of the Linguistics Program.

Certificate in Teaching English as a Second Language

At the request of a student who has satisfactorily fulfilled the specified requirements, the Linguistics Program will issue a Certificate in Teaching English as a Second Language.

Fall/Spring Course Patterns in Career Minor

Fall:	*Units*
Linguistics 310	4
Liberal Studies 327A	2
Linguistics 441	3
Linguistics 499	2
	11
Spring:	
Linguistics 311	4
Linguistics 357	4
Linguistics 442	3
Linguistics 499	2
	13

Advisor: Dr. Shirley Silver
(Anthro./Ling., Stevenson 2026, Phone 664-2419/2312/2944

The Center for Performing Arts is a department within the School of Arts and Humanities which coordinates the performance activities of the Music and Theatre Arts Departments; sponsors guest artists and off-campus performances by performing arts groups; and maintains the performing arts box office and mailing list.

Performing ensembles, comprised of students and community members, include the Chamber Music Workshop, Community Chamber Orchestra, Early Music Ensemble, Concert Jazz Workshop, Contemporary Jazz Ensemble, Piano Ensemble, Symphonic Band, Songwriting Workshop, Opera Theatre, Drama Ensemble, Dance Ensemble, Javanese Gamelan, Sonoma Dance Exchange, Chorus, University Singers, Evening Chorus, and Vocal Jazz Ensemble. In addition, a number of student-initiated projects in music, dance and drama are presented each semester, including noon concerts each week.

There are more than 100 performances presented each academic year with an annual attendance approaching 10,000 people.

The box office, located in the lobby of Ives Hall, is open Monday through Friday from 10 a.m. to 2 p.m. Reserved tickets are available for many performances; call 707-664-2353 for additional information. Discount rates on all tickets for SSU students are in effect for all performances.

Associate Dean, Performing Arts:

William Sherman

Director:

Floyd William Ross

Department Office:

Ives 211, Phone (707) 664-2235

Performing Arts Box Office:

Ives Lobby, Phone (707) 664-2353



Center for Performing Arts

Administration of Non-profit Agencies
See Political Science, page 261.

Gerontology
See page 159.

Energy Management and Design
See Environmental Studies and Planning, page 128.

Teaching English as a Second Language
See Interdisciplinary Studies, page 180.

Wine Marketing
Students interested in the Wine Marketing Certificate should inquire at the Social Science School Office, Stevenson 2020.



Certificate Programs



Chemistry

The Chemistry Department offers a flexible academic program designed to familiarize students with the concepts of the atomic and molecular world. Students may choose a course pattern of chemistry upper-division electives for the B.A. or B.S. degree which emphasizes the areas of analytical, organic, inorganic, or physical chemistry, biochemistry, environmental science pre-health professional preparation, or pre-enology. The B.S. degree is certified by the American Chemical Society.

Courses include classroom lectures, laboratory work, field experience, independent study projects, and seminars where well-known chemists address the students and the public. Most classes are small, providing a high degree of individual instruction and advising.

The Department emphasizes experimental laboratory work which involves independent and individualized experimentation, with critical evaluation of data as the goal of most experiments.

The Department is well-equipped with many modern scientific instruments. Unlike many institutions with graduate programs, instruments are available to students in laboratory courses as well as to those engaged in research projects. Research instruments include ultraviolet, visible, infrared, and atomic absorption spectrophotometers, x-ray diffraction, nuclear magnetic resonance and mass spectrometers, and gas, liquid and ion chromatographs. Research instruments are interfaced with departmental minicomputers, and campus computing facilities are accessible by departmental terminals.

Sonoma State's Chemistry graduates have secured employment in the wine, chemical and petroleum industries, in analytical testing laboratories, in air and water pollution laboratories, in criminalistic laboratories and in chemically-related jobs in teaching or sales. Other graduates have pursued advanced degrees at leading universities across the nation in the areas of chemistry, chemical physics, biophysical chemistry, environmental science, chemical engineering, material science, medical biophysical chemistry, medical microbiology, medicine, dentistry, podiatry and veterinary medicine.

Chemistry majors interested in a career in the wine industry should consider completing the Sonoma State University Wine Marketing Certificate Program. For more information on this program inquire at the Social Science School Office, Stevenson 2020.

The Chemistry Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in chemistry, refer to the Appendix, pages 297–350.

Elementary and Secondary Teaching Credential Preparation

A major in Chemistry is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the Elementary Teaching Credential, students must pass the General Knowledge Portion of the National Teacher's Examination. For the Secondary Teaching Credential, students must complete the Single Subject Waiver Program in Physical Science. Chemistry majors seeking a teaching credential are encouraged to consult with the physical science advisor, and review the University's special bulletin on *Programs in Teacher Education*. For further information on credentials and

professional Education requirements see p. 106 of this Catalog.

Department Chair:

Donald D. Marshall

Faculty:

Leslie Brooks, David Eck, Vincent Hoagland, Marvin Kientz, Douglas Martin, Ambrose Nichols (Emeritus), Douglas Rustad, Gene Schaumberg, Dale Trowbridge

Department Office:

Darwin 126, phone (707) 664-2334

Bachelor of Science in Chemistry

Major

The B.S. Degree Program is designed to provide the thorough preparation needed by candidates desiring to work as chemists in industrial and governmental laboratories or desiring to enter graduate programs in chemistry leading to advanced degrees.

	Units
General Education	48
Major	40
Supporting Subjects	19
Electives or Minor	21
	128

Course Requirements for the B.S. Degree

Chemistry Courses:	
1125AB *—General Chemistry (10 units—5 in Gen. Ed., 5 in Major)	*Units* 5
325—Inorganic Chemistry	3
335AB, 336AB—Organic Chemistry	10
375AB, 376—Physical Chemistry	9
381—Computer Programming	2
494—Undergraduate Research	
497—Seminar	1
Upper Division Chemistry Electives †	9
	40

Supporting Courses for B.S. Degree

Mathematics:	
161, 211, 261—Calculus and Analytic Geometry (3 units in Gen. Ed., units in major) Recommended sequence)	*Units* 9
Physics:	
114, 116, 214, 216—Introduction to Physics and Laboratories	10
314, 316 STRONGLY recommended (5 units)	
	19

* Chem 115AB—General Chemistry plus Chem 255—Quantitative Analysis will satisfy the Chem 125AB requirement.

† In consultation with and with the approval of his advisor in the Chemistry Department, a student can choose a pattern of chemistry upper division electives to concentrate in the areas of analytical, inorganic, organic, physical chemistry, or biochemistry.

Certified B.S. Degree in Chemistry

The student meeting the requirements listed for the B.S. degree in addition to those listed below will have his or her transcript noted as a B.S. degree approved by the American Chemical Society.

Grade Point Average:

The student must earn a minimum of 3.0 (out of 4.0) Grade Point Average in upper division Chemistry courses and advanced courses (as defined below) or receive a majority vote of the Chemistry faculty.

Additional Requirements:

420. Advanced Inorganic Chemistry (3)

455. Advanced Analytical Chemistry (4) and two advanced work courses.

One approved advanced course. Examples of advanced courses in Chemistry are Chemistry 436, 437, 441, 445, 446, 457, 470, 481, and 496. Advanced courses taken in other Natural Science departments must be individually approved by the Chemistry Department.

Sequence of Courses:

Students electing the ACS approved B.S. degree should normally take their course work as identified below. This sequence is specified by the American Chemical Society and it is thus important that it be followed as closely as is possible.

First Two Years:
- General Chem . . . with Quantitative Analysis
- Organic Chemistry
- Physics
- Mathematics

Third year:
- Inorganic Chemistry **
- Physical Chemistry
- Computer Programming **

Fourth Year:
- Advanced Inorganic Chemistry ***
- Advanced Analytical Chemistry ***
- Undergraduate Research
- Seminar
- Advanced Work

** May be taken in the second year.

*** These courses may be taken in the spring of the third year concurrently with Chemistry 375B.

Bachelor of Arts in Chemistry

Major

The B.A. degree allows broad preparation for biochemists, for environmental scientists, and for those wishing to obtain technical work or work allied to Chemistry such as: pre-professional, medicine, or dentistry, electronics, food processing, chemical sales, patent, safety, library, or supervisory work in the chemical industries. This degree would provide adequate preparation for graduate study toward an advanced degree in Chemistry or in Biochemistry.

	Units
General Education	48
Major	33
Supporting Subjects	11–13
Electives or Minor	30–32
	124

Course Requirements for B.A. Degree

Chemistry Courses:	*Units*
115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major)	5
255 Quantitative Analysis	4
310AB—Fundamentals of Physical Chemistry	6
316—Physical Chemistry Laboratory	2
335AB—Organic Chemistry	8
Upper Division Chemistry Electives	8
	33

Supporting Courses for B.A. Degree

Mathematics:	*Units*
161 and 211S—Calculus and Analytic Geometry (4 units in Gen. Ed., 3 units in major) (Recommended sequence)	3
AND	
Physics:	
209AB and 210AB—General Physics and Laboratories	8
OR	
114, 116, 214, 216—Introduction to Physics and Laboratories	10
	11–13

Advisory Patterns for B.A. Degree

With the approval of an advisor in the Chemistry Department, a student can choose a pattern of Chemistry upper-division electives in the B.A. degree to concentrate in the areas of analytical, inorganic, organic, physical chemistry, biochemistry, environmental science, pre-professional preparation, or pre-enology. Patterns are designed to provide guidelines for majors who wish to advance toward specific goals in the Chemistry major.

Biochemistry Advisory or Pre-Health Professional Plan

The Biochemistry Advisory Plan is appropriate for students who are interested in employment in the biochemical, pharmaceutical or biotechnology industries or as preparation for graduate study in biochemistry. The Pre-Health Professional Plan is for students who intend to do graduate work in dentistry, medicine, clinical chemistry, medical technology, pharmacy, veterinary medicine, or other para-medical work. For further information about Health Professions, see page 256. The upper division electives for both patterns are Chem 336, 441, 445 and 446. Strongly recommended courses for the biochemistry plan are Chem 497 and at least two courses from Biol. 215, 320, 324, 334 and 340.

Environmental Toxicology Advisory Plan

Designed for students interested in careers in the growing environmental analysis industry or for students interested in graduate work in toxicology, environmental chemistry, or pharmaceutical chemistry. The upper division chemistry electives are Chem 336, 436, 457 and 496 (toxicology). Strongly recommended courses are Chem 381 and 497, and at least two courses from Biol 215, 224, 385, 497, Geol 306, and Phys 354.

Pre-Enology (Wine Chemistry) Advisory Plan

Designed for students intending to do graduate work in enology or planning to work in the wine industry. The upper division Chemistry electives should include Chem 445 and 446. Strongly recommended courses are Chem 336, 499, Biol 116, 215, 340 and Math 165.

Academic Minor in Chemistry

Completion of a minimum of 20 units in Chemistry courses. The 20 units must include a minimum of 6 upper division course units with courses in general chemistry, quantitative analysis or clinical biochemistry and organic chemistry or a curriculum approved by the Department. (Chemistry 125AB fulfills both general and quantitative analysis).

Chemistry Courses

102. Chemistry and Society—Food, Nutrition and Toxicology
(3) (Fall) Eck

Lecture, 2 hours; Laboratory, 3 hours. A non-mathematical course in introductory Chemistry and toxicology. Students will investigate the acute and chronic toxicity of numerous chemical substances such as PCB, DMSO, sugar, DES, saccharin, etc. The students will learn basic chemistry and biochemistry which will enable them to interpret controversial data on foods, drugs and toxins that are a part of daily life. The laboratory will consist of experiments covering chemical principles and phenomena discussed in the lecture. This course partially fulfills the Natural Science GE requirements and satisfies the laboratory requirement.

102. Chemistry and Society—Introductory Wine Chemistry (Enology)
(3) (Spring) Schaumberg

Lecture, 2 hours; Laboratory, 3 hours. An introductory course of scientific information and methodology regarding commercial and home wine making. Topics include the chemistry of wine making, the chemistry of grapes, wine analysis, wine stabilization, quality control, and wine maturations in wooden containers. Introductory background chemistry and biochemistry will also be introduced. The laboratory will consist of experiments covering chemical principles and phenomena discussed in the lecture. This course partially fulfills the Natural Science GE requirement and satisifies the laboratory requirement.

110. Preparation for General Chemistry
(2) (Fall and Spring) Marshall, Rustad

Lecture, 2 hours. For students who will be taking Chem 115A but lack the necessary mathematical and scientific background. This course emphasizes the use of calculators, exponential numbers, metric system, nomenclature, chemical equations, stoichiometry, gas laws, concentration units, and elementary atomic structure. Chemistry 110 is not open to students who have completed Chemistry 115A or 125A. Not acceptable for credit toward a science major or minor, or for satisfying the general education requirement.

115AB. General Chemistry
(5–5) (Both 115A and 115B offered Fall and Spring) All faculty

Lecture, 3 hours; laboratory lecture, 1 hour; laboratory, 3 hours. General principles of chemistry selected from the areas of biochemistry, analytical, inorganic, organic and physical chemistry. This course is designed for science majors and students taking pre-professional curricula. This course partially fulfills the Natural Science GE requirements and satisfies the laboratory requirement.

125AB. General Chemistry
(5–5) (Fall-Spring) Rustad

Lecture, 3 hours; laboratory, 6 hours. An in-depth foundation for chemistry, physics, molecular-biology, and geology majors. Includes introductory aspects of quantitative analysis, physical chemistry and instrumental analysis. Chemistry majors completing this course will bypass Chemistry 255. Prerequisite: High school chemistry and physics.

195. Lower Division Special Studies
(1–3) Department Faculty

232. Survey of Organic Chemistry
(5) (Fall) Kientz

Lecture, 3 hours; laboratory lecture, 1 hour; laboratory, 3 hours. An introduction to the important principles, compounds and reactions of organic chemistry. Particular emphasis on compounds of biological significance. Laboratory includes an introduction to basic techniques of organic chemistry with emphasis on their application to natural products. Course designed for students not majoring in chemistry. Prerequisite: Chemistry 115A or 125A or consent of instructor.

255. Quantitative Analysis
(4) (Fall) Marshall

Lecture, 2 hours; laboratory, 6 hours. Theory and practice of methods of analysis, including volumetric, gravimetric, and selected instrumental techniques. Prerequisite: Chemistry 115B.

310AB. Fundamentals of Physical Chemistry
(3–3) (Fall-Spring) Brooks, Martin

Lecture, 3 hours. Development and applications of the concepts of thermodynamics, equilibrium, kinetics, and spectroscopy to chemical systems. Intended for candidates for the B.A. degree in chemistry and for related professions. (Not applicable to the B.S. degree in chemistry.) Prerequisites: Chem 125B or 255; Mathematics 211S or concurrent registration; Physics 210AB or 214 and 216; or consent of the instructor.

311. Elements of Electronics
(3) (Fall and Spring)

Lecture, 3 hours. Basic DC and AC circuit theory, applications of diode circuits, principles of transistor amplifiers; oscillators, and electronic instruments, applications of integrated circuit operational amplifiers. CONCURRENT ENROLLMENT IN CHEMISTRY 311L IS MANDATORY. Prerequisites: Mathematics 105D or Mathematics 107 or equivalent; Physics 210B or 214; or consent of instructor. Cross-listed with Physics 311.

311L. Elements of Electronics Laboratory
(1) (Fall and Spring)

Laboratory, 3 hours. Lab to accompany Chemistry 311. CONCURRENT ENROLLMENT IN CHEMISTRY 311 IS MANDATORY.

316. Physical Chemistry Laboratory for B.A. Students
(2) (Spring) Brooks, Martin, Rustad

Lecture, 1 hour; Laboratory, 3 hours. Physicochemical measurements with an emphasis on error analysis, instrumental techniques, report writing and presentation. Prerequisites: Chemistry 310A; concurrent registration in Chemistry 310B.

325. Inorganic Chemistry
(3) (Fall) Rustad

Lecture, 3 hours. Periodic relationships and reactions, ionic and elementary covalent bonding, crystal structures, acid-base concepts and introduction to coordination and organometallic chemistry.
Prerequisite: Chemistry 125B or Chemistry 255.

335A. Organic Chemistry
(5) (Fall and Spring) Eck, Schaumberg, Trowbridge

Lecture, 3 hours; laboratory lecture, 1 hour; laboratory, 3 hours. Basic course in the general theory and reactions of organic chemistry. Emphasis on basic principles. Recommended for science and pre-professional majors.
Prerequisite: Chemistry 115B or 125B or consent of instructor.

335B. Organic Chemistry
(3) (Fall and Spring) Eck, Schaumberg, Trowbridge

Lecture, 3 hours. Continuation of Chemistry 335A. Prerequisite: Chemistry 335A.

336. Organic Chemistry Laboratory
(2) (Fall and Spring) Eck, Schaumberg, Trowbridge

Lecture, 1 hour; laboratory, 3 hours. Fundamental techniques of organic chemistry emphasizing synthetic organic chemistry, modern instrumental methods and qualitative organic analysis. Designed to complement Chemistry 335B.
Prerequisite: Chemistry 335A.

340. Survey of Biochemistry
(3) (Spring) Kientz, Hoagland

Lecture, 3 hours. A survey of the structure and function of proteins, nucleic acids, lipids, carbohydrates and other biological molecules.
Prerequisite: Chemistry 232 or Chemistry 335A; Chemistry 115B.

341. Clinical Biochemistry
(4) (Fall) Kientz

Lecture, 2 hours; laboratory 6 hours. The chemistry, metabolism, and analysis of amino acids, proteins, enzymes, carbohydrates, lipids, and other molecules of clinical interest. There is a strong emphasis on analytical measurements by means of instrumentation. This course fulfills the analytical requirement for the medical technology curriculum.
Prerequisite: Chemistry 340.

375AB. Physical Chemistry
(3–3) (Fall-Spring) Brooks, Martin

Lecture, 3 hours. Theoretical priniciples of quantum mechanics, statistical mechanics, thermodynamics, and kinetics relevant to chemical structure, chemical equilibrium and chemical reactions.
Prerequisites: Chemistry 125B or 255; Physics 214 and 216; Mathematics 261, concurrent registration or consent of instructor. Physics 314 and 316 *strongly* recommended.

376. Physical Chemistry Laboratory for B.S. Students
Brooks, Martin, Rustad

Lecture, 1 hour; laboratory, 6 hours. Physicochemical measurements with an emphasis on experiment planning and design, error analysis, instrumental techniques, report writing and presentation.
Prerequisites: Chemistry 125B or 255; Physics 214 and 216; Mathematics 261, concurrent registration or consent of the instructor. Concurrent registration in Chemistry 375A.

381. Computer Programming for Scientists
(2) (Spring) Brooks, Marshall

Lecture, 1 hour; laboratory, 3 hours. BASIC and FORTRAN programming with emphasis on applications in chemistry and physics. Cross-listed with Physics 381. Prerequisites: Chemistry 115B or 125B; Physics 114; Mathematics 211S.

386. X-Ray Phenomena (2)

Lecture 1 hour; laboratory 3 hours. Interaction of X-rays with matter. Synchrotron radiation and conventional X-ray sources. X-ray fluorescence will be taught as an analytical technique. Current applications of synchrotron radiation. This course is the same as Physics 386.
Prerequisites: Physics 214, 216, Chemistry 115B.

397. Chemistry Practicum
(1–6) (Fall and spring) Department Faculty

Supervised chemistry work experiences which involve practical application of previously studied theory. Intended for professional growth and/or collection of data for future theoretical interpretation. Does not count as upper division electives toward a B.A. or B.S. degree in chemistry. No more than 2 units may be used toward a chemistry minor. No more than 4 units may be taken in a given type of work experience. May be repeated for up to a total of 6 units.
Prerequisite: Junior standing or consent of the instructor.

400. History of Physical Science
(3)

Lecture, 3 hours. A survey of the historical development of the physical sciences. This course is the same as Geology 400 and Physics 400. Not acceptable as Upper Division Chemistry elective for B.A. or B.S. Degree or minor.
Prerequisite: Major in the physical sciences or consent of the instructor.

420. Advanced Inorganic Chemistry
(3) (Spring) Rustad

Lecture, 2 hours; laboratory, 3 hours. Covalent bonding and structures, coordination and organometallic chemistry, solid state chemistry, and the laboratory syntheses and study of selected inorganic compounds.
Prerequisites: Chemistry 325, Chemistry 310B, 375B or concurrent registration or consent of instructor.

436. Modern Techniques of Organic Chemistry
(3) (Fall) Schaumberg, Eck, Trowbridge

Lecture, 1 hour; laboratory, 6 hours. Preparation and characterization of organic compounds by modern methods; includes special techniques of synthesis, analysis, and interpretation of spectral data.
Prerequisites: Chemistry 335B, 336; Foundation in spectroscopy, kinetics and thermodynamics, or consent of the instructor.

437. Advanced Organic Chemistry
(2) (Spring) Eck, Schaumberg, Trowbridge

Lecture, 2 hours. Physical and physiochemical consideration of organic chemistry with emphasis on reaction mechanisms, reactivity and structure, and recent developments from current literature.
Prerequisites: Chemistry 335B; Foundation in spectroscopy, kinetics and thermodanymics, or consent of the instructor.

441. Biochemical Methods
(3) (Spring) Hoagland, Kientz

Lecture, 1 hour; laboratory, 6 hours. Applications of biochemical techniques to the study of proteins, enzymes, and nucleic acids.
Prerequisites: Chemistry 232 or 335B; 340 or 445 or 446; Foundation in spectroscopy, kinetics and thermodynamics, or consent of the instructor.

445. Biochemistry: Structural Materials and Protein Synthesis
(3) (Fall) Kientz, Hoagland

Lecture, 3 hours. A study of buffers, amino acids, proteins, carbohydrates, lipids, nucleic acids and protein synthesis. Emphasis is placed on the structure of macromolecules.
Prerequisites: Chemistry 335B; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

446. Biochemistry: Enzymes and Metabolism
(3) (Spring) Hoagland, Kientz

Lecture, 3 hours. A study of bioenergetics, enzyme structure and function, and the metabolism of carbohydrates, lipids and proteins.
Prerequisites: Chemistry 335B; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

455. Advanced Analytical Chemistry
(4) (Spring) Marshall

Lecture, 2 hours; laboratory, 6 hours. Advanced theory and practice of analytical chemistry with emphasis on instrumental methods of analysis.
Prerequisites: Chemistry 310B or 375B or concurrent registration, or consent of instructor.

457. Environmental Chemistry
(3) (Fall) Marshall

Lecture, 1 hour; laboratory, 6 hours. A study of the problems of air, water, and land pollution with special emphasis on chemical analysis. Field trips will include trips to various centers involved in pollution control and/or analysis.
Prerequisites: Chemistry 255 or 125B; 335A; minimum of senior standing; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

470. Advanced Physical Chemistry
(3) Brooks

Lecture, 3 hours. Basic theories and methods of quantum chemistry and statistical thermodynamics. Emphasis on the application of these techniques to molecular structure.
Prerequisites: Chemistry 375AB, Mathematics 261.

481. Applied Nuclear Chemistry and Physics
(2) (Fall) Dunning

Lecture, 2 hours. This course offers working knowledge of nuclear radiations, radioactive sources and nuclear reactors. Interaction of ionizing radiation with matter, physical, chemical and biological effects. Radiochemical dating. Nuclear models. Nuclear reactor theory and neutron activation. Radioactive tracer methods. This course is the same as Physics 481.
Prerequisites: Physics 214, Chemistry 115B, and one upper division course in the natural sciences.

482. Applied Nuclear Chemistry and Physics Laboratory
(2) (Fall) Dunning

Lab Lecture, 1 hour; laboratory, 3 hours. The use and production of radioactive sources and nuclear reactor problems using a neutron howitzer. Applications to detection of trace elements, nuclear chemical phenomena, radiological safety. State of the art instrumentation and laboratory practices. This course is the same as Physics 482.
Prerequisite: Physics 216, previous or concurrent enrollment in Physics 481.

491. Cooperative Education
(1–4) (Fall and Spring)

Integration of academic studies with industrial, governmental, or medical job experience. Individually planned through department advisor. Presentation of a seminar and written report are required. May be repeated.
Prerequisites: Upper division standing in Chemistry or consent of instructor.

494. Undergraduate Research
(1–6) (Fall and Spring) Department Faculty

Individual investigaion of either student- or faculty-initiated experimental or theoretical chemical problems under the supervision of a member of the chemistry faculty. May be taken only by petition to the Chemistry Department.
Prerequisites: Chemistry 335B; 310B or 375B or concurrent enrollment; and consent of instructor.

495. Special Studies
(1–3) (Fall and Spring) Departmeni Faculty

Investigation of existing information on a specific or general topic of interest to the student.
Prerequisite: Consent of instructor; upper division standing in chemistry or closely related science required.

496. Selected Topics in Chemistry
(1–3) Department Faculty

A study of an advanced topic in chemistry. May be repeated for additional credit with new subject matter.

497. Seminar
(1) (Spring) Eck, Hoagland

Presentation and discussions of current topics in chemistry based upon a paper or papers selected from the recent chemical literature. Introduction to pedagogical techniques used in presentation of the subject matter. Attendance of all chemistry majors is recommended whether taking the course for credit or not.
Prerequisites: Chemistry 335B; 310B or 375B or concurrent enrollment; or consent of instructor.

499. Internship
(1–4) (Fall and Spring)

Chemistry field experience in industrial, hospital, or similar laboratory settings. Enrollment by prior arrangement with supervising faculty member and community sponsor. See department advisor for details. Three hours of work per week for each unit of credit. Internship assignments may be paid. Department approval and a final written report are required for a letter grade and use of this course to satisfy upper division Chemistry elective requirements; a maximum of 4 units may be applied toward upper division Chemistry elective requirements.



Communication Studies

The Communication Studies Major is an innovative interdisciplinary educational program designed to prepare students for careers in media or as candidates for advanced graduate study and research.

The Communication Studies Degree Program coordinates three distinct study approaches to the media—practical applications, academic studies, and critical analysis. Practical applications combine basic training in equipment operation, production design and organization, and professional internships. Academic studies focus on the evolution of media technology, history of media production, mass media and society, and media management. Critical analysis explores mass media ethics, the media as a force for social change, and the analysis and evaluation of specific media productions.

Students are encouraged to develop a specific academic advisory plan with the assistance of a faculty advisor. Advisory plans, based on the student's specific interests, may focus on such areas as journalism, radio, television, media technology, media criticism, advertising, public relations, or be designed to prepare a student for graduate work in communications studies.

The Communication Studies Program places a heavy emphasis on classes and internships which provide students with pragmatic, real-world insights into the media. Students are strongly advised, by faculty who have professional backgrounds, to gain the practical experience and skills needed in the media marketplace by participating in a variety of internships. The Department, working closely with the University Field Experience Office, has developed many professional media internships with community organizations including local radio and television stations, newspapers, magazines, and other media groups.

On-campus media also offer a variety of opportunities for student involvement. University media include *The Sonoma State Star*, a weekly campus newspaper; *KSUN*, a campus community radio station; and the *Mandala* and the *Sonoma Management Review*, two student magazines.

An eight-track electronic music recording studio; photography darkrooms; computer and information science labs; a studio for video production and editing; and a new library media center are available to Communication Studies students.

Students who major in Communication Studies at Sonoma State University generally follow one of two paths after successfully completing the B.A. degree requirements: 1) Employment at an entry level in some communication specialty in either the public or private arena. Some typical positions toward which students may work include newspaper reporters, recording technicians, radio announcers, news directors, sports broadcasters, editors, magazine writers, and advertising and public relations writers and managers. 2) Graduate level study in a professional career preparation program in another institution.

Students with a Minor in Communication Studies bring their employers in almost any field an important and often sought secondary skill in communication.

Coordinator:

Carl Jensen

Faculty:

Michael Litle

Temporary Faculty:

Sandra Hansen

Department Office:

Nichols Hall 362, phone (707) 664-2149

Bachelor of Arts in Communication Studies

Major

	Units
General Education	48
Major Requirements	46
Electives	30
TOTAL	Minimum 124

Course Requirements

The Communication Studies course requirements are divided into two groups: core (28 units) and major electives (18 units). All students are required to take the eight prescribed core courses which total 24 units. In addition, every student must earn four additional units either as a media intern (COMS 499) or complete an extensive senior project (COMS 498) for a total of 28 core course units.

Core Courses

COMS 200 Principles of Mass Communication	3
COMS 201 Introduction to Media Technology	3
COMS 202 Principles of Media Criticism	3
COMS 300 Media Management	3
COMS 301 Mass Media and Society	3
COMS 302 Media and Technology	3
COMS 401 Seminar: Mass Communication	3
COMS 402 Seminar: Media Criticism	3
One of the Following Courses:	
COMS 498 Senior Project	4
COMS 499 Internship in the Media	4
Total	28
Elective Courses	18

Upon entry into the program each student shall consult with a faculty advisor to develop a balanced and coherent pattern of 18 elective units around a specific advisory plan based on the student's academic and professional goals.

Minor in Communication Studies

The Communication Studies Minor is specially designed for students majoring in other disciplines who recognize the need to have an understanding of the critical and pervasive role the media play in society. Students with a Minor in Communication Studies will bring their employer in almost any area of endeavor in public institutions or private industry an important, and often required, secondary skill in communication. In this media-conscious society, this Minor can be a valuable asset in a student's future career plans regardless of his or her major interest. The Minor provides for a diversified background in the history and theory of communication; offers an insight into the economic, sociological, and political dimensions and effects of the media; and includes a "hands-on" introduction to the audio/visual and electronic tools of the trade. All students are required to take the 12-unit core and an additional eight elective units from upper division Communication Studies courses for a total of 20 units for the Minor.

Minor Core Courses

	Units
COMS 200 Principles of Mass Communication	3
COMS 201 Introduction to Media Technology	3
COMS 202 Principles of Media Criticism	3
COMS 301 Mass Media and Society	3
Electives	8
Total	20

Communication Studies Courses

COMS 200. Principles of Mass Communication
(3)

Introduction to the nature and function of mass communication; the mechanics and psychology of mass communication; a survey of current theory and research models in mass communication.

COMS 201. Introduction to Media Technology
(3)

Introduction to processes and equipment used in media production. Lectures stress basic understanding of the procedures involved in recording, video, film, and photography from initial conception to final result. Laboratory provides experience in using media production equipment.

COMS 202. Principles of Media Criticism
(3)

An introduction to ways of looking at the mass media. Focus on individual messages—magazine ads, news, television entertainment, movies—using methods of analysis derived from a variety of perspectives.

COMS 265. Introduction to Radio Broadcasting
(3)

History of broadcasting; evolution of broadcast technology; introduction to basic theories and techniques of radio broadcasting. Overview of radio station organization, programming, and operation. Laboratory experience in radio program development and production techniques.

COMS 300. Media Management
(3)

Overview of the function of public relations organizations in society and their role in media management and the formation of public opinion. Practical insights into how individuals and organizations publicize themselves and attract media attention.
Prerequisites: COMS 200, COMS 201.

COMS 301. Mass Media and Society
(3)

A critical analysis of the nature and functions of mass communication in contemporary society. Overview of the history, structure, function, and influence of the mass media. Development of critical and analytic skills necessary to determine when and how "truth" is manipulated to serve special parochial or cultural interests.
Prerequisites: COMS 200, COMS 201.
Cross-listed with Sociology 331.

COMS 302. Media and Technology
(3)

Study of the interaction of technology, tradition, ownership, and individuals in shaping specific works within the mass media.
Prerequisites: COMS 200, COMS 201, COMS 202.

COMS 355. Small Systems Video
(3)

A beginning course in the operation and use of lightweight studio and field video production equipment.
Prerequisites: COMS 201 or equivalent experience.

COMS 365. Radio Production
(3)

Lecture and laboratory experiences in program creation and development and production techniques in radio broadcasting.
Prerequisites: COMS 265, or consent of instructor. Course may be repeated for credit.

COMS 401. Senior Seminar in Communication
(3)

Advanced overview of major issues in mass communication for senior students. Research and discussion of critical topics in mass communication, with an emphasis on their interrelatedness. Review of the ways cultural ideology is presupposed in the structure or content of the mass media.
Prerequisites: COMS 301, COMS 302, Senior standing.

COMS 402. Senior Seminar in Media Criticism
(3)

Application of critical methodologies to the analysis and evaluation of media productions in film, video, photography and recording. Emphasis is placed on coordinating different approaches to the evaluation of media productions, considered both as individual objects for contemplation and as products for mass consumption.
Prerequisites: COMS 302, Senior standing.

COMS 435. Seminar: Media Censorship
(4)

An intensive analysis of the role and impact of censorship in the news media. Emphasis is on exploring, through an internationally-recognized media research project, significant newsworthy issues which should be, but are not, fully covered by the news media.
Prerequisites: COMS 301 or consent of instructor. Cross-listed with Sociology 435.

COMS 455. Advanced Small Systems Video
(3)

An advanced video production course emphasizing the communication of ideas, concepts, narrative material and other messages via the electronic medium. Course may be repeated for credit.
Prerequisites: COMS 355.

COMS 465. Advanced Radio Broadcasting
(3)

Advanced theories and techniques in programming. Lectures and field study on current philosophies and practices in radio broadcasting.
Prerequisites: COMS 265.

COMS 495. Special Studies
(1-4)

Supervised study of a particular problem or area of interest in the media selected by the student in consultation with a sponsoring faculty member. Student must fill out "Application for Special Study 495" form. Regular meetings will be arranged for discussions and progress evaluations. Course may be repeated for credit.

COMS 498. Senior Project
(4)

An extensive project in one particular area of media study. Students concentrating in one medium—film, video, photography, or recording—will be expected to present a work in that medium demonstrating a high level of technical and production skill. Students concentrating in criticism will develop a project in criticism of comparable scope.

COMS 499. Media Internship
(1–4)

A supervised internship in a community organization which employs skills in media production and equipment operation in a practical setting. Students seeking internship placement should work closely with an advisor early in their program to insure that they acquire the skills necessary for internship placement.



Computer and Information Science

The development of high speed digital computers and associated hardware has made possible the rapid manipulation of large amounts of information. Not only can problems be speedily solved with traditional methods, but new insights can be gained through novel information processing techniques. Computer and Information Science deals with these techniques in areas such as representation, transmission, and processing of data; feedback and control in natural or artificial systems; and computation. Knowledge and skills in these areas are widely applicable in fields ranging from design of electronic systems and accompanying software to virtually all branches of commerce, the arts, social sciences, and traditional Sciences.

The department offers a Bachelor of Science degree in Computer Science designed to prepare students for professional careers in the computer industry or for graduate work in computer science. The standard curriculum consists of a rigorous course of study in computer science and mathematics and provides the student with a solid background in fundamental concepts and techniques.

Two alternate options, Computer Systems and Computer Applications, are also available and share a common set of courses with the standard curriculum. The Computer Systems option emphasizes physics and electronics and also prepares students for professional careers in the computer industry or for graduate study. The Applications option is designed to prepare students for professional careers as computing specialists in industries such as banking, insurance, and energy, as well as in the public sector. The standard curriculum and the Computer Systems option meet guidelines established by the Association for Computing Machinery (A.C.M.).

Students in the program have access to a rich array of computing hardware and software. In addition to the facilities provided by the campus computer center described on page 335, the Department of Physics and Astronomy provides laboratory facilities in analog and digital electronics and in microprocessor applications.

Work Experience

It has become increasingly important that computer science majors have some work experience before they graduate. Students of computer science are urged to contact the Career Development Center as early in their academic career as possible. The Student Employment and Field Experience offices in the Career Development Center will help students gain valuable experience through part-time, temporary, and summer jobs. The Career Development Center also helps students plan their careers and develop effective job-seeking skills.

Faculty:

David O. Butcher, Joseph W. Frasca, Richard H. Gordon, George Ledin Jr., Robert G. Plantz

Part-Time Faculty:

Donna Crawford, Norman Jacobson, Michael Lyle

Department Office:

Darwin 128, phone (707) 664-2368

Grading Policy in the Department of Computer and Information Science

Students majoring in Computer Science must take all of their courses required for the major in the traditional grading mode. This

includes courses taken as part of the Outside Concentration, electives in CIS, and Supporting Courses.

Admission Policy for Upper Division CIS Courses

Students must take *all* the courses in Group I and earn a C (not C−) or better in each course *before* taking *any* of the courses in Group II.

Group I: CIS 150, 151, 250; MATH 161,242

Group II: CIS 310, CIS 350, CIS 354 and any 400 level CIS course

Students may not register in any Group I class more than twice.

Bachelor of Science in Computer Science

MAJOR

	Units
General Education	48
Core Curriculum	15
Supporting Courses in Mathematics	17
Required Computer Courses	34
Electives	10
Total	124

B.S. Core Curriculum

	Units
CIS 150 Computer Programming I	4
CIS 151 Computer Programming II	3
CIS 158C Introduction to COBOL	2
CIS 250 Assembly Language Programming	3
CIS 350 Introduction to File Processing	3
Total	15

Required Computer Science Courses for the Degree

	Units
CIS 251 Computer Hardware Organization	3
CIS 255 Programming Languages	3
CIS 310 Systems Programming	3
CIS 354 Data Structures and Algorithm Analysis	3
CIS 410 Computer Architecture	3
CIS 450 Operating Systems	3
CIS 452 Compiler Design and Construction	3
CIS Electives (CIS electives must be chosen from CIS 158F, CIS 158L, CIS 158Z, upper division CIS courses, MATH 352 or MATH 454. At least 11 units must be upper division)	13
Total	34

Supporting Courses in Mathematics

	Units
MATH 161 Calculus and Analytic Geometry I	4
MATH 211 Calculus and Analytic Geometry II	4
MATH 222 Elementary Applied Linear Algebra	3
MATH 242 Discrete Structures	3
MATH 345 Probability Theory	3
Total	17

Alternate Options:	*Computer Systems* Units	*Applications* Units
General Education	48	48
Core Curriculum	15	15
Supporting Courses in Mathematics	17	14
Required Computer Science Courses	34	38
Electives	10	9
Total	124	124

Computer Systems Option

	Units
B.S. Core Curriculum	15
Required Computer Science Courses for Computer Science Option:	
CIS 255 Programming Languages	3
CIS 354 Data Structures and Algorithm Analysis	3
Physics 114 Introduction to Physics I	4
Physics 214 Introduction to Physics II	4
Physics 311 Elements of Electronics	4
Physics 312 Elements of Digital Electronics	4
Physics 412 Microprocessor Applications	
CIS Electives (CIS electives must be chosen from upper division CIS courses, MATH 352 or MATH 454.)	9
Total	34

Supporting Courses in Mathematics for the Computer Systems Option

	Units
MATH 161 Calculus and Analytic Geometry I	4
MATH 211 Calculus and Analytic Geometry II	4
MATH 222 Elementary Applied Linear Algebra	3
MATH 242 Discrete Structures	3
MATH 345 Probability Theory	3
Total	17

Applications Option

	Units
B.S. Core Curriculum See page 86	15
Required Computer Science Courses for Applications Option:	
CIS 251 Computer Hardware Organization	3
CIS 355 Database Management Design System	3
CIS 430 Systems Analysis	3
CIS 470 Software Design and Development	3
CIS Electives (CIS 255 or any 300- or 400-level CIS course is acceptable as an elective.)	6
Outside Concentration (Courses in another discipline or disciplines; at least 12 units must be upper division. All concentrations *must* be approved by CIS department.)	20
Total	38

Supporting Courses in Mathematics for Applications Option

	Units
MATH 161 Calculus and Analytic Geometry I	4
MATH 165 Statistics	4
MATH 222 Applied Linear Algebra	3
MATH 242 Discrete Structures	3
Total	14

Upper Division CIS Courses

	Units
CIS 310 Systems Programming	3
CIS 340 Computer Security	3
CIS 345 Implications of Computers for Society	3
CIS 350 Introduction to File Processing	3
CIS 355 Database Management Systems	3
CIS 375 Computer Graphics	3
CIS 385 Selected Topics	3
CIS 410 Computer Architecture	3
CIS 430 Systems Analysis	3
CIS 440 Advanced Computer Security	3
CIS 450 Operating Systems	3
CIS 452 Compiler Design and Construction	3
CIS 455 Advanced Database Design	3
CIS 465 Data Communications	3
CIS 470 Software Design and Development	3
CIS 475 Advanced Computer Graphics	3
CIS 480 Artificial Intelligence	3
CIS 495 Special Studies	1–4
CIS 496 Senior Seminar	4

Minor in Computer Theory and Applications

A Minor in Computer Theory and Applications is offered as a Computer and Information Science Program. Students electing this Minor will be prepared for careers in business application programming, scientific application programming, computer equipment sales, as field engineers and as data processing managers among the myriad job opportunities associated with the computer field. Approval of the Minor Plan should be obtained by the junior year at the latest in order that the minor be properly planned.

Minor Requirements

	Units
Required Courses	12
Electives	8
Total	20

Required Courses Theory and Applications Minor (12 units)

	Units
CIS 150 Computer Programming I	4
CIS 151 Computer Programming II	3
CIS 158C Introduction to COBOL	2
or	
CIS 158F Introduction to FORTRAN	2
CIS 250 Assembly Language Programming	3
Total	12

Electives

	Units
Electives may be chosen from the following list or may be any upper division CIS course. At least 6 units must be upper division	8
*CIS 158C Introduction to COBOL	2
*CIS 158F Introduction to FORTRAN	2
CIS 158L Introduction to LISP	3
CIS 158Z Introduction to C	2
CIS 175 Introduction to Computer Graphics	3
CIS 251 Computer Hardware Organization	3
CIS 255 Programming Languages	3
MGT 319 Information System Design for Management	
or	
Econ 319 Economic Information Systems	4

* May only be taken as an elective if it is not used as a required course in the minor.

Computer and Information Science Courses

101. Introduction to Computers and Computing
(3)

Introduction to computers and computing. Topics covered include computers in society, history of computing, how a computer operates, survey of computer languages, program development, and computer application. Students will have hands on experience with mini, micro, and large scale computer systems, including use of a variety of application packages. This course is intended for the general student and cannot be counted toward the CIS Major.
Prerequisite: none.

150. Computer Programming I
(4)

An overview of computer organization, arithmetic and logical expressions, conditional and repetitive statements, simple I/O, and subprograms. Algorithm development utilizing flow charting and stepwise refinement; examples will include: sorting, searching, merging. Use of the above concepts will be implemented in the programming language Pascal.
Prerequisite: Math 106 or consent of instructor.

151. Computer Programming II
(3)

Principles of good programming style: readability, documentation, structured programming concepts; top-down programming, refinement. Techniques of debugging and testing. Algorithms and data structures, string processing, sorting and searching linear and linked allocation, recursion.
Prerequisite: CIS 150 and Math 161 or consent of instructor.

158B. Introduction to BASIC
(2)

Elementary aspects of the BASIC programming language will be covered with special emphasis placed on programming style. As time permits, more advanced aspects will be covered. BASIC is the most widely used interactive programming language. [Crosslisted as MATH 158B.]
Prerequisites: Any one of MATH 106, 121, 131, or consent of instructor

158C. Introduction to COBOL
(2)

Programming in the business-oriented computer language COBOL, with applications to typical business problems and preparation of programs for their solution. Students cannot get credit for both CIS 158C and Mgt. 217.
Prerequisite: CIS 150 or consent of instructor.

158F. Introduction to FORTRAN
(2)

Programming in the science-oriented computer language FORTRAN. Special emphasis will be placed on programming style. Top-down and structured approaches will be used.
Prerequisite: MATH 107 or consent of instructor.

158L. Introduction to LISP
(3)

A beginning course in the commands and applications of the computer language LISP. The course is intended to prepare programmers for work in the field of Artificial Intelligence, and preliminary attention will be given to the problems of such work.
Prerequisites: Familiarity with the local CYBER and one of its text editors is highly recommended; otherwise consent of the instructor should be sought.

158Z. Introduction to C
(2)

Programming in the language C. The C programming language is a powerful and concise language, and is often the language of choice for systems programmers.
Prerequisite: CIS 150 or consent of instructor.

175. Introduction to Computer Graphics
(3)

A first course in computer graphics which will introduce students to computer graphics hardware and software. This survey course will examine topics such as: graphics hardware, microcomputer graphics, presentation and business graphics, graphics for artists, computer mapping, animation, two and three dimensional graphics, and basic graphic programming. Students will have experience using a variety of graphic software on both mainframe and microcomputers.
Prerequisite: A previous computer course or consent of instructor.

250. Assembly Language Programming
(3)

Introduction to assembly language programming, computer system organization from the machine language point of view, assembly language implementation of structured programming constructs and elementary data structures.
Prerequisite: CIS 158F or CIS 150 or Chem 381 or Physics 381 or consent of instructor.

251. Computer Hardware Organization
(3)

Computer arithmetic, digital circuit elements, logic structures, Boolean algebra and gate networks, arithmetic logic unit, memory, input/output devices, I/O processors, control unit, concepts of microprogramming and parallel processing.
Prerequisites: CIS 150 and MATH 242 or consent of instructor.

255. Programming Languages
(3)

Survey and comparison of programming languages with respect to syntax, data structures, binding times, storage allocation, control and implementation. The languages compared may be Pascal, FORTRAN, SNOBOL, LISP, C, Modula-2, PL/I, APL, and ADA.
Prerequisite: CIS 151.

310. Systems Programming
(3)

Debugging tools, linking and relocation, reentrant code, coroutines, I/O and interrupt routines, floating point representation, advanced features of assembly language including macros and conditional assembly.
Prerequisites: CIS 250, CIS 251 or Physics 312 and MATH 242 or consent of instructor.

340. Computer Security
(3)

Current methods for increasing security, protecting privacy and guaranteeing degrees of confidentiality of computer records; insuring computer installation safety; protecting software products; preventing and dealing with crime; value systems, ethics, and human factors affecting use and misuse of computers; discussion of recent technical, legal, and socio-political issues influencing computer security problems.
Prerequisites: CIS 151 and CIS 250 or consent of instructor.

345. The Implications of Computers for Society
(3)

Professional, ethical, and social issues affecting computer and information scientists. Topics may include: concepts of social value, social consequences of computer applications, legal issues, computers in the decision-making process, public perceptions of computers and computer professionals.
Prerequisite: CIS 151.

350. Introduction to File Processing
(3)

Introduction to concepts and techniques for structuring data on bulk storage devices. Topics covered include: file processing environment, sequential access, random access, data structures, file I/O.
Prerequisite: CIS 151 and 158C or consent of instructor.

354. Data Structures and Algorithm Analysis
(3)

Structures such as stacks, queues, lists, trees. Computer oriented graph theory. Design and analysis of algorithms for internal and external sorting, merging and searching. Memory management including hashing, dynamic storage allocation, garbage collection and compaction. Applications to database management systems.
Prerequisites: CIS 151, 250 and MATH 242 or consent of instructor.

355. Database Management Systems Design
(3)

Design and implementation of database management systems. Topics covered will include: data models, data normalization, data description languages, query facilities, file organization, index organization, security, data integrity, and reliability.
Prerequisite: CIS 350 or consent of instructor.

375. Computer Graphics
(3)

An introduction to the principles of computer graphics, coordinate transformations, "2- and 3-dimensional primitives, segmented display files, raster display algorithms, polygon manipulation, color and shading, interactive input techniques, device independent software, hidden line and surface algorithms, geometric modeling, graphics hardware.
Prerequisites: CIS 151, MATH 161, and MATH 222 or consent of instructor.

385. Selected Topics in Computer Science
(1–4)

This course may be repeated with different subject matter for credit in the major.
Prerequisites: Upper division standing, with permission of an advisor and consent of instructor.

395. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems. The most common task for a C.I.S. student taking C.I.P. will be tutoring at a local school. Units for C.I.P. may not be applied toward the major in CIS.
Prerequisites: CIS 150 or 158C or 158F or MATH 158B and consent of CIS advisor.

410. Computer Architecture
(3)

Review of finite state machines as they pertain to computer design; logic families and design with LSI, MSI, SSI and microprocessors; use of ROMs, PLAs, PLSs; low-level I/O with emphasis on synchronizer failure; instruction set design; memory-processor structures; memory hierarchies: cache, virtual memory, and secondary storage; multiprocessors; networks; non-von Neumann architectures; comparative examples of existing architectures.
Prerequisites: CIS 310 and CSI 354 or consent of instructor.

430. Systems Analysis
(3)

Techniques of systems analysis. The system life cycle, problem definition and analysis, cost-benefit analysis, data flow diagrams, project management, software and hardware specifications, survey of system components.
Prerequisite: CIS 350 or consent of instructor.

440. Advanced Computer Security
(3)

Data security technology, cryptographic systems (public-key and digital signatures), information and coding theory, complexity theory, combinatorics and number theory foundations, encryption algorithms, cryptographic techniques, access control methodologies, information flow controls (Bell-LaPadula and other models), inference controls, audit approaches, discussion of latest developments.
Prerequisites: CIS 340, CIS 310, CIS 354 and MATH 242 or consent of instructor.

450. Operating Systems
(3)

Multiprogramming and timesharing systems; scheduling policies; storage management; design of a sample operating system. Students will be required to program and test modules for the sample system.
Prerequisite: CIS 251 and CIS 354 or consent of instructor.

452. Compiler Design and Construction
(3)

Lexical analysis; parsing; code generation; optimization. Design and construction of parts of a simple compiler.
Prerequisites: CIS 255 and CIS 354 or consent of instructor.

454. Automata, Computability and Formal Languages
(3)

Context sensitive, context free and regular grammars. Deterministic and nondeterministic finite automata, pushdown automata. Turing machines and computability, linear bounded automata. [Crosslisted with MATH 454.]
Prerequisite: MATH 220 or MATH 242 or consent of instructor.

455. Advanced Database Design
(3)

Database models; insertion, deletion, modification, navigation; database query languages; relational algebra and calculus and their respective languages; database design criteria; functional and multivalued dependencies; query optimization; universal relation, cyclic and acyclic structures; database integrity protection; transaction modeling; survey of recent developments in database theory and practice.
Prerequisite: CIS 355 or consent of instructor.

465. Data Communications
(3)

The ISO reference model, theoretical basis for data communications, protocols, networks.
Prerequisites: CIS 354, MATH 211, and MATH 345 or consent of instructor.

470. Software Design and Development
(3)

Techniques of software design and development. Formal models of structured programming, module coupling and cohesion, exception processing, program correctness and testing, program complexity analysis. Organization and management of software development teams.
Prerequisite: CIS 350 or consent of instructor.

475. Advanced Computer Graphics
(3)

Special topics in computer graphics, which may include animation, CAD/CAM, computer image synthesis, cartography, pattern recognition.
Prerequisite: CIS 375 or consent of instructor.

480. Artificial intelligence
(3)

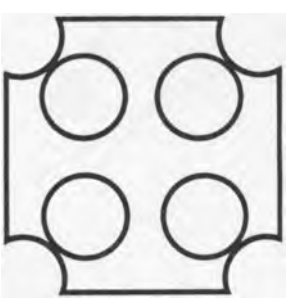
A study of programs, computer algorithms, and computer techniques that simulate human intelligence. Topics may include: computer application to chess, pattern recognition, general problem solving, decision making, and robotics.
Prerequisite: CIS 158L or consent of instructor.

495. Special Studies
(1–4)

This course is primarily intended for students who are doing advanced work in an area of computer science (e.g. a senior project).
Prerequisite: An upper division CIS course in the area of interest or consent of instructor.

496. Senior Seminar
(4)

Discussion of a topic of current importance in computer science. Independent student projects or oral presentations may be required.
Prerequisite: Senior standing in CIS curriculum.



Counseling

The 60-unit graduate program in Counseling offers two professional training options: Option I prepares students for the Marriage, Family, and Child Counseling licensure in California, and Option II prepares students for the Pupil Personnel Services Credential for counseling in the public schools, kindergarten through 12th grade.

The program relies heavily on interpersonal skill training and field experience, beginning during the first semester and culminating with an intensive supervised internship in some aspect of counseling, permitting the integration of theoretical constructs and research appraisal with practical application during the second year. The Department is prepared to assist students in obtaining field placements relevant to their projected professional goals. These placements include, but are not limited to: marriage and family counseling agencies, mental health clinics, counseling centers, public schools, community colleges, and college-level student personnel departments.

Special characteristics of the Program include the following: (1) early observation of, and involvement in, actual counseling settings; (2) development of a core of knowledge and experience in both individual and group counseling theory and practice; (3) encouragement in the maintenance and development of individual counseling styles; and (4) commitment to self-exploration and personal growth through participation in peer counseling, individual counseling, and group experiences. This aspect of the Program is seen as crucial to the development of adequate counseling skills and is given special consideration by the faculty as part of its evaluation of student readiness to undertake internship responsibilities.

In sum, there is emphasis in this Program on the three "basic pillars" (hopefully in creative interrelation) of theory, practical experience, and personal exploration—rather than on just one facet of professional preparation. The effort is to establish in the student a sound foundation for a lifetime of continued professional growth—a foundation which permits confident movement into an entry-level counseling position, but which does not pretend more. Within the compass of a 60-unit program, the faculty see such a goal as attainable and eminently worthwhile.

The faculty is committed to the idea that the counselor of the future should take an active role in helping to shape the social/environmental milieu in which he/she will work. While the faculty recognizes how difficult this task may be in specific instances and areas, it sees the counselor as one who actively participates in the life of an organization, not as submissive keeper of the status quo or as unseeing iconoclast but as a sensitive and perceptive voice representing individual freedom and human values.

The Master's Program may be completed within two academic years; however, some students with job and/or family responsibilities often move more slowly. Resources permitting, efforts will be made to accommodate individual patterns. For most students, 8 units per semester will be considered a minimal number. It should be stressed that individual patterns should be planned very carefully since most courses will not be offered every semester and some P.P.S.C. courses only once in any two-year period.

The Department is preparing new areas of emphasis in counseling the elderly,

substance abuse, student and college personnel and preparation for doctoral work. Consult Department for details.

A student who has not been formally admitted to the Counseling Department may take no more than twelve units and only in the following course offerings of the Department, with the consent of the instructor. Counseling 501, 502, 503, 512, 513, 521, 525, 530, 535, 545, 585, 586, and 590. Admission to individual courses in no way implies admission to the Master's Degree Program or to the P.P.S.C. Program.

Prospective students are reminded of the University requirement that no fewer than fifteen semester units shall be taken after admission to classified standing.

Department Chair:

Sara Sharratt

Faculty:

Mark Doolittle, Fred Moore, John Palmer, Carolyn Saarni

Department Office:

Nichols Hall-220, phone, (707) 664-2544

Admission Requirements

A. A baccalaureate degree—preferably in the behavioral sciences, and optimally, one with sound preparation in psychology. A recent course (or demonstrated competency) in basic statistical analysis is a prerequisite for admission to Counseling 513.

   In addition, coursework in classical personality theory and abnormal behavior are PREREQUISITES for admission into the program. Specifically, it is expected that students will have a background in Freud, Jung, traditional behaviorism, and client-centered therapy.

B. A 3.0 (B) grade point average in the last two years of undergraduate work. Applicants who satisfy all other requirements may petition the University for waiver of this requirement. It should be emphasized that such waiver is not automatically granted.

C. Aptitude test scores from the Graduate Record Examination. While these scores will be used only for informational purposes (i.e., no basic cutoff minima will be required), their timely submission is a firm requirement for candidacy for admission—and no file will be read if the G.R.E. scores are not part of the file. (For information on locations, dates, and times for the G.R.E., contact the Testing Office.) (707) 664-2947.

D. Completion of Counseling Department application forms, in addition to those required by the University.

E. A personal interview is a required part of the admission procedure.

F. Departmental admissions committees (which include students) have found the following criteria meaningful for applicants:
   1. The ability to handle academic work of graduate-level rigor; generally, as evidenced by previous academic performance.
   2. Some (preferably paid) relevant work experience and/or life experience. In an intensive program such as ours, such experience may be indispensable.
   3. Thorough grounding in the behavioral sciences (on a baccalaureate level).
   4. Global personal assessment—suitability for a career in a helping profession.

Refer to section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Application Procedures

Interested persons can obtain the standard state-wide application form from the Admissions Offices of the State University or community colleges. Students are accepted to the Counseling Program only once a year. Therefore, we begin taking applications on November 1 and continue for approximately six weeks for admission the following fall. For specific instructions and procedures contact the Counseling Department.

General Information Meetings

Students planning to apply for admission or students wishing to enroll in any of the Counseling Department's courses are urged to attend one of the monthly informational meetings specifically planned for prospective students. Selection criteria, admission procedures, and registration and advisement procedures will be explained.

Master's Degree Requirements

CORE Courses

	Units
Couns 501A Seminar: Counseling Theory and Practice	4
Couns 502 Seminar: Adult Development: Individual, Family & Career	4
Couns 510A Seminar: Supervised Counseling Practicum	4
Couns 510B Supervised Counseling Practicum	4
Couns 512 Seminar: Group Process	4
Couns 513 Seminar: Research Methods and Literature	4
Couns 514A Supervised Internship	4
Couns 514B Supervised Internship	4
Couns 536 Sem: Development & Clinical Issues with Children & Adolescents	4
	36

Option I—Marriage, Family and Child Counseling

Couns 503 Seminar: Dynamics of Individual Behavior	4
Couns 525 Seminar: Tests and Measurements	4
Couns 540 Seminar: Marriage and Family Problems and Adjustments	4
Counse 545 Seminar: Family Law and Professional Ethics	4
Couns 570 Seminar: Cross-Cultural Awareness in Counseling	4
Couns 580 Seminar: Sex Counseling	4
	24

Completion of the Marriage, Family and Child Counseling Option satisfies all academic requirements (courses) for the M.F.C.C. examination.

Option II—Pupil Personnel Services Credential (School Counseling)

Couns 511 Seminar: Counseling for Career Development	4
Couns 521 Seminar: Pupil Personnel Services—Concepts and Organization	4
Couns 525 Seminar: Tests and Measurements	4
Couns 570 Seminar: Cross-Cultural Awareness in Counseling	4
Ed 430 Exceptional Children	4
Electives	4
	24

All Master's candidates are required to complete a project representing a comprehensive and integrative understanding of the field of Counseling. Projects will include a case analysis and a proposal for developing a mental health program.

Community College Counseling Credential

Completion of the M.A. degree satisfies all current requirements to apply for the Community College Counseling Credential.

Chemical Dependency Certification

The Counseling Department offers a specialty training option in Chemical Dependency which satisfies the academic requirements for professional certification by the California Association of Alcoholism and Drug Abuse Counselors, the State professional organization. Dr. Fred Moore, Program Coordinator, may be contacted at (707) 664-2544.

Counseling Courses

501. Seminar: Counseling Theory and Practice
(4) Department Faculty

An overview of the theories and techniques of major traditional and contemporary counseling models, including: Psychodynamic; Cognitive/Behavioral; Adlerian, Trait-Factor; Existential; Gestalt; Crisis Intervention and Brief Therapy; Feminist Therapy; and Behavioral Medicine.

502. Seminar: Adult Development: Individual, Family & Career
(4) Doolittle

Students will be introduced to the concepts of adult development: individual, family and career through the major theorists in the field and through illustrative biographies. The implications for psychotherapy will be thoroughly reviewed.

503. Dynamics of Individual Behavior
(4) Department Faculty

A course designed to cover psychopathology and socio-political related issues of diagnosis and treatment. Attention will be given to: 1. understanding of the wide variety of psychopathology in clinical practice; 2. the application of evaluation methods and diagnostic classification systems CDSM III; 3. development of appropriate treatment plans; and 4. the relationship of class, gender, ethnic background to diagnosis and treatment.

510A. Seminar: Counseling Practicum
(4) Department Faculty

A course that provides students an opportunity to develop necessary and basic counseling skills to prepare them for an intership in a wide variety of agencies. Training is done through the use of video tape feedback and actual in-class practice demonstrations.
Prerequisite: counseling 501 or taken concurrently.

510B. Counseling Practicum
(4) Department Faculty

A course that provides students an opportunity to continue the development of advanced counseling skills to prepare them for an internship. Training is done through the use of video tape feedback and actual in-class practice domonstrations. In addition, students actually see clients under the supervision of their instructor.
Prerequisite: Counseling 510A.

511. Seminar: Counseling for Career Development
(4) Palmer

A course designed to relate the traditional therapeutic counseling models to career counseling. The course will familiarize students with career counseling strategies, sources of occupational information, and career counseling testing. Students will be required to work with an actual client in exploring personal values, interest patterns, and needs as they relate to work satisfaction and career development. Students will be required to purchase testing materials.
Prerequisite: Counseling 501 and Counseling 510A or consent of the instructor.

512. Seminar: Group Process
(4) Department Faculty

A didactic and experiential study of theories and processes in group counseling. The dynamics and procedures involved in working with groups will be studied with members as participants and as leaders.

513. Seminar: Research Methods and Literature
(4) Saarni

A survey of the principles of research design as applied to clinical issues and settings, with emphasis on evaluation of human service programs and grant proposal writing.
Prerequisite: Demonstrated competence in basic statistical analysis (i.e., an approved course within the last two years or passing an objective examination given by the Counseling Department.)

514AB. Supervised Internship
(4) and (4) Department Faculty

Advanced clinical experience at least two full days per week, under faculty supervision in a setting related to the professional goals of the student. In addition, weekly meetings will be held to discuss related internship problems and to evaluate the field experience. Two semesters are required. Prerequisites: Counseling 501AB, 503 and 510AB.

521. Seminar: Pupil Personnel Services—Concepts and Organization
(4) Palmer

A seminar in organizing, supervising, and administering Pupil Personnel Programs in elementary and secondary schools; legal and financial aspects, as well as laws affecting children and child welfare.

525. Seminar: Tests and Measurements
(4) Saarni

Investigation of the nature and rationale of psychological measurement, both individual and group, with emphasis on its utility in clinical or guidance settings. Attention will be given to both limitations and justification in the measurement of human characteristics. Students will be required to purchase testing materials.

530. Counseling the Aging and Their Families
(4) Palmer

The course will focus on identifying psychological and developmental problems of the aging with an overview of counseling strategies and skills effective in working with elderly clients and their families.

535. Seminar: Developmental & Clinical Issues with Children & Adolescents
(4) Saarni

This course focuses on child clinical psychology and the sorts of counseling interventions that may be appropriately undertaken. Course objectives include: (1) to provide students with an overview of common behavior disorders and emotional disturbances in childhood, and (2) to provide students with an introduction to basic counseling skills in working with children and their parents, and (3) to consider developmental contexts in working with children and adolescents.

540. Seminar: Marriage and Family Problems and Adjustments
(4) Sharratt

A study of the theorectical frameworks of relationship counseling including family therapy, couple therapy, and co-therapy. In addition, there will be in-class role playing and counseling demonstrations.
Prerequisite: Counseling 510 or consent of instructor.

545. Seminar: Family Law and Professional Ethics for the Counselor
(4) Doolittle

A course designed to clarify the legal and ethical responsibilities of the counselor. Legal standards related to counseling practice will be surveyed, including issues related to dissolution; child care, custody, and abuse; confidentiality; involuntary hospitalization; mandatory reporting requirements; and other issues related to the relationship between law and counseling.

570. Seminar: Cross-Cultural Awareness in Counseling
(4) Sharratt, Moore

A course dealing with the impact of racism and sexism on the mental health of minority groups and the study of counseling strategies with minority clients.
Prerequisites: Counseling 510 or consent of instructor.

580. Seminar: Sex Counseling
(4) Doolittle

The course goal is: (1) to examine issues related to human sexuality, and (2) to provide knowledge in sex counseling: interviewing, assessment, and intervention strategies based upon an integrated survey of behavioral and psychodynamic approaches.
Prerequsite: Counseling 510 or taken concurrently, or consent of instructor.

585. Seminar: Interventions, Treatment & Recovery in Alcoholism & Drug Abuse.
(4) Moore

A course which addresses the main clinical and theoretical issues in treatment of alcoholism and drug abuse.

586. Seminar: Counseling & Chemical Dependency; Physiology & Pharmacology of Substance Abuse.
(4) Department Faculty

A course designed to acquaint students with the systems of the body and how they react to alcohol and drugs of abuse.
Prerequsite: Counseling 590 or consent of instructor.

590. Alcoholism Studies
(3) Department Faculty

A survey course designed to provide a broad conceptual base regarding the major dimensions of dependence upon drugs/alcohol. Emphasis is on practical issues from the standpoint of the family and the community. The course explores historical and current modes of treatment, intervention, and prevention of alcoholism and alcohol-related problems.

595. Special Studies
(1-4) Department Faculty

Creative Writing is offered in the English Department. Students who wish to work in Creative Writing may select the Creative Writing Plan or the Alternative major in English. An M.A. in English with a creative thesis option is also offered by the Department.

The B.A. degree is a 42-unit program and the M.A. degree is a 30-unit program. Sequences of courses are available in fiction writing, poetry writing, and T.V. and script writing. Creative Writing faculty include fiction writer and playwright William Babula, poet David Bromige, and fiction writer Gerald Haslam.

Recent visitors to the campus and the program have included Quentin Bell, Virginia Woolf's biographer; the best-selling novelist Paul Erdman; David Halberstam, author of *The Best and the Brightest*; Lewis Lapham, former editor of *Harper's Magazine*; the feminist writer Meridel Le Sueur; Ishmael Reed, author of *Mumbo Jumbo;* Jessica Mitford, author of the *American Way of Death;* and the 1980 Nobel Laureate for Literature, Czeslaw Milosz. Biographer and novelist Irving Stone, author of numerous works including *The Agony and the Ecstasy* and *Lust for Life,* Pulitzer Price winning Playwright Edward Albee, popular novelist Kurt Vonnegut, Jr., and British poet Sir Stephen Spender, have all recently conducted seminars and workshops for students in the program.

Author Gerald Rosen whose five novels include *Blues for a Dying Nation, The Carmen Miranda Memorial Flagpole,* and *Growing Up Bronx* is currently "Writer-In-Residence" at Sonoma State Univeristy.

The well-regarded literary magazine *Sonoma Mandala* is published through the English Publications Workshop. All submissions should be sent c/o English Department.

For program details see English in this Catalog p. 120.



Three American soldiers go out on one more night patrol in Vietnam in the prize-winning play The Fragging of Lt. Jones by SSU playwright William Babula.

Photo by Ed Bridant



Creative Writing



Criminal Justice Administration

The Criminal Justice Administration Major is a professionally oriented liberal arts curriculum concerned with the changing nature and content of law, the shifting public expectations of criminal justice agencies, and the reactions of those agencies to social perceptions and political pressures. The student is offered a multi-disciplinary academic approach to the understanding of the mechanisms of the social control, resolutions of criminal justice problems and a knowledge of accepted procedures and alternatives.

This general but all important background serves as a base for the areas of emphasis which are of interest to the individual student. Fields of concentration such as adult and juvenile probation, law enforcement, public advocacy, prevention and diversion, correctional and parole services are studied in detail from several perspectives. The Major also serves as an excellent preparation for graduate studies and law school.

Department Chair:

J. Homero E. Yearwood

Faculty:

James P. Driscoll, Kenneth K. Marcus

Department Office:

Stevenson 2084, phone (707) 664-2934

Bachelor of Arts in Criminal Justice Administration

Major

	Units
General Education	48
Major Requirements	36
Supporting Subjects	28
Electives	12
Total	124

Please note that transferable units from colleges and junior colleges may be applied to elective and supporting requirements. The course work taken at this University to complete these requirements must be selected in consultation with the major advisor.

Course Requirements

The required courses for the major will be offered on a day and evening schedule which will be rotated each semester to serve the working student.

The required 36 units will be selected from among the courses listed below. The courses selected shall always be determined in consultation with a faculty advisor.

	Units
CJA 301 Criminal Justice and Public Policy	4
CJA 330 Government and the Rule of Law	4
CJA 365 Management and Public Agencies	4
CJA 375 Current Issues in Criminal Justice	4
CJA 399 Lecture Series	1
CJA 405 Rights of the Accused	4
CJA 406 Violence and Terrorism	4

		Units
CJA 407	Police, Courts, and Community Relations	4
CJA 425	Criminology	4
CJA 450	Punishment and Corrections	4
CJA 489	Civil Liberties and the Constitution	4
CJA 490	Senior Seminar: Criminal Justice Administration	4
CJA 495	Special Studies	1--4
CJA 499	Internship	4

Minor in Criminal Justice Administration

The minor consists of any 20-unit pattern of Criminal Justice Administration courses chosen in consultation with a departmental advisor. A maximum of 4 units of Special Studies OR Intership credit may be applied to the minor.

Criminal Justice Administration Courses

301. Criminal Justice and Public Policy
(4)

A systematic analysis will be made of criminal justice agencies, the nature and effect of public opinion and political decisions, and such important issues as police discretion, differential implementation of the criminal law, and negotiations in criminal justice processes.

330. Government and the Rule of Law
(4)

The historical, political, social, and philosophical antecedents of the American legal system will be examined and particular attention will be paid to the law as an instrument of social control. The role of the Supreme Court in interpreting the Constitution and the role played by judges in making judicial policy will be emphasized.

365. Management of Public Agencies
(4)

Central concerns of this course are the formation and administration of the mangerial policies of public agencies. It will also focus on such vital issues as the allocation of public resources, public accountability, and the description, analysis, solutions, and synthesis of contemporary mangerial problems in criminal justice agencies.

375. Current Issues in Criminal Justice
(4)

An in-depth examination of problems and controversies in Criminal Justice. The course will provide an examination of how the objectives of government and social planners may be achieved or blocked by Criminal Justice practices and procedures.

399. Lecture Series
(1)

When offered, a weekly meeting offering presentations and discussions by guest lecturers on issues of current interest and importance.

405. Rights of the Accused
(4)

Leading Constitutional Cases in Criminal Justice including Search and Seizure, Death Penalty, Electronic Surveillance, Privilege Against Self-Incrimination, Jury Trial, Right to Counsel and Double Jeopardy will be studied in detail. California Supreme Court decisions will be introduced where appropriate.

CJA 406 Violence and Terrorism
(4)

An examination of the sanctioned use of violence in domestic and international dispute settlements and its implications regarding terrorist activities. How is violence and terrorism legitimized, authorized and rationalized? The significance of race, national pride and relative deprivation will also be covered.

407. Police, Courts, and Community Relations
(4)

The history of the police, police discretion, police minority relations, as well as the sentencing patterns of the courts will be examined. The significance of the role of the court as the last resort in dispute settlements and community relations.

425. Criminology
(4)

A survey of the theoretical explanations of delinquent and criminal behavior which examines the origins of criminal law, patterns of criminal behavior systems, and the nature and extent of criminal activity.

450. Punishments and Corrections
(4)

The course will address the problems created by pressures to punish and control criminals, the politics of control strategies, the use and misuse of probation and parole, the concept of correction, and alternatives to incarceration.

CJA 489 Civil Liberties and the Constitution
(4)

An examination of the fundamental principles of constitutional law which govern and constrain the powers and operations of criminal justice agencies and their personnel. The rights and immunities guaranteed by the Constitution in general and the civil liberties, rights and freedoms protected by the Bill of Rights will be covered.

490. Senior Seminar: Criminal Justice Administration
(4)

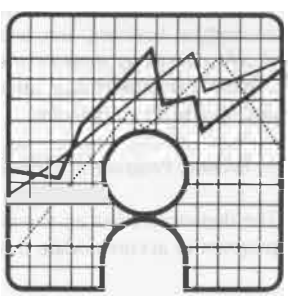
The purpose of this comprehensive seminar is to synthesize and examine the theoretical concepts and empirical findings of other courses in the major curriculum. Areas of special interest to the instructor and the students will be closely studied. Prerequisities: Senior standing and/or consent of instructor.

495. Special Studies
(1–4)

The supervised study of a particular problem or area of interest selected by the student in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations and a term paper will be submitted. This course may be repeated for credit.

499. Internship
(4)

In consultation with the major advisor, the student selects a public, private or community agency, gains field experience under the supervision of agency heads and meets with the faculty advisor to discuss progress. This course is graded on a CR/NC basis and may be repeated for a total of eight (8) units.



Economics

Economics is a social science which focuses on people and studies the ways in which they are organized in economic systems for the production and distribution of wealth and income and for the exercise of opportunity and freedom.

The B.A. Program offered by the Economics Department is committed to excellence and trains students to meet the challenges of the future in a wide variety of careers.

The Program has three basic objectives: (1) to provide a sound grasp of the tools of economic analysis and measurement; (2) to provide an understanding of institutional development and the interrelation of economic and social factors; and (3) to develop in students the ability to apply systematic analysis and understanding to decision making in the private and the public sector.

The basic techniques of analysis and measurement are treated in courses in micro and macroeconomics, economic statistics, use of computers and introductory mathematical economics. Many courses deal with the structure and performance of a particular institution or policy area within the economy. Students can follow their career and intellectual interests by taking courses and fields in such areas as: health care management, urban economics, international economics, law and regulation, computer applications in economics and management, public finance, money and banking, managerial economics, and radical economics.

The six faculty members of the Department work closely with students in small classes and seminars. All of the faculty have served as practicing economists with various public agencies or private firms, and thus bring to their teaching a rich background of theory along with practical experience in policy issues and problems.

The curriculum and teaching program of the department are designed for those students who seek employment in the public or private sector upon graduation, and those wishing to pursue studies in graduate training programs in economics, business, public administration, law, and other fields.

Many of the Department's graduates have started their careers upon graduation with major financial institutions, corporate business, government, and non-profit organizations. They find definite employer preferences for well-trained economics majors as teachers, management trainees, budget analysts, marketing specialists, program planners and a wide variety of entry-level jobs where employers expect a person to be able to apply systematic thinking and analysis.

Economics Majors interested in the field of health care management should consider completing the Sonoma State University Health Systems Organization Career Minor. For more information on this program see page 172 in this Catalog.

The Economics Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in Economics, refer to page 315.

Department Chair:

Sue Hayes

Faculty:

Gerald Egerer, Victor Garlin, Barry Ben-Zion, Stephen Lewis, Richard Van Gieson

Department Office:

Stevenson 2042, phone (707) 664-2366

Bachelor of Arts Economics

Major

	Units
Economics Courses	44
Supporting Courses (including 3 units in G.E.)	3
Remainder of General Education	45
Electives	32
Total Units for Graduation	124

Course Requirements

	Units
1. All majors are required to take the following courses	28
Econ. 201A—Introduction to Macroeconomics	4
Econ. 201B—Introduction to Microeconomics	4
Econ. 304—Intermediate Macroeconomic Theory	4
Econ. 305—Intermediate Microeconomic Theory	4
Econ. 317—Applied Statistics in Economics & Management	4
Econ. 404—Seminar in Macroeconomic Theory	4
Econ. 405—Seminar in Microeconomic Theory	4
Math 217—Topics in Calculus for Management and the Social Sciences. Math 161—Calculus, can be taken instead of Math 217.	
2. In addition, all majors will take two of the following upper-division courses	8
Econ. 303—International Economics	4
Econ. 308—Introduction to Mathematical Economics	4
Econ. 322—Urban Economics	4
Econ. 319—Introduction to Decision Support Systems	4
Econ. 388—Economics and Law of Regulation	4
3. Also, majors will take two of the following seminars	8
Econ. 411—Seminar in Public Finance	4
Econ. 419—Seminar in Decision Support Systems	4
Econ. 488—Seminar in Economics and Law of Regulations	4

Note: Majors should consult with the department advisor in making appropriate course selections in groups (2) and (3) above, and in regard to choosing the proper course selection in mathematics.

The department offers a number of interesting 300 level elective courses, requiring only a background in principles of economics.

In addition, majors can take 400 level seminars in a variety of specialized fields.

Minor in Economics

Students may qualify for a minor in Economics, which shall be recorded on request in the student's official records, by satisfying the following requirements	Units 20
1. Econ. 201A,B—Introduction to Economics	8
2. Econ. 304—Intermediate Macroeconomic Theory and Econ. 305—Intermediate Microeconomic Theory	8
3. Electives	4

Other Programs

1. Double Majors

Students majoring in other disciplines such as Computer Science, Environmental Studies, Management, Politics, and History, will find that adding an Economics major will provide them with a breadth of background that is viewed favorably by graduate professional programs and employers.

Students interested in a double major should consult with the Economics Department Advisor.

2. Graduate Work in Economics

Students planning graduate work in economics, business, law, and other fields should consult as soon as possible with the department chair to plan an appropriate undergraduate curriculum.

3. Evening Program in Economics

The department has an evening degree program to accommodate those majors who

can attend the University only during the evening. An evening student can finish the major in three years by taking two courses a semester.

Elementary and Secondary Teaching Credential Preparation

A major in Economics is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, students must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, students must pass the National Teacher's Examination in Social Science, or complete the Single Subject Social Science Waiver program. Economics majors seeking a teaching credential are encouraged to consult with a department advisor and review the University's special bulletin on *Programs in Teacher Education*. For information on the professional education requirements see p. 106 of this Catalog.

Economics Courses

200. Consumer Economics
(1–4)

Economics applied to individuals and families in allocating their income and wealth and planning their spending and investments, and the impact of these decisions on the economy as a whole. Topics will include budgeting, home ownership, insurance, estate planning, taxation, and investments in stocks, bonds, mutual funds, and real estate.

201A. Introduction to Macroeconomics
(4)

An examination of the basic characteristics of the American economy and the principles that determine its peformance. Emphasis is given to those factors which determine the total level of production, employment, prices, interest rates, inflation, and recession. This course satisfies the general education social science requirement.

201B. Introduction to Microeconomics
(4)

An examination of the basic principles that determine the behavior of individual consumers and firms in the U.S. economy as they respond to changing economic conditions. Topics include demand, supply, pricing, production, cost, competition, and industrial structure. This course satisfies the general education social science requirement. This course may be taken before 201A.

301. Principles of Economics (Intensive Course)
(4)

An intensive study of macroeconomic and microeconomic theory. Enrollment restricted to postbaccalaureate students. 302

303. International Economics
(4)

A study of economic development in selected countries and regions, of alternative theories of development and growth strategies, of the theory of international trade and payments, and of the available techniques for achieving equilibrium. Course emphasis will vary among instructors.
Prerequisite: 201A and 201B, or consent of instructor.

304. Intermediate Macroeconomic Theory
(4)

A study of theories that explain the causes of fluctuations in production, employment, income, money and prices in the economy. Topics covered include: national income accounting, models of short-run equilibrium and long-run growth, consumption, money market, monetary policy, fiscal policy and the macro-institutional framework of the U.S. economy.
Prerequisites: ECON 201A, and MATH 106 or its equivalent.

305. Intermediate Microeconomic Theory
(4)

A study of theories that explain consumer behavior and decision-making organizations and firms in the economy. Deals with theories of demand, pricing, production, cost analysis, and competition.
Prerequisites: Econ. 201B and Math. 106 or its equivalent.

308. Introduction to Mathematical Economics

An introduction to the technique of applying selected elementary mathematical methods to the construction of simple micro- and macroeconomic models, with a view to exploring the models' predictions in areas such as taxation, pricing, employment, output and inflation. Designed to support quantitatively oriented courses in economics and management.
Prerequisites: 201AB and Math 217 or equivalent.

317. Applied Statistics in Economics and Business
(4)

This course is devoted to techniques that are frequently used by economists to analyze problems in industry and government, such as compound growth rates, future and present values, index numbers, seasonal adjustments, central tendency and dispersion, correlation and regressions.
Prerequisite: Math. 106 or consent of instructor.

318. Managerial Economics
(4)

Economic analysis applied to the management decisions of public or private firms. The course is oriented to case studies that illuminate the content and applicability of such basic economic concepts as marginality, opportunity costs, and market structure. Topics covered will include: demand analysis, resource allocation, production economics, and cost analysis; profitability analysis; price and non-price competition; capital budgeting, and long-range strategy formulation.
Prerequisite: Econ. 201B or consent of instructor.

319. Introduction to Decision Support Systems
(4)

An introduction to the use of computers as a quantitative tool for economic and financial analysis using high level computer languages and applications packages. Topics include: modeling, simulation, forecasting, regression, and optimization.
Prerequisites: ECON 201A, 201B or consent of instructor.

322. Urban Economics
(4)

This course will focus on the issues and problems facing communities and regions in their attempts to manage and control growth and enhance the quality of life. The student will be introduced to economic planning theory and techniques useful for dealing with issues such as optimal growth, land use, environmental preservation, housing for all income groups, and energy conservation.
Prerequisite: Econ. 201A or consent of instructor.

325. Radical Economic Analysis
(4)

This course develops the analytical categories of radical economics and applies them to the contemporary American economy. Problem areas studied include: waste and irrationality in production and consumption, concentration of economic power, the internationalization of capital, the economic role of government, alienation and the labor process, and radical critiques of neo-classical and neo-Keynesian economic analysis.
Prerequisite: Econ. 201A or consent of instructor.

326. Comparative Economic Analysis and Systems
(4)

This course studies the development of economic theory, analysis, and policy in its relation to the actual historical development of economic systems in capitalist, socialist, and third-world nations.

375. Money and Banking
(4)

An examination of U.S. financial institutions, including the Federal Reserve System, U.S. Treasury, and the rapidly changing domestic and international banking system. Topics will include alternative theories of monetary and fiscal policy, the determination of interest rates and the price level, and the influence of financial institutions on inflation, recession and growth.
Prerequisite: Econ. 201A or consent of instructor.

381. Natural Resource Management
(4)

A study of natural resources and their role in the California economy. Management strategies for public and private utilization of resources. Special attention will be given to the economics of agricultural enterprises, timber, and geothermal energy. Other areas of interest such as water development, marine resources, and rural land use will be covered if time permits.
Prerequisite: Econ. 201B or consent of instructor.

388. Economics and Law of Regulation
(4)

An analysis of the regulatory environment of American business. Studies the way the legal system resolves economic conflicts among business, consumers, labor and government. Topics include: regulation of monopoly and competition; consumer protection; labor law; and environmental law.
Prerequisites: Econ. 201A or 201B.

393. Economics of Health Systems
(4)

An overview of health systems in the U.S., exploring some historical sequences in the development of existing systems. Strength and weakness of existing systems. Proposed systemic and programmatic changes suggested for improving the delivery of health services. Satisfies a core requirement for the Career Minor in Human Services: Health System Organization.

403. Seminar in Economic Development
(4)

Examination of the economic theories of development that are applied to analyze and solve the problems of increasing the standard of living in less developed countries.
Prerequisites: Econ. 303 or 305 or consent of instructor.

404. Seminar in Macroeconomic Theory

A study of theories dealing with inflation, unemployment, macro-economic policies, equilibrium and disequilibrium. Topics include: investment, growth theory, international trade, aggregate demand and supply, comparative statics, dynamics, Post-Keynesian economics, recent theoretical developments, and policy issues.
Prerequisites: ECON 304, MATH 161, 217 or its equivalent.

405. Seminar in Microeconomic Theory
(4)

This course is devoted to explorations of economic theory and policy issues, and is designed to deepen the students' understanding of economic theory learned in Econ 305.
Prerequisite: Econ. 305, Math 161, 217, or its equivalent.

411. Seminar in Public Finance
(4)

A seminar devoted to the use of economic theory for public project analysis by students seeking careers in the public sector. Topics include: resource allocation, modeling and simulation, queuing theory, dynamic systems, linear programming, decision theory, measurement of preferences, benefit-cost analysis, government investment and project evaluation.
Prerequisites: ECON 304, 305 or consent of instructor.

419. Seminar in Decision Support Systems
(4)

A seminar on computer-based systems which provide quantitative support for end-user computing emphasizing economic and financial decision making. Areas of study include: economic and financial modeling, econometrics, strategic planning, database management, application generators, the "Information Center" concept, hardware components, and Decision Support System formation.
Prerequisites: ECON 304 or 305, and ECON 317 or 319, or MGT 319 or consent of instructor.

421. Seminar in Labor Economics
(4)

Study of neo-classical and radical theories of the labor market. Past attempts to test the validity of these theories and possible methods to further analyze labor market behavior will be discussed.
Prerequisites: Econ. 304, 305 or 341, or consent of instructor.

425. Seminar in Radical Economics
(4)

The dynamics of the capitalist economy as viewed from Marxian and neo-Marxian perspectives. Topics include: methodology, price and value theory, class structure and the income distribution, exploitation and the labor process, capitalist development and the theory of the state, and the evolution of capitalist ideology.
Prerequisites: Econ. 325 or consent of instructor.

432. Seminar in U.S. Economic History
(4)

Economic development of the U.S. since the Revolution. Topics to be covered include: capital formation and the growth of business concentration; the distribution of national income; problems of agriculture; growth of the labor movement; patterns of inflation and depression; impact of international relationships on U.S. economic development. Some emphasis will be given to the study of social conflict generated by economic conditions at each stage of U.S. growth.
Prerequisites: Econ. 304A or 305A or consent or instructor. Cross listed with History 432.

456. Economics of the Justice System
(4)

An overview of the impact of the justice system on the economy and society of the United States. The course will also deal with the contribution of economic analysis of the evaluation of alternatives proposed to make the justice system in this country more efficient and equitable.

483. Seminar in Health Systems Economics
(4)

Advanced study of topics in the organization and financing of health-care delivery systems.
Prerequisite: Econ. 393 or consent of instructor.

488. Economics and Law of Business Regulation
(4)

Advanced topics in economic and legal aspects of business regulation.
Prerequisite: Econ. 388.

494. Special Topics in Economics
(1-4)

Course of lectures on a single topic or set of related topics not ordinarily covered in the Economics curriculum. The course may be repeated for credit with a different topic.
Prerequisite: Consent of the instructor.

495. Special Studies
(1-4)

Prerequisite: A student must be majoring in Economics and should contact the individual instructor for approval of special studies project prior to registration.

496. Tutoring Economics
(2)

Intended for advanced students working as tutors in economics courses. Students must take Econ. 497 the first semester that they are tutors. May not be taken more than twice. Can be taken only credit/no credit.

497. Seminar in Teaching Economics

A faculty directed seminar in teaching methods and concepts for students tutoring in economics. Can be taken only credit/no credit.

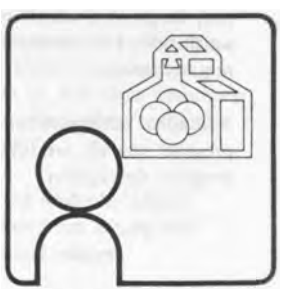
499. Internship
(1-4)

517. Seminar in Economic Forecasting
(4 units)

Designed to familiarize students with a basic problem facing every firm—how to forecast future sales, costs, prices, interest costs, and other economic variables that are the basis for business planning and budgeting. The seminar will make use of the case method to give students exposure to actual forecasts for individual firms and industries.
Prerequisite: Econ. 317 or Mgt. 315, or its equivalent.

518. Seminar in Managerial Economics
(4 units)

A seminar for managers in the private or public sector that is focused on the development of management strategies that help organizations identify and cope with the changing economic problems they confront. Case studies of individual firms and industries will be utilized to explore resource allocation problems facing management in the following areas: product markets, production costs, productivity, competitive position, capital budgeting, and analysis of profitability.
Prerequisite: An intermediate microeconomic course or equivalent course such as Econ. 318, 305, or Mgt. 391.



Education

The School of Education is committed to excellence in the professional preparation of teachers and other educational specialists. Programs offered by the School are based on a solid foundation of liberal arts and sciences and emphasize experiences which are both practical and theoretical. All programs are fully accredited.

While programs are designed primarily for positions in public schools, students receive preparation which is applicable to a variety of non-teaching positions in education or related human service fields within both the public and private sectors.

Individuals interested in teaching at the elementary school level should choose the course of study leading to the Multiple Subject Credential. This credential authorizes the holder to teach all subjects required in the public school curriculum in a self-contained classroom, pre-school through grade 12.

The Single Subject Credential authorizes the holder to teach a particular subject in a school organized by subject departments, pre-school through grade 12. Since most elementary schools are not departmentalized, this credential, in practice, is appropriate for the secondary school teacher candidate.

Individuals possessing a basic teaching credential may enter programs leading to the specialist or service credentials. These advanced credentials authorize the holders to perform specialized roles in public schools.

M.A. in Education programs are designed with both the full-time and part-time students in mind. Some master's programs can be taken concurrently with advanced credential programs.

The Children's Center Permit Programs assist students in completing state requirements for employment in child care centers. Permit programs are available for instruction and supervision.

For more detailed information on credentials and other Education programs see the University's special bulletins and program brochures.

Associate Dean

Carroll V. Mjelde

Faculty:

Libby Byers, Thomas Cooke, Jayne DeLawter, George Elliott, Robert Fletcher, Herbert Fougner, Robert Fuchigami, Bernice Goldmark, Martha Rapp Haggard, Betty Halpern, Sally Hurtado, Duncan MacInnes, Andrea Neves, Deborah Priddy, Charles Rhinehart, Richard Rizzo, Brian Shears, Thalia Silverman, Harold Skinner, David Thatcher, Eva Washington.

School Office:

Stevenson 3096, phone (707) 664-2131.

Special Resources

Two Credentials Analysts are available to evaluate coursework for specific credential requirements. Records of teachers from out of state are evaluated for purposes of advising and recommendation for California credentials. A fee is charged for non-matriculated applicants. For individual advising and evaluations, consult the Credentials Office in Stevenson Hall, 3079. 664-2581

In addition to regular campus resources, the School of Education maintains a curriculum

materials center. A collection of instructional materials such as commercially published textbooks, sample tests, and professional journals, is housed in Stevenson Hall, 3076.

Career Outlook

Credential candidates who are willing to be geographically flexible generally find teaching positions readily available. Increasing numbers of positions for those seeking elementary school teaching positions are available in California and across the nation. By 1990 there should also be more positions available for those wishing to teach at the high school level. Currently there exists a shortage of credentialed teachers in mathematics, science, and bilingual education. In addition, graduates of the School of Education frequently find positions in community agencies and in the private sector.

For more detailed and current information, a prospective teacher should obtain information from the on-campus Career Development Center.

Programs Available:

Basic Teaching Credentials

Multiple Subject (Elementary Emphasis)
Multiple Subject (Early Childhood Emphasis)
Multiple Subject (Bilingual Emphasis-Spanish)
Single Subject (generally for Secondary level, see Single Subject Waiver Programs below)

Specialist Credentials

Early Childhood Education
Reading
Special Education (both Learning Handicapped and Severely Handicapped)

Service Credentials—Preliminary and Professional

Administrative Services
Pupil Personnel Services

Certificate Programs

Adapted Physical Education
Children's Center Permit
Resource Specialist Certificate of Competence

Master's Degree Programs

Administrative Services
Curriculum, Teaching, and Learning
Early Childhood
Reading
Special Education

Other Programs Affiliated With the School of Education

Fifth Year (to obtain a clear California Basic Teaching Credential)
Mini Corps

Basic Teaching Credentials

The basic authorization to teach in the California public schools requires the following:

1. Possession of a baccalaureate (bachelor's) degree.
2. Completion of an appropriate major, either earned as part of the degree or established by examination (NTE).
3. Passage of the California Basic Education Skills Test for teachers (CBEST).
4. Completion of U.S. Constitution requirements, by passing a two unit course (Political Science 200 or 202), or a test.
5. Completion of a state approved program of professional teacher education.
6. Filing of the State Certificate of Clearance form which includes finger printing.

NOTE: Completion of the requirements listed above will allow an individual to obtain a *preliminary* basic teaching credential. A professional *clear* teaching credential will be recommended by the University upon completion of an approved fifth year of study (30 units beyond the bachelors degree).

NOTE: Legislation is pending that will substantially change California credentialing laws. Contact the Credentials Office for the latest information regarding these changes. Students should consult with the Credentials Office and appropriate department during their first semester on campus if they plan to earn a credential.

Requirements for Admission to Basic Teaching Credential Preparation Programs

All credential candidates must complete the following before admission to the professional preparation programs:

1. Admission to the University
2. Junior standing (60 units) or above. (For Single Subject Credential see Single Subject Credential Program.)
3. Cumulative grade point average equivalent to the upper half of undergraduate students in the candidate's discipline at SSU.
   a. GPA for students who have completed 30 semester units at SSU will be determined by SSU coursework only.
   b. GPA for students who have not completed 30 semester units at SSU will be determined by cumulative work attempted at all colleges and universities attended.
4. Passing scores on all sections of CBEST.
5. Successful completion of a supervised field experience.
6. Successful completion of an admissions interview with a member of the School of Education faculty (in addition, for Single Subject, to an interview in the academic department).
7. Demonstration of aptitude, personality, and character traits which satisfy the standards of the teaching profession. Assessment of these qualities will be made by the School of Education through evaluation of interviews, letters of recommendation and candidates' autobiographical statements.

A limited number of students may be admitted to basic teaching credential programs who have not met one or more of the above requirements when such students have compensating strengths in other required areas. Petitions for exceptional admission are available in the School of Education office. Exceptional admissions may be granted which are conditioned on satisfactory completion of specific requirements.

Additional admission requirement which are program specific are listed with each program description.

Procedures for Admission to Basic Teaching Credential Preparation Programs

1. Apply for admission directly to the School of Education. Application packets and additional information may be obtained from the Credentials Office, Stevenson 3079.
2. Submit to the Credentials Office two official transcripts from each college/university attended. (Check with the office of Admissions and Records regarding additional official transcripts required for admission to the University.)
3. Submit CBEST results.
4. Submit verification of supervised field experience.

Continuation in Basic Teaching Credential Preparation Programs

1. Students in the basic credential programs must maintain a 3.0 grade point average in professional education coursework to be eligible for student teaching.
2. Students must continue to satisfy the admissions requirements listed above. Should the School of Education determine that a student no longer satisfies these requirements or that a student admitted as an exception has failed to satisfy a condition of admission, the School may, after notifying and counseling with the student, discontinue the student's participation in the teacher education program.

Graduate School Admission

In addition to the above application requirements, all graduating seniors must apply for readmission to the University as graduate students. Other students who hold the baccalaureate degree must file an application for admission to the University.

MULTIPLE SUBJECT CREDENTIAL PROGRAMS

This credential authorizes the holder to teach in a self-contained classroom pre-school to grade 12. It is most frequently used for teaching in elementary and early childhood education.

Students pursuing the Multiple Subject Credential may select from among the following departmental majors.

a. Environmental Studies
b. Hutchins School of Liberal Studies
c. Mexican American Studies/BALS

Students may also satisfy academic requirements by passing the General Knowledge section of the Core Battery National Teachers Examination (NTE). This examination process provides the option for students to major in a program of their choice.

In addition to the requirements listed on page 106, the following criteria must be met prior to admission to the programs:

1. If the upper half GPA of a major discipline falls below 2.5, the candidate must have a minimum GPA of 2.75 in upper division and graduate work or a cumulative GPA of 2.5.
2. Approval of the School of Education. Candidates are approved on the basis of the profile of their qualifications resulting from grade point average, previous experience, letters of recommendations, and interview ratings.

All candidates must take the Written English Proficiency Test (WEPT) and apply for the Certificate of Clearance prior to or during their first semester. Graduate students may satisfy the WEPT requirement by a passing score (41 or better) on the writing section of CBEST. Undergraduate and graduate students may substitute Eng. 375 or its equivalent for WEPT.

Three programs are available which lead to a Multiple Subject Credential. Each program may extend over three semesters. A two-semester pattern is available for a limited number of qualified graduate applicants. For information regarding the programs listed below, consult the appropriate program coordinator or read the program bulletin.

1. Elementary Emphasis

   The standard Multiple Subject Credential Program prepares candidates to teach in self-contained classrooms, grades K–12. Because self-contained classes are located primarily in elementary schools, professional coursework and field experience focus on elementary classroom concerns; supervised student teaching is divided between primary (grades 1–3) and intermediate (grades 4–6) levels.

2. Early Childhood Emphasis

   The Early Childhood Program emphasizes a developmental approach to children's learning, not only in the classroom but in before-, and after-school care, day centers and other learning programs. This credential includes professional courses plus supervised field work in four settings: pre-school, kindergarten, primary, and intermediate.

3. Bilingual Emphasis

   This professional program prepares bilingual teacher candidates to teach in Spanish-English bilingual self-contained classrooms, K–12. Candidates are also authorized to teach in regular settings. Approximately half of the courses are taught in Spanish.

In addition to the requirements listed on page 106 and (the previous column), the following criteria must be met prior to admission to the Bilingual Emphasis program.

a. Completion of General Education requirements.

b. Application for admission to both the Multiple Subject/Elementary Emphasis Program and the Multiple Subject/Bilingual Program.

c. Satisfactory interview ratings from at least one faculty member in both the Bilingual Education Program and the Multiple Subject Program.

d. Passage of the Hispanic Cultural examination and the Spanish Language Examination with a Foreign Service Institute (FSI) level of 2.0.

e. Receive approval of the Bilingual Education Program Admission Committee. Although grade point average is a consideration in the selection of candidates, emphasis is also given to the extent of experience relevant to elementary school teaching and recommendations resulting from

interviews, child-related experience, and coursework.

Students wishing a two-semester Bilingual Emphasis program must also satisfy the following conditions.

f. Possession of a baccalaureate degree.

g. Passage of CBEST.

h. FSI level of 3.0 on the Spanish Language Examination and the Hispanic Culture Examination.

SINGLE SUBJECT CREDENTIAL PROGRAM

This credential authorizes the holder to teach an approved subject matter area. It is most commonly used in junior and senior high school instruction. The Single Subject program extends over three semesters. A two-semester pattern is available for a limited number of qualified graduate applicants.

In addition to the requirements listed on page 106, the following criteria must be met prior to admission to the program:

1. Completion of all General Education requirements.
2. Completion of at least 75 units of the degree program.
3. No more than 20 semester units of the degree major to be completed. (Foreign Language—21 units).
4. Passage of CBEST.
5. Passage of the Written English Proficiency Test (WEPT).

Students wishing a two-semester single subject program must also satisfy the following conditions:

6. Possession of a baccalaureate degree and completion of all subject matter requirements in a single subject waiver program or passage of the appropriate subject matter exam (NTE).
7. Passage of CBEST.
8. Evidence of a minimum of 60 hours of successful experience as an aide or volunteer at the secondary school level. Letters of recommendation are acceptable evidence.

All candidates must provide evidence from a physician of a clear chest x-ray or TB skin test and apply for the Certificate of Clearance during the first semester. The Certificate of Clearance must be obtained before placement in the public schools.

The following programs offer work appropriate for the Single Subject Credential. Further information may be obtained by calling the number listed or visiting the particular office in charge of the program, and by reading the University's special bulletin on *Programs in Teacher Education*.

Single Subject Waiver Programs

Art	Art 128, 664-2151
English	Nichols, 362
Drama	664-2140
English	
Journalism	
Speech	
oreign Language	Stevenson, 3016
	664-2351
French	
German	
Spanish	
Government	Stevenson 2070
History	664-2313
Life Science-Biology	Darwin 125, 664-2189
Mathematics	Darwin 128, 664-2368
Music	Ives 206, 664-2324
Physical Education	P.E. 14, 664-2357
Physical Science	
Chemistry	Darwin 126, 664-2334
Physics	Darwin 126, 664-2334
Social Science	
Mexican American Studies	Nichols 214, 664-2369
Social Science	Stevenson 2020, 664-2112

Requirements for Continuing in the Basic Credential Programs

Advising is required each semester for all Education students.

All courses in the School of Education must be taken for a letter grade, except for field-based courses and thesis which are graded credit/no credit.

Continued enrollment in a credential program is contingent upon the student's maintaining the standards required for admission to the program. Students are expected to make continuous progress toward the credential while maintaining a grade point average of 2.5 in their major and in professional education courses. Incomplete grades and grades of "D" or "F" in professional education courses must be removed prior to enrollment in courses for the next phase.

Candidates who must delay progress in the professional preparation program must file a form with the program coordinator. A student returning from a program delay will be subject to the screening requirements in effect at the time of reentry and will be accommodated as space allows. Any student on academic probation is subject to automatic disqualification as a credential candidate.

FIFTH YEAR PROGRAMS

A fifth year of study is an integral part of teacher education programs in California and is required to obtain a clear teaching credential. Defined as 30 semester units after the baccalaureate degree, the programs must include approved courses in special education and health education.

Candidates must consult with the Fifth Year program coordinator to plan programs most suited to their prior experience and their individual professional goals.

Prerequisites for Admission to Fifth Year Programs

All candidates must complete the following before admission to a Fifth Year program:

1. Be admitted to the University as a graduate student.
2. Apply for admission to the fifth year program through the Credentials Office.
3. Submit to the Credentials Office two photocopies of a valid basic California teaching credential and two official transcripts from each college/university attended.

Program Guidelines

1. Any course must receive prior written approval from the candidate's advisor and the Fifth Year Program Coordinator.
2. Approved special education and health education courses must be included in the 30 units.
3. A maximum of 3 units of lower division courses and 6 units of extension courses may be included.
4. A maximum of 9 semester units in courses taken at other institutions of higher education may be included.
5. A minimum grade point average of 2.5 must be maintained, and no grade below a "C" may be counted.

Acceptable fifth year program objectives may include:

1. The professional preparation for a basic credential
2. A master's degree program
3. A specialist or service credential program
4. Additional courses in the applicant's teaching major
5. A second approved teaching major
6. A second basic teaching credential
7. Courses leading toward professional growth and improvement in teaching effectiveness.

For further information, consult the school coordinator of graduate studies.

Professional Growth Requirements

Teachers who need to fulfill 150 clock hours of professional growth requirements every five years in order to maintain their clear California credential will find a variety of appropriate courses offered by the School of Education and throughout the University. Teachers are invited to consult with the coordinator of graduate studies in the School of Education regarding the planning of their personalized programs.

Master/Resident Teacher Scholarship Program

Teachers who wish to serve as resident teachers in the basic teaching credential programs can update and improve their supervisorial skills and curriculum knowledge in a state-financed scholarship program. This program may be used to purse a master's degree or an advanced specialist credential or simply to take relevant courses. For further information, consult the coordinator of graduate studies.

SPECIALIST AND SERVICES CREDENTIALS

The School of Education offers programs leading to advanced credentials. The Specialist Credential authorizes the holder to teach in special areas at any grade level from pre-school through secondary. The Service Credential allows the holder to provide specific non-classroom services to public schools. Completion of a basic California teaching credential is required for admission to most specialist and service credential programs. These advanced programs may be coordinated with a Master of Arts degree program.

A listing of specialist and service credentials can be found earlier in this section. Specific course requirements for the specialist and service credentials will be found in program brochures located in the Credentials Office (Stevenson 3079) or from the coordinators of the specific programs.

THE MASTER OF ARTS IN EDUCATION

The Master of Arts program in Education offers courses of graduate study to prepare candidates for specialized teaching and for curriculum and instructional leadership responsibilities in the schools. The program, a minimum of thirty units, provides for areas of concentration in Administrative Service, Curriculum, Teaching, and Learning, Early Childhood, Reading and Special Education.

Students must maintain a 3.0 grade point average in all coursework in the approved Master's degree program as well as all coursework taken subsequent to admission to unclassified status.

Refer to section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Prerequisites for Admission to Unclassified Status

1. A baccalaureate degree from an accredited institution.
2. A cumulative grade point average of 2.5 or an upper division and graduate grade point average of 2.75 and a grade point average of 3.0 for previous work in education.
3. Application to the University as a graduate student.
4. Application to the School of Education.
5. Transcripts and two photocopies of a valid basic teaching credential (except where otherwise noted) on file in the Credentials Office.

Requirements for Advancement to Classified Status

All graduate students must complete the following before admission to classified status, in addition to any requirements listed above:

1. Completion of the aptitude portion of the Graduate Record Examination, for advising purposes.
2. Development of an approved program in consultation with the graduate coordinator and program faculty.
3. Satisfactory completion of *over 6* and *under 15* units in the approved program.

In addition to any requirements listed above, the student must complete the following:

4. Formation of a graduate advisory committee, if required.
5. Recommendation by the School of Education.

Requirements for the M.A. Degree in Education

Graduate students must complete all requirements as established by the School of Education graduate committee, the graduate advisory committee, and the University, to include:

1. Completion of an approved program consisting of a minimum of 30 units of 400–500 level courses, as follows:
   a. at least one-half of the units in 500 level courses

b. not more than 9 semester units of transfer and/or extension credit
c. at least 15 units completed after advancement to classified status

2. Completion and final approval of a thesis or creative project OR passage of the written comprehensive examination.

All requirements listed above must be completed within seven years (14 semesters) of the initiation of graduate study.

M.A. Core Courses

Three core courses are required for all M.A. in Education programs. These courses are:
Education 572 Philosophical/Historical Perspectives in Education (3)
Education 573 Sociological and Psychological Foundations for Teaching and Learning (3)
Education 574 Educational Research, Evaluation and Policy Studies (3)

Students take either of the following courses depending on the M.A. option they select:
Education 575AB M.A. Thesis Creative Project (3) (for students who choose research or a creative project)
Education 576 Current Trends and Issues in Education (2) (for students who choose the comprehensive examination)

Areas of Concentration: Master of Arts in Education

Educational Administrative Services

The Educational Administrative Services concentration is designed to prepare teachers to serve in administrative positions, such as superintendent, principal, assistant principal and equivalent positions, in public and private schools.

In addition to the general admission requirements for School of Education graduate programs, candidates must have completed three years of successful full time teaching experience and specified prerequisite courses and have passed CBEST. Candidates may combine their master's degree studies with a Preliminary Administrative Service Credential.

In addition to the core courses, the Concentration courses include 12 units from among the following courses:
Education 580A Educational Leadership and School Management (3)
Education 580B Educational Leadership and School Management (3)
Education 581 Management of Educational Personnel: Policies and Procedures (3)
Education 582 School Community Relationships and Politics (3)
Education 583 School Governance: Judicial, Legislative, and Financial Aspects (3)
Education 584 Special Education for Administrators (1)
Education 585 Curriculum Development: Theory, Practice and Evaluation (3)
Education 587 Field Experience in Administration (3)

In addition to the above, students must complete 6–7 units of supporting course work from 400–500 level. These courses must be approved by the program coordinator.

Curriculum, Teaching and Learning

The Curriculum, Teaching and Learning concentration provides flexibility in program development for a wide range of professional educators. Candidates need not possess a teaching credential; they may prepare for staff development and leadership positions in a variety of settings.

In addition to the core course, the required concentration courses include:
Education 585 Curriculum Development: Theory, Practice and Evaluation (3)
Education 586 Teaching and Learning: Research and Application in the Classroom (3)

The remaining units (12–16) are in an approved Area of Emphasis. Students may select or design a plan of coursework from the School of Education or in other departments. A field component may comprise a major portion of the Area of Emphasis.

Early Childhood Education

The Early Childhood Education concentration prepares people to work with children from birth to eight years of age in community sponsored programs, federal programs, or agency sponsored programs. Candidates who possess a valid basic teaching credential may combine their master's degree studies with a Specialist Credential in Early Childhood Education.

Reading

The Reading concentration is designed to prepare teachers for specialized teaching and for curriculum and instructional leadership responsibilities in the field of language and literacy. The specific requirements for this option is being revised.

Candidates who possess a valid basic teaching credential may combine their master's degree studies with a Reading Specialist Credential.

Special Education

The Special Education concentration provides advanced academic experience aimed at expanding and deepening students expertise in special education. The M.A. program is appropriate for special educators seeking to enhance their professional capacities and expanding their future career options. While the central speciality of the program relates to Resource Specialists, whose purpose is to promote the least restrictive environment for people with special needs, a variety of current and classical special education topics are included in the coursework of the program.

CHILDREN'S CENTER PERMIT PROGRAMS

Individuals interested in pursuing a career in the field of infant and child home/school care must fulfill California State Department of Education requirements. This permit is required for both public and private child care centers.

Regular Instructional Permit

This program qualifies students to teach in centers at several levels: infancy, pre-school, and elementary. The instructional permit is required for employment in local, state and federally supported programs.

Requirements for the Instructional Permit

1. Completion of 16 units of general education
2. Completion of 24 semester units of early childhood education coursework
3. Completion of one year of supervised field work or two years of experience in a child development center.

Supervision Permit

This program prepares individuals to direct or administer early childhood programs.

Requirements for the Supervisor Permit

1. Possession of the Children's Center Regular Instructional Permit.
2. Possession of a baccalaureate degree.
3. Completion of 12 semester units of advanced coursework in early childhood education.
4. Completion of 6 semester units in administration of pre-school programs.
5. Completion of two years of teaching.
6. Passage of CBEST.

Professional Development in Early Childhood Education

Professional development opportunities are available for individuals working in auxiliary roles (aides or assistants) and complementary roles (social work, nutrition, health) in child development centers. Students may enroll in individual courses without participating in a full permit program.

For further information, consult the coordinator of Early Childhood Education program.

Education Courses

200. Introduction to Education
(3–4)

This course is an introduction to current educational issues in America, with particular emphases on public schooling. Students will explore the relationship between learning and teaching, and the changing roles of the school. A 1 unit field experience is provided to allow opportunity for first-hand observation of and contact with practicing teachers in a variety of classroom settings.

291. Seminar for Tutors
(2–3)

Open to students who are tutoring on campus or in the community, or who are interested in tutoring. Focus on problems of inter-personal relationships, social contexts of tutors, learning styles, techniques of teaching, and individual problems encountered in tutoring.

295. Community Involvement Program
(1–4)

C.I.P. involves students in the community, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree.

328. Teaching to an Instructional Objective
(2)

Guidance in lesson preparation with emphasis on direct delivery, self-evaluation and analysis of presentations.
Prerequisite: Functional Spanish language skills and participation in the Mini-Corps Program or consent of instructor.

329. The Migrant Experience
(2)

An examination of the migrant plight in our society and educational system through study of the literature and by a direct active contact with the migrant community.
Prerequisite: Functional Spanish language skills and participation in the Mini-Corps Program or consent of instructor.

331. Practicum in Child Study
(3)

An intensive study of the growth and learning of children through observation and participation in selected situations. May be taken twice for credit. May be applied toward Children's Center Permit.

395. Community Involvement Program
(1–4)

C.I.P. involves students in the community, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree.

400. Curriculum of the Elementary School (Social Sciences)
(1)

Principles, methods, and materials of instruction (including audio-visual) in the elementary schools' social studies curriculum.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

401. Curriculum of the Elementary School (Environmental Education)
(2)

For pre- and inservice teachers. Includes definition of terms, the history of conservation and current environmental problems. The course utilizes a practical interdisciplinary approach to conservation education. The course requires implementation of or participation in a project or program in the school community, e.g., Sonoma County Outdoor Education Program; The Federal National Environmental Study Areas Program.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

402. Curriculum of the Elementary School (Mathematics)
(1)

Principles, methods and materials of instruction in mathematics in the elementary school.
Prerequisite: Math. 300, Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

403. Curriculum of the Elementary School (Science)
(1)

Introduction to science concepts, processes and teaching techniques leading to effective elementary science instruction. Particular emphasis is placed on enthusiasm and confidence in using locally available and inexpensive teaching and laboratory materials in process oriented instruction.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

404. Microcomputers in the Classroom
(1)

This course provides an introduction to microcomputer use and approaches for using microcomputers in the elementary school. Evaluation of educational software and initial training in programming are included. Available to SSU computer majors when space allows.
Prerequisite: Approval by the School of Education.

405A–B. Student Teaching Multiple Subject Credential and Seminar
(7–7)

Full-time student teaching experience in an elementary school under the guidance of a resident teacher. Two placements are required: one at the primary level (grades 1–3), and one at the intermediate (grades 4–6).
Prerequisites: Completion of all program coursework.
Consent of Multiple-Subject Coordinator
Requirement: Concurrent enrollment in Ed. 414.

405C–D. Student Teaching Multiple Subject Credential—Early Childhood Education
(7–7)

Student teaching in the primary and intermediate grades under the guidance of a resident teacher. Take with Ed. 414.
Prerequisite: Admission to Early Childhood Education Credential Program.

406A. The Teaching of Reading in the Secondary School
(3)

Methods, techniques, and materials for teaching reading at the secondary level. Emphasis will be on developing effective readers in the content areas and in meeting the reading needs of all students. Field practicum required. Prerequisite: Approval of School of Education or admission to the Single Subject Credential Program.

406B. Secondary Reading Field Experience
(1)

Observation and participation in classroom activities in a reading instruction setting. Prerequisite: Concurrent enrollment in 406A. Credential holders may be exempt.

407. Curriculum of the Elementary School (Reading)
(3)

An overview of reading theory, the history of reading instruction, and current practices in teaching reading. Emphasis is on evaluating instructional approaches and materials, developing classroom diagnostic procedures, and organizing for instruction.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.
Requirement: Concurrent Enrollment in Ed. 412.

408. Curriculum of the Elementary School (Language Arts)
(1)

Principles, methods, and materials of instruction (including audio-visual) for elementary school language arts including writing, reading, written language conventions (spelling, punctuation, speaking, listening, and language study).
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

409. Integrated Curriculum for the Multiple Subject Credential
(3)

The theory and practice of an integrated curriculum in the content areas of math, science, social science and language arts.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.

410. Second Language Pedagogy
(2)

Current and past methods of teaching a foreign/second language. Theories of first/second language acquisition and learning. The influence of linguistic theories upon second language teaching practices and goals. Other topics covered include second language instructional approaches and techniques; the use, evaluation and adaptation of instructional materials; language assessment and testing practices; and course planning, implementation, and evaluation.
Prerequisite: LING 441. Linguistics and Second Language Teaching.

411. Classroom Spanish for Bilingual Educators
(3)

For educators who teach in bilingual classrooms at the elementary school level. The course reviews and applies grammatical structures and pedagogical vocabulary in Spanish needed to teach basic elementary school curriculum. It emphasizes the development of questioning strategies in Spanish which elicit critical thinking and creative responses from Spanish-speaking students.

412. Student Teaching in Reading
(1)

An initial experience designed to provide the teacher candidate with preliminary practice and application of pedagogical skills, knowledge, and insights through classroom and school-wide activities. Candidates must spend a minimum of 30 hours of observation/participation in an assigned school. It is recommended that no more than 4 hours of student teaching be completed per week.
Prerequisite: Ed. 416, 428 and 429. Consent of Multiple Subject Coordinator.
Requirement: Concurrent enrollment with Education 407—Curriculum of the Elementary School (Reading). Credential holders maybe exempt.

413. Integrated Curriculum—Bilingual Education
(1)

Dynamics and operation of the integrated curriculum including the design of curricular models.

414. Seminar in Student-Teaching
(1)

Progress and problems in student-teaching. Discussion and workshops designed to enhance career and professional development.
Prerequisite: Completion of program coursework.
Requirement: Concurrent enrollment with Education 405AB, or 405C/D.

415. Social and Psychological Foundations for Cultural Diversity
(3)

Classroom techniques and materials that provide for diversity in pupil abilities and that also consider ethnic and socio-economic factors. Field experience (30 hours) in a culturally diverse educational setting. This fulfills requirements for the Children's Center Supervision Certificate, the Specialist Credential, and M.A. program. Multiple Subject/ECE.
Prerequisite: Admission to certificate and graduate program.

416. Student Teaching in Multi-Cultural Settings—Field Experience
(1)

Field experience to be taken concurrently with 428.
Prerequisite: Admission to basic credential program.

419. Movement and Drama in the Classroom
(3)

An activity workshop in which the participants can relate creative movement and drama experience to the classroom curriculum. Includes movement; music and movement, pantomime, improvisations, reenactment of children's stories and role playing. The work of Sherborne, Heathcote, Spolin and others will be used.

420. Human Development I
(2)

The child at home, at school and in the community; social attitudes toward children. The birth process, pre and post natal care and nutrition. Learning and personality theories. Issues related to language development, sex roles, and cultural differences. Some field experience required. May be applied toward Children's Center Permit.
Prerequisite: Consent of instructor.

421. An Historical Look at Changing Definitions of Childhood
(3)

Current practices in education and child rearing in societal and historical perspective. The class will examine paintings, photographs, diaries, autobiographies, legends, folk and fairy tales, and empirical data such as changes in survival rates of infants and possible effects upon adult attitudes.

422A–B. Secondary School Curriculum and Instruction
(1) (1)

Scope, sequence and methods of instruction in secondary schools. Part A is generic and focuses on those aspects of curriculum and instruction common to all disciplines. Part B is related specifically to candidates' particular subject matter.

424. Introduction to Student Teaching
(2)

An initial observation/participation field experience designed to provide the teacher candidate with preliminary practice and application of pedagogical skills, knowledge and insights through classroom school-wide activities.

Candidates must spend a mininum of nine weeks observing in an assigned school, including one week of supervised student teaching.
Prerequisite: Admission to the Single Subject Credential Program.

425A–B. Secondary Student Teaching
(4) (8)

Full time supervised teaching experience in secondary schools under the guidance of a resident teacher.
Prerequisites: Take with Ed. 426. Consent of Single Subject coordinator.

426. Seminar Accompanying Student Teaching (Secondary)
(1–1)

An examination of the problems faced by student teachers. Emphasis on the planning and evaluation of instruction, and the evaluation of learning as well as classroom management and control, and record keeping. To be taken concurrently with Educ. 425. May be repeated for credit.
Prerequisite: Consent of Single Subject Coordinator.

428. Issues in Multi-Cultural Education
(1)

This course provides a base for understanding and exploring the diversity of thought and communication in the classroom. It also provides a base for understanding the nature of philosophies, policies and procedures which govern educational practices in the multi-cultural classroom.
Prerequisite: Admission to basic credential program. Approval of the School of Education.

429. Psychological and Sociological Foundations of Education
(4)

A broad survey of the teaching-learning process including the principles of growth and development, learning theory and evaluation. A pragmatic exploration of the larger community, the school, the various learning settings with emphasis on divergent values of the community and their implications for the learner and the school.

430. Special Education for Teachers
(4)

A survey of theory, programs, concepts and teaching practices related to children with special needs. Emphasis will include current mandates and trends related to the "mainstreaming" of exceptional children into the "least" restrictive environments. This course meets special education requirements for regular education teachers.

431. Student Teaching (Pre-School/Kindergarten)
(3)

Classroom observation and experience in a pre-school/kindergarten setting, 12 hours per week for at least seven weeks.
Prerequisite: Admission into the Multiple Subject/Early Childhood Emphasis credential program.

433. Student Teaching in Pre-School Programs
(1–5)

Observation, student teaching and scheduled seminars. Emphasis on planning activities for 2–5 year old children and evaluation of growth and learning in the young child. May be applied toward Children's Center Permit.

434. Supervision of Pre-School Educational Programs
(3)

Principles and methods of supervision and administration with a focus on current child development theories and their translation into programs. Examination of procedures for establishing schools and meeting statutory requirements. May be applied toward Children's Center Instructional and/or Supervisorial Permit.

435. Topics in Early Childhood Program Administration: Infant, Preschool and Extended Day Care
(3)

Topics may include: careers in Early Childhood Education programs, inter-group relations, work with staff, parents and community, infant/toddler programs, and their curricula.

437. Seminar: Integrated Curriculum in Pre-School Through Elementary
(3)

A multi-disciplinary approach to the task of "learning to learn." Focus is on trends in curriculum and innovative school patterns for the education of the young child, infancy, pre-school through elementary programs.
Prerequisite: Admission to Multiple Subject Early Childhood Emphasis, Early Childhood Specialist Credential, M.A. Programs, or consent of instructor.

450. The Gifted Student
(3)

Intensive study of the education of gifted and talented students.

452. Student Teaching with Students with Special Needs
(6)

Student teaching with at least two groups of exceptional children.
Prerequisite: Take with Ed. 453. Consent of Special Education Coordinator.

453. Seminar in Student Teaching
(1)

Discussion of progress and problems for student teachers in special education. To be taken concurrent with Education 452.

457AB. Exceptional Infant
(2–3)

A course focusing on the development of the developmentally disabled infant and methods of early stimulation. The course is both theoretical, involving review of current ideas and research, and practical, involving work with babies and infants.

486. Creative Utilization of Educational Media
(2)

Exploration of ways to utilize and create media for the teaching-learning environment. Laboratory practice in the planning and production of audio-visual materials. Basic graphic techniques for preparation of transparencies, mounted materials and other projected and non-projected media. Limited instruction in photography and videotape. Laboratory fee payable at registration will be charged as published in class schedule.

490. Selected Topics in Education
(1–4)

A course which may be designed according to the interest of a particular faculty member, providing opportunities for diversification in content and reading.

491. Seminar for Tutors
(2–3)

Open to students who are tutoring on campus or in the community, or who are interested in tutoring. Focus on problems of inter-personal relationships, social contexts of tutors and their students, learning styles, techniques of teaching, and individual problems encountered in tutoring.

492. Selected Topics in In-Service Education
(1–4)

In this course collaboration between the University, county offices, and local school districts will result in staff development experiences for teachers and administrators. Specifically, the course is designed to address current issues facing practicing teachers and administrators. Opportunities to formulate staff development programs and to plan for other school based projects such as curriculum revision, clinical supervision, etc., will be central to the course design. Student projects may grow from local school needs.

495. Special Studies
(1–4)

Independent study designed in consultation with an instructor.
Prerequisite: Successful completion of at least two courses in the School of Education. Students must complete the standard SSU form and secure the required approvals during the first week of classes.

502. Advanced Seminar: Curriculum and Research in Mathematics
(3)

Research programs, trends and issues in math education. Topics include: mathematics for all learners, the metric system, reading as a mathematical skills need, performance standards, program development and evaluation are some of the areas to be studied.
Prerequisite: Ed 402 or equivalent. Approval of School of Education.

503. Advanced Seminar: Curriculum and Research in Science
(3)

Research programs, trends and issues in science education.
Prerequite: Educ. 403 or equivalent.
Approval of School of Education.

504. Advanced Seminar: Curriculum and Research in Social Sciences
(3)

Research, programs, trends and issues in social sciences education. Particular emphasis on the integrative approaches and study of inquiry methods in social sciences.
Prerequisite: Educ. 400 or equivalent.
Approval of School of Education.

505. Field Experiences with Young Children
(3–6)

Field experience in early childhood education, fulfilling the field requirement for the Early Childhood Specialist Credential.
Prerequisite: Consent of Coordinator of Early Childhood Education.

507. Advanced Seminar: Curriculum and Research in Reading
(3)

Research, programs, trends and issues on reading and reading instruction. Study of the reading process (beginning and proficient reading) and methods and materials for teaching of reading.
Prerequisite: Educ. 407 or equivalent.
Approval of School of Education.

508. Advanced Seminar: Curriculum and Research in Language Arts
(3)

Research, programs, trends and issues in language arts. Readings in the research literature on oral and written language development, language functions and forms, and methods and materials for teaching language arts.
Prerequisite: Educ. 408 or equivalent.
Approval of School of Education.

509. Organization, Administration and Supervision of Reading Instruction
(3)

Principles and procedures in administration and supervision of instruction in reading, including surveys of current practices.
Prerequisite: Approval of School of Education.

511. Seminar: Comparative Education
(3)

A study of school systems of other countries, including consideration of educational objectives, organization, administration and curriculum.
Prerequisite: Approval of School of Education.

514. Selection and Evaluation of Reading Materials
(3)

Evaluation of commercially published and teacher prepared instructional materials and devices for use in reading instruction, including literature and software.
Prerequisite: Approval of School of Education.

515. Seminar: Children's Literature
(3)

A study of recent materials in children's literature, authors of children's books and ways of using children's literature in the classroom.
Prerequisite: Approval of School of Education.

517. Psychology of the Reading Process
(3)

Research and theories of the psychological, socio-psycholinguistic, physiological, neurological, and educational aspects of the reading process.
Prerequisite: Approval of School of Education.

520. Seminar: Human Development II
(3)

An examination of divergent theories of human development and their effects upon program design, teaching strategies and school policy. The dynamics of adults and children interacting during their respective stages of development. Current research in the context of trends and issues in child rearing and education.

530. Methods and Materials in Billingual Education
(2)

A brief review of theories of language development, culture and cognition and culture and teaching. Development of curriculum materials for bilingual students in various subject areas and levels. Evaluation of existing materials and ways to adapt them in the bilingual classroom. Taught in Spanish.
Prerequisite: Linguistics 441 and consent of instructor.

531. Bilingual Field Practicum
(4)

Application of theory, concepts, and techniques of bilingual-cross-cultural education in selected bilingual field settings.
Prerequisite: Consent of the program coordinator.

534. Integrated Curriculum in Infant Programs through 3rd Grade. (0–8 years of age)
(3)

A multi-disciplinary approach to the task of "learning to learn." Focus is on trends in curriculum and innovative school patterns for the education of the young child, infancy–8 years, through elementary programs.
Prerequisite: Admission to Multiple Subject/Early Childhood Emphasis, Early Childhood Specialist Credential, M.A. Programs, or consent of instructor.

536. Curriculum Development—Elementary Schools
(3)

An inquiry into types of curriculum in elementary schools; how to construct criteria for curriculum construction; the psychological, sociological, and subject matter concepts for curriculum; setting goals, with means and methods for achieving them; changing curriculum patterns.
Prerequisite: Approval of School of Education.

537. Seminar: Developmental Approach to Reading
(3)

A study of various systems of teaching reading to young children, infancy 8 years. Analysis of the systems; evaluation of reading and language materials; use of phonics; identification of reading disorders.
Prerequisite: Admission to Early Childhood Education Specialist Credential Program.

538. Seminar: Supervision, Management and Evaluation of Programs for Young Children
(3)

An overview of schools for young children, infancy–8, public, private, compensatory, licensing and certification requirements; school administrative management; personnel and program development. Some field experience required.
Prerequisite: Consent of instructor. Required course for Specialist and MA in ECE and also may be applied to Children's Center Supervisory Permit.

539. Research in Early Childhood Education
(3)

Current topics in Early Childhood Education. Course may be taken concurrently with Education 574.
Prerequisite: Consent of the instructor.

546AB. Competencies in the Teaching of the Severely Handicapped.
(3) (3)

Study of education and rehabilitation problems of severely handicapped learners. Observations and participation assignments required.
Prerequisite: Admission to Special Education Program.

547AB. Educational Assessment of Exceptional Students
(3) (3)

Assessment and interpretation of instruments used with exceptional students. Some field work required.
Prerequisite: Admission to Special Education Program.

549AB. Competencies in the Teaching of the Mildly Handicapped
(3) (3)

Study of the education of mildly handicapped learners.
Prerequisite: Admission to Special Education Program.

560A. Diagnosis and Remediation of Reading Difficulties
(3)

Principles and procedures for evaluating readers of all ages. Use of a variety of evaluative instruments. Methods and materials for teaching of reading. Includes field experiences.
Prerequisite: Consent of the instructor.

560B. Practicum in Diagnosis and Remedial Instruction in Reading
(3)

Field experience with readers of all ages, including evaluation of reading effectiveness, design and implementation of instruction, and selection and modification of materials.

561. Supervised Field Experience
(3)

Practicum including evaluation and instruction of individuals and groups and selection of reading materials. Practice also in evaluating school reading programs, and in-service professional development.
Prerequisite: Consent of the instructor.

562. Advanced Problems in Special Education
(3)

Recent trends, issues, and problems in special education including those related to the role of resource teacher.
Prerequisite: Consent of the instructor.

563. Consultation and Coordination in Special Education
(3)

The Resource Specialist as consultant and coordinator vis a vis both special and regular education will be studied.
Prerequisite: Approval of the instructor.

564. Seminar: Research in Special Education
(3)

Researchable problems in special education will be identified and discussed. Students will be expected to submit an acceptable project proposal.
Prerequisite: Consent of the instructor.

565AB. Seminar: Advanced Field Problems
(1) (1)

This seminar focuses on involvement in current problems, particularly at the local level, and provides for an exchange of ideas for graduate students.

568. Evaluation in Education
(3)

An analysis of the role of evaluation in the educational process. Emphasis will be upon evaluation techniques used by teachers and will include appraisal of standardized tests and an interpretation of the data they provide.
Prerequisite: Approval of School of Education.

569. Resource Teachers in Special Education
(3)

Techniques and methods for helping special students in the regular class.
Prerequisite: Consent of the instructor.

572. Philosophic and Historical Perspectives in Education
(3)

The examination and evaluation of alternative philosophies of Education and their impact on institutions of Education in an historical perspective. The construction of philosophies of education and the frameworks for implementing them. Aspects of institutions of education to be examined are: organization systems; teaching/learning theories; methods of group management; teaching styles; materials; multi-cultural groups; evaluation.
Prerequisite: Consent of Instructor.

573. Sociological and Psychological Foundations for Teaching and Learning
(3)

A study of the value assumptions, concepts, and methods of a variety of psychological and sociological theories, and their consequences for Education. Theories of human growth and development, learning, and self-concept. Analysis of the effects of sociocultural variables and linguistic and cultural diversity in school practices.
Prerequisite: Consent of Instructor.

574. Educational Research, Evaluation and Policy Studies
(3)

Investigations of how educational practice may be studied to inform theory and influence educational policy. Critical assessment, interpretation, and application of educational research and evaluation findings to policy issues at local and national levels. Qualitative research methodologies as well as quantitative procedures. Emphasis on becoming more effective consumers of research.
Prerequisite: Consent of Instructor.

575A. Master of Arts Thesis
(1)

Thesis project research and writing.
Credit/no credit grades only.
Prerequisite: Admission to M.A. in Education Program and Consent of Instructor.

575B. Master of Arts Thesis
(2)

Thesis project research and writing.
Credit/no credit grades only.
Prerequisite: 575A and admission to M.A. in Education Program. An authorized "Thesis Prospectus Approval Form" is required before enrolling in 575B.

576. Current Trends and Issues in Education
(2)

Problems and issues in education as they relate to the various areas of education. Topics discussed will be those identified as currently in a state of change, controversial, and interdisciplinary within the broad scope of education.
Prerequisite: Admission to M.A. in Education Program.

580A. Educational Leadership and School Management
(3)

Organizational theory and development as applied to district and school roles and policies; alternative leadership modes, program and staff evaluation and communication and decision-making; adult learning and development, self-accountability, stress management and facilitating organizational change.
Prerequisite: Consent of Instructor.

580B. Educational Leadership and School Management
(3)

Advanced study of organizational theory and practices acquired in Education 580A. Effective schools research; alternative ways of organizing and managing schools; short- and long-range planning; delegating responsibility; resource and plant management; using the computer and technology for data collection, analysis and management; practice in problem-solving and conflict resolution using a variety of techniques.
Prerequisite: Consent of Instructor and Admission to Preliminary Administrative Services Credential Program.

581. Management of Educational Personnel: Policies and Procedures
(3)

Human relationships and their implications for the organization; skills in supervising and evaluating staff; personnel management applied to affirmative action, collective bargaining and employment contracts; working effectively with formal and informal employee groups, professional organizations and unions; planning, providing and participating in staff development.
Prerequisite: Consent of Instructor and Admission to Preliminary Administrative Services Credential Program.

582. School-Community Relationships and Politics
(3)

Concepts of power and influence in community, district and staff school, parent and community group roles in educational process; procedures for maintaining open communication with diverse constituencies; the administrator as a community leader and political force.
Prerequisite: Consent of Instructor and Admission to Preliminary Administrative Services Credential Program.

583. School, Governance: Judicial, Legislative and Financial Aspects
(3)

A study of emerging social groups and forces impacting upon public and private education; civil liberties, school records, integration and bilingual education legal structures; funding and budgeting; current judicial, legislative and financial aspects of school governance; contract compliance; communicating legal and financial information to staff, colleagues and community.
Prerequisite: Consent of Instructor and Admission to Preliminary Administrative Services Credential Program.

584. Special Education for Administrators
(1)

Knowledge about the legal and financial aspects and implications of Special Education; experience in conducting an Individualized Educational Plan (IEP) meeting; facilitation of teaching and learning of objectives and resources; monitoring, evaluating and modifying instruction to fulfill objectives.
Prerequisite: Consent of Instructor and Admission to Preliminary Administrative Services Credential Program.

585. Curriculum Development: Theory, Practice and Evaluation
(3)

Analyses of socio-political, economic and cultural influences on curriculum development, instructional processes, and learner achievement in a variety of instructional settings. Study of the structures of various disciplines, the roles of participants, and other variables in staff and curriculum development. Evaluation of alternative theoretical models for constructing and changing curricula.
Prerequisite: Approval of the School of Education.

586. Teaching and Learning: Research and Application in the Classroom
(3)

An analysis of teaching and learning strategies in both traditional and innovative classroom settings and of instructional variables as they relate to diverse groups of learners. A review of recent developments in the evaluation of classroom performance and achievement.
Prerequisite: Approval of the School of Education.

587. Field Experience in Administration
(3)

An intense culminating experience for First Tier administration candidates in which they select a problem, prepare a systematic problem-solving model, and apply it in a district setting. In consultation with the university instructor and school district personnel, candidates will prepare individualized plans which extend and incorporate prior learning and competencies acquired in First Tier courses.
Prerequisite: Consent of Instructor and Admission to the Preliminary Administrative Services Credential Program.

588AB. Curriculum and Materials Modification in Special Education
(3) (3)

Analysis of curriculum and materials modifications.
Prerequisite: Admission to Special Education Program.

590A. Advanced Leadership Assessment
(2)

Leadership skills and knowledge base will be evaluated through formal assessment procedures, including self-assessment and an employing district or county assessment. An individualized plan will be developed which prescribes course work, problem-solving episodes and field experiences to be undertaken by the candidate.
Prerequisite: Admission to the Professional Administrative Services Credential Program.

590B. Competency Review Seminar
(1)

Candidate shall be asked to submit documentation of skills, be interviewed, and otherwise demonstrate the desired performance of competencies for the professional administrative services credential.
Prerequisite: 590A and Consent of Instructor.

591. Advanced Seminar/Practice: Supervision and Instruction
(3)

Instructional managment strategies designed to achieve goals and objectives; an analysis of learning and instructional research and theory; a repertoire of instructional methodologies; bases for creating suitable learning environments and methods for supervision of instruction. Experience will include practice, peer follow-up and coaching. (Includes field experience).
Prerequisite: 590A.

592. Advanced Seminar/Practice: Interpersonal Skills
(3)

Practice in oral and written communication; trust building; time management; conflict resolution; skills in dealing with confrontation; facilitating professional norms, building autonomy; evaluation through self-reflection. Experiences will conclude seminars, simulated and field practice, peer and self-assessment.
Prerequisite: 590A.

593. Seminar: An Interdisciplinary Approach to the Learning Environment
(3)

An interdisciplinary analysis of the American School system. Topics will include: curriculum design, parent's expectations, roles of teachers. Emphasis will be on various models for schooling and their impact on children, teachers and community.

594. Advanced Seminar/Practice: Professional and Staff Development
(3)

Collaborative planning with other administrators and participants to develp instructional strategies for adult learners; the application of knowledge about the functioning of organizations to adult learning and performance; the integration of organizational goals with specific programs of adult learning; identifying sources of funding to carry out staff development activities. (Includes field experience).
Prerequisite: 590A.

595. Special Studies
(1-4)

Independent study designed in consultation with an instructor. Students must complete the standard SSU form and secure the required approvals during the first week of classes.

596A. Advanced Field Experience: Organization, Theory, Planning and Application
(2)

Students will be involved in site-based problem-solving and analysis, the generation and field implementation of appropriate solutions, and an evaluation of the chosen solutions. Planning, discussion, monitoring, coaching and evaluation will occur in a seminar setting.
Prerequisite: 590A.

596B. Advanced Field Experience: Instructional Leadership
(2)

Same as 596A.
Prerequisite: 590A.

596C. Advanced Field Experience: Evaluation
(2)

Same as 596A.
Prerequisite: 590A.

596D. Advanced Field Experience: School Law and Political Relationships
(2)

Same as 596A.
Prerequisite: 590A.

596E. Advanced Field Experience: Fiscal and Material Resources Management
(2)

Same as 596A.
Prerequisite: 590A.

596F. Advanced Field Experience: Cultural and Socio-Economic Diversity
(2)

Same as 596A.
Prerequisite: 590A.



English

English, with its various areas of study, remains one of the most comprehensive and "liberalizing" of the liberal arts. It provides a familiarity with the written documents that define the past and give meaning and purpose to the present; it gives knowledge about the sources and structure of language; it develops a student's ability to use language in written and oral forms; it stirs the creative and recreative impulses; and it provides, through the study of fiction, poetry, drama, and the essay, knowledge about human relations, about the multiple ways in which we envision our world, about ourselves.

Since the establishment of the University, the English Department has maintained a thriving and increasingly diversified program and is at present the University's third largest department. Apart from its majors, the Department serves many other students who take English courses to improve their writing, to develop a minor or double major field, or to pursue interests in some aspect of literature, linguistics, or media. English is the field most frequently shared by students who wish to combine fields of study in an interdisciplinary major—for example, literature and sociology, literature and history, literature and art, linguistics and psychology.

Students who wish to major in English may choose one of four plans, each of which provides a coherent program with a particular emphasis. After a core of required courses, varying from 12 to 21 units depending upon the plan, students will follow programs leading to a degree in English and American Literature, Creative Writing, or Media/Communication. A fourth possibility is the Alternative Major, an individualized self-developed program of study of up to 18 units.

Students who have majored in English are found in business, public relations and advertising, broadcasting, journalism, law, government service, as well as in elementary, secondary, and college teaching. All of these fields require—beyond their specialized training—an understanding of human motivation, of the conflicts and dilemmas that perennially confront people. They also require a clear recognition of the ways in which language defines and affects our behavior, and the ability to express oneself clearly, logically, and with passion.

The English Department participates in the Sonoma State University CLEP (College Level Examination Program) credit by examination program. For further information on CLEP course equivalents in English, refer to page 315.

Department Chair:

Don R. Patterson

Faculty:

William Babula, Martin Blaze, David Bromige, Robert Coleman, Nirmal-Singh Dhesi, Gerald Haslam, Richard Hendrickson, James Kormier, Hector Lee (Emeritus), William Lee, Don Patterson, Mary Rich (Emeritus), Alan Sandy, Eugene Soules, Janice "J.J." Wilson

Department Office:

Nichols Hall 362, phone (707) 664-2140

Elementary and Secondary Teaching Credential Preparation

A major in English is acceptable preparation for a California elementary or secondary teaching credential. For the Elementary Teaching Credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the Secondary Teaching Credential, majors must complete a single subject waiver program in English, English/Journalism, English/Speech or English/Drama. English majors seeking a teaching credential are encouraged to consult with a department advisor, and review the University's special bulletin on *Programs in Teacher Education.* For further information on credentials and professional Education requirements see page 106 of this Catalog.

The English Department also participates in the Applied Arts Minor, which may be of special interest to students seeking the Multiple Subjects credential.

Bachelor of Arts English

Major

Literature Concentration

Introduction to Literary Analysis:	*Units*
Seminar (English 301)	3
Survey Courses	6
To be selected from English 237, 238, 239, 240.	
Shakespeare (English 339 or 439)	3
Study of Language (English 379)	3
Upper Division Course in Writing	3
To be selected from English 303, 307, 318, 329, 352, 366, 375, 407, 418.	
Areas of Specialization (English, American: two period courses required; other courses to be selected from period, author, and genre courses. (See department advisor for detailed course sequences.)	18
Electives	6
Total	42

Creative Writing Concentration

Introdu tion to Literary Analysis:	*Units*
Seminar (English 301)	3
Survey Course	3
To be selected from English 237, 238, 239, 240.	
Study of Language (English 379)	3
Shakespeare (English 339 or 439)	3
Upper Division Course in Writing	3
To be selected from English 303, 307, 318, 329, 352, 366, 375, 407, 409, 418, 429.	
Introductory Genre Courses	3–6
To be selected from English 367, 369, 373.	
Advanced Genre Course	3
To be selected from English 470, 472, 474.	
2 Period Courses (English 448, 482)	6
Author Course (English 483 or 484)	3
Electives	9–15
Additional courses in upper division writing courses, which may be repeated for credit, or additional literature courses, or up to 6 units in the Alternative Major.	
Total	42

Media/Communication Concentration

Introduction to Literary Analysis:	*Units*
Seminar (English 301)	3
Principles of Communication (English 372)	3
Literature Survey Courses	6
To be selected from English 237, 238, 239, 240.	
Shakespeare (English 339 or 439)	3
Study of Language (English 379)	3
Upper Division Course in Writing	3
2 Period Courses (English 448, 482)	6
Electives (See department advisor for detailed course sequences)	15
Total	42

With advisor's consent, the student may include in the elective group 3 units of CIP (Community Involvement Program) and up to 6 units of courses in other departments. A foreign language is not required. See department for detailed course sequence.

Alternative Major

A minimum of 12 to a maximum of 18 units of individualized self-developed program approved by an advisor in this program. The remaining units should be distributed as follows:

Individualized Self-Developed Program	*Units* 12–18
Literary Analysis Seminar (English 301)	3
Study of Language (English 379)	3
Introduction to Fiction/Poetry Writing (English 307 or 318).	3
Shakespeare (English 339 or 439)	3
2 Period Courses (English 448, 482)	6
Electives in literature or writing courses	6–12
Total	42

Minor in English

Students majoring in other fields may develop, in consultation with an English Department advisor, a 20 unit English minor.

Minor in English Literature—6 units of any two survey courses (to be selected from English 237, 238, 239, 240), and College Composition (English 375), followed by 11 units of electives chosen from the courses listed under English: Literature.

Minor in English Communication—Principles of Communication (English 372) followed by 17 units of electives chosen from the courses listed under English: Media/Communication. See an English Department advisor for additional coursework in pre-law, technical writing, creative writing and media.

Master of Arts in English

The graduate degree program at Sonoma State University consists of 30 units of work which may be distributed according to a student's particular interests. Linguistics, creative writing, and world literature, as well as English and American literature, are possible choices for major emphasis. The program offers both thesis and non-thesis options.

Entrance to the Program

Students with a substantial number of undergraduate credits in English, as well as those having an undergraduate English major, are invited to submit their transcripts for evaluation by the English Department graduate coordinator. This evaluation will determine whether the student may enter the program with conditional or classified post baccalaureate status.

Refer to section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Admission to Candidacy

For a change from conditional to classified status (also called "admission to candidacy"), a student will need to satisfy two English Department requirements:

1) a demonstration of competence in reading a foreign language, or a college transcript showing completion of the fourth semester or the sixth quarter of a foreign language; and
2) a score on the GRE Advanced Literature Examination at the 65th percentile or above, or a grade of "B" or better on the English Department's Comprehensive Examination.

The English Department's Comprehensive Examination is given at the end of every semester. Students who wish to prepare for this examination or for the GRE may take the review seminar, English 494.

Degree Options

To fulfill the requirements for the degree, a student may choose one of two options:

1) 24 units of formal course work, plus 6 units for planning and writing a thesis; or
2) 30 units of formal course work, plus completion of a written examination in the student's major emphasis; or
3) 24 units of formal course work, plus 6 units for planning and writing a creative project (e.g., a novel, a book of poems, a screenplay, etc.), prefaced by a critical introduction.

Fifteen of the total 30 units in the graduate program should be taken after the student has been admitted to classified status. All students are expected to take English 500 and 501 and at least half of the 30 units in courses numbered in the 500 series.

Required Courses for all Tracks

	Units
English 500 Research and Critical Writing	3
English 501 Literary Criticism	3

Multiple Track Program

The English Department offers advising options in (1) Literature, (2) Creative Writing, (3) The Teaching of Writing, and (4) Writing for the Media. Courses to be taken for course option and electives must be carefully planned with the Graduate Advisor.

	Units
English 599 Thesis/Course Option	6
Electives	18
Total	30

Teacher Certificate Program (Non-Degree/Non-Credential)

The English Department has established a new non-degree Teacher Certificate program, focusing on the teaching of English. This program is designed to serve elementary teachers who wish to pursue post-baccalaureate courses leading to their clear credential, graduates without a B.A. degree in English who may wish to prepare themselves for teaching in that field, or graduates with a B.A. in English who seek courses with a teaching emphasis. Anyone with a grade point average of 2.5 may apply for candidacy to this program. Applicants should seek individual advisement in the English Department.

The Teacher Certificate Program encompasses the following course of study:

	Units
I. English 379 Study of Language	3
II. English 491A Seminar Writing Techniques	3
III. Literature: to include 3 units from each of the following categories	9
A. Survey (237, 238, 239, 240, 494)	
B. Children's Literature (English 342), *or* Youth in Literature (English 343)	
C. Genre: (367, 369, 373)	
IV. Electives *	6
Total	20

English Proficiency Test

The University offers 99-level courses in English for students who do pass the written English Proficiency Test at an appropriate level. Please see page 300 for additional information.

* Students who have not already successfully completed an upper division writing course *must* do so as part of their electives. The course selected may be College Composition (English 375), any creative writing course, or Writing for the Media (English 366).

English Courses

99. Basic Composition
(3)

Study and review of grammar, sentence structure, punctuation, and other elements of standard written English and practice in the reading and analysis of essays. Students assigned to course on basis of English Placement Test scores. Course is taken in conjunction with 3 units of English 99T (Tutoring) and may be repeated *once* for credit. Course credit is not applicable toward graduation. Course offered for C/NC only.
Prerequisite: Completion of the English Placement Test.

99T. Basic Composition—Tutoring
(1–3)

Individual and group tutoring in English composition. Tutoring units are assigned on basis of English Placement Test scores and are taken in conjunction with other writing courses. May be repeated and is graded Credit/No Credit. Course credit is not applicable toward graduation.
Prerequisite: Completion of the English Placement Test.

101. Expository Writing and Analytical Reading
(3)

Study and practice in the expression of facts and ideas; principles of investigation, of organization, and of effective writing style, with emphasis upon expository writing and upon developing analytical reading ability.
Prerequisite: Completion of the English Placement Test.

103. Learning Strategies
(3)

A study-skill development approach with emphasis upon the mechanics of study, i.e., reading, note taking, term papers, vocabulary, test taking, and others.

207. Creative Writing
(3)

English 207 will introduce a variety of forms of creative writing: Poetry, and prose poems, the personal essay, vignettes, short stories, and experimental fiction. Students will explore each form with in-class exercises and discussion, as well as keep a writer's notebook and accumulate a portfolio. Writers from the University faculty and the larger community will appear throughout the semester for guest lectures.

214. Literature of the World
(3)

An introduction to the study of literature. Master works drawn from a world-wide range of cultures and historical periods will provide the basis for discussion. Emphasis will be placed on written analysis of literary form and meaning. Recommended: Completion of English 101 or equivalent.

237. Survey: Early American Literature
(3)

Survey of American Literature to 1855. Covers major writers from the 17th through first half of 19th centuries. Smith and Bradstreet through Hawthorne and Melville; Puritanism, Deism, Transcendentalism, the Romance.

238. Survey: Later American Literature
(3)

Begins with Whitman and covers most major writers of the late 19th century and of the 20th century to date. Twain, Dreiser, Hemingway, Faulkner, Wright; Local Color, Realism, Naturalism.

239. Survey: Early English Literature
(3)

Survey of English Literature to 1789. Includes such major authors as Chaucer, Shakespeare, Donne, Milton, Pope, Swift. Old and Middle English, courtly love, the Renaissance, satire.

240. Survey: Later English Literature
(3)

English Literature since 1789. From Blake to the present. Includes such major authors as Wordsworth and the other great Romantics, Tennyson, Browning, Hopkins, Yeats, Eliot. The Pre-Raphaelites, the Decadents, the anti-Victorians, the Imagists, Surrealists are some of the central topics.

275. Composition Workshop
(3)

A course designed to develop students' writing skills to the level required to pass the Written English Proficiency Test (WEPT). Intensive review of grammar and other mechanics, sentence structure, paragraphing, and development, organization, and self-editing of the complete expository essay.

292. Introduction to Library Research
(2)

Introduction to general reference tools. Practice in using card catalogues, periodical indexes, microfilms, government documents, and general reference works. Designed to assist future research. Open to all students. (Cross listed as ITDS 200)

295. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree.

300. World Literature
(3)

World Literature focuses on the great literary works of the human imagination from the 18th-century to the present. It treats "Eastern" and "Western" literature with equal emphasis.

301. Introduction to Literary Analysis: Seminar
(3)

The art of critical writing on each genre, and the application of traditional and modern criticism to the study of literature. All English majors must take this course in their junior year.

303. Special Studies in Composition
(3)

Expository writing with a specific emphasis which varies from semester to semester; reports, grants, proposals, and general business writing. See class schedule for current title.

307. Introduction to Fiction Writing
(3)

Prerequisite: English 375 or consent of instructor. May be repeated for credit.

313. Classical Studies
(3)

Studies of major works and authors of the ancient world. Consult class schedule for current listing.

318. Introduction to Poetry Writing
(3)

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

329. Script Writing (Stage-Film-TV)
(3)

Prerequisite: English 375 or consent of instructor. May be repeated for credit.

336. Studies in World Literature in English
(3)

Studies of literature in translation. See class schedule for current offering. May be repeated for credit.

339. Introduction to Shakespeare
(3)

Introductory course which includes readings of major plays and poems. Available to majors and non-majors. Fulfills Shakespeare requirement for English majors.

340. Development of the Old Testament
(3)

The historical backgrounds and literary influence of major Old Testament books.

341. Explorations in Language
(3)

A course in language or linguistics that will include subjects not offered in regular curriculum. See class schedule for current titles. May be repeated for credit.

342. Children's Literature
(3)

A study of children's books, with emphasis on both traditional and modern materials. Consideration of children's reading interests and criteria for selection of books.

343. Youth and Literature
(3)

A study of books, both traditional and modern, that are of interest to adolescent and young adult readers.

345. Women Writers
(3)

A survey which, with a varying focus from semester to semester, considers women writers in a number of different periods, countries, and genres. Format lecture/discussion. Suitable for non-majors. Can be repeated for credit.

349. Explorations in Literature
(3)

A course in literary explorations that will include subjects not normally offered in the regular curriculum. See class schedule for current titles. May be repeated for credit.

352. Personal Essay
(3)

Intended for the general student who wishes to practice expository writing. Provides students with opportunity to explore personal experience through writing and examine elements of prose style in an informal, workshop atmosphere. Prerequisites: (1) upper division standing, and (2) completion of the WEPT requirement or consent of instructor. May be repeated for credit.

361. Fundamentals of News Media
(3)

A course which is designed to train students in the theory and practice of journalism. It will cover reporting and editing, news gathering and research, the principles of newspaper format, makeup, and production. A prerequisite for English 368.

366. Writing for the Media
(3)

Emphasis on writing for newspapers, periodicals, and house organs. Analysis of contemporary media and their use and influence. Consent of instructor required.

367. Introduction to Short Story
(3)

368. Media Lab: Star, KSUN, Mandala
(1–4)

Provides opportunity for supervised field experience and internships with newspapers, periodicals, radio and television stations, etc. May be repeated for credit.
Prerequisite: English 361.

369. Introduction to Poetry
(3)

371. Introduction to Novel
(3)

372. Principles of Communication
(3)

A comprehensive survey of the nature and function of human communication, written, spoken, and non-verbal. Small group discussions of particular aspects of communication theory and practice, for example: semantics, male/female differences in communication, English dialects, visual and verbal conventions in film, video, and television.

373. Introduction to Drama
(3)

375. College Composition
(3)

Students should have completed English 101 or the equivalent before enrolling in English 375. An advanced writing course, emphasizing organization of essays, style, grammar, rhetorical techniques, and rewriting and editing. Course includes discussion of effective prose, review of students' work, and individual consultations.

377. Film and Literature
(3)

The novel/play as a genre has been a dominant feature in Western culture for centuries. This course will involve reading novels/plays and viewing film adaptations of these novel/plays. The course will focus on the uniqueness of both the novel/play and film as well as the profound influence the novel/play has had on motion pictures.

379. The Study of Language
(3)

Introduction to the nature of language, examining philosophical approaches as well as the insights of modern linguistic science.

387. Public Speaking
(3)

Introduction to speaking in front of groups. May be repeated once for credit.

389. Interpersonal Communication Workshop
(3)

A group-process approach to both verbal and non-verbal communication in personal and small-group interaction; video recording/playback is used extensively. May be repeated once for credit.

395. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree.

400. English Lecture Series
(1–3)

A public lecture series on topics of general interest. Two units require regular attendance and a final paper. Students who take three units additionally meet once a week in discussion groups and do further reading on selected topics.

407–429 Advanced Creative Writing
(3)

Seminars involving criticism and discussion of students' works. Enrollment is limited to 15 and requires the consent of the instructor. May be taken twice for credit.

407. Fiction Writing
(3)

Prerequisite: English 307 or its equivalent and by consent of instructor.

409. Master Class in Fiction Writing
(3)

Fiction writing workshop with a published novelist. Enrollment limited to 15—students who have taken class before or with consent of instructor.

418. Advanced Poetry Writing
(3)

Prerequisite: English 318 or its equivalent.

429. Advanced Script Writing
(3)

Prerequisite: English 329 or its equivalent.

435. Alternative Major
(1–4)

Individualized, project-oriented course of study with variable credit. May be repeated. Admission by special application. See English Department office for additional information. Consent of instructor required.

439. Studies in Shakespeare
(3)

Close study of comedies, tragedies, and history plays, and related literary criticism. Fulfills Shakespeare requirement for English majors.

444. Modes of Literature
(3)

A single literary mode (Tragedy, Comedy, Satire, etc.) will be selected for study in depth. See class schedule for current offering. Course may be repeated for credit.

447. Studies in Comparative Literature
(3)

The study of literary themes and movements: course includes the various literatures which relate to topic (e.g., Decadence and Symbolism, Modern European Literature, etc.). See class schedule for current offering. May be repeated for credit.

448. Periods in English Literature
(3)

Middle English, Renaissance, Seventeenth Century, Restoration and Eighteenth Century, Romantic, Victorian, Twentieth Century. See class schedule for current offering. May be repeated for credit.

449. Feminist Perspectives in Literature
(3)

An advanced course in reading, writing, and research from the newly emerging feminist perspectives, interdisciplinary in approach and using a seminar format. May be repeated for credit. Consent of instructor required.

454. Studies in Folklore
(3)

Types and forms in folklore. Students will be encouraged to follow special interests, such as the ballad, tale, folk speech, customs, or local history. Teachers may relate folklore to teaching units. See class schedule for current offering. May be repeated for credit.

470. Studies in Poetry
(3)

Themes, modes, and techniques of poetry: modern British, twentieth-century American, etc. See class schedule for current offering. May be repeated for credit.

472. Studies in the Novel
(3)

In depth studies of a particular kind of novel: English, twentieth-century American, political (offered jointly with the Department of Politics), war novel, etc. See class schedule for current offerings. May be repeated for credit.

474. Studies in Drama
(3)

Study of representative plays of a particular period: Medieval, Renaissance, Neoclassic, Nineteenth Century, Modern. See class schedule for current offering. May be repeated for credit.

475. Word Processing for Publication
(3)

Students will learn to use Wordstar, then use it to produce four publishable manuscripts, at least one of which will be submitted for publication to a suitable periodical.
Prerequisite: English 352 and English 375, or equivalent.

481. Studies in English Literature
(3)

Close study of topics unique to English literature. See class schedule for current offering. May be repeated for credit.

482. Studies in American Literature
(3)

Close study of topics unique to American literature, (e.g., Transcendentalism, Western American Literature, etc.). See class schedule for current offering. May be repeated for credit.

483. Individual Authors: American
(3)

Each semester one or more authors will be selected for study in depth. See class schedule for the author to be studied. May be repeated for credit.

484. Individual Authors: English
(3)

Each semester one or more authors will be selected for study in depth. See class schedule for the author to be studied. May be repeated for credit.

489. Topics in English Linguistics
(3)

Individual and small group study of such specialized topics in English linguistics as the history of English, the structure of English, sociolinguistics, language acquisition, and literary stylistics. May be repeated for credit. Prerequisite: English 379 or consent of instructor.

491. Seminar and Practicum in Writing Techniques
(3)

A seminar devoted to researching, discussing, and demonstrating various approaches to teaching the composing process. Course includes a one-hour-per-week practicum in which students apply theoretical principles in classroom or individual tutoring situations.

494. Senior Seminar
(3)

A review of English and American literature. Recommended for those planning to take the English Department comprehensive examination.

495. Special Studies
(1–4)

To register for 495 the student must not only have the consent of the instructor, but the material and course of study should satisfy student needs not covered by regularly offered courses. In addition, the amount and level of work proposed should be at the appropriate academic level. Consent of instructor and department required.

499. Internship
(1–4)

For upper division majors who wish to work off campus in job-learning situations which relate to their major emphasis. Excludes student teaching. Written contract and faculty sponsorship required.

500. Research and Critical Writing
(3)

Required for M.A. candidates in English. The use of reference materials and library resources. Techniques of critical and scholarly writing. Exercises are adaptable to the student's area of emphasis for thesis, creative project, or non-thesis option. The course should be taken during the first semester of classified status.

501. Literary Criticism
(3)

Required for M.A. candidates in English. Study of the major texts in critical theory from Plato and Aristotle to the theoretical pluralism of the present. Examination of the philosophical bases of the critical act as well as the writing of criticism of selected literary texts.

536. Seminar: World Literature
(3)

Studies related to different aspects of world literature, tracing the influence of interrelationship of ideas, themes, and forms in different literatures. Course content varies from semester to semester. Course may be taken more than once for credit.
Prerequisite: Consent of instructor.

539. Seminar: Shakespeare
(3)

Critical reading and analysis in depth of representative modes such as tragedy or comedy, etc., in Shakespeare.
Prerequisite: An upper division course in Shakespeare. Consent of instructor.

581. Seminar: English Literature
(3)

A single topic of English literature will be selected for study in depth. See class schedule for current offering. May be repeated for credit.
Prerequisite: Consent of instructor.

582. Seminar: American Literature
(3)

A single topic of American Literature will be selected for study in depth. See class schedule for current offering. Course may be repeated for credit.
Prerequisite: Consent of instructor.

583. Seminar: Individual Authors: American
(3)

In depth study of an individual author and related criticism. May be repeated for credit. See class schedule for current offering.
Prerequisite: Consent of instructor.

584. Seminar: Individual Authors: English
(3)

In depth study of an individual author and related criticism. May be repeated for credit. See class schedule for current offering.
Prerequisite: Consent of instructor.

588. Seminar: Study of Language
(3)

Linguistic theory and its applications to the study of English, with emphasis on original research and the detailed study of primary materials.
Prerequisite: Consent of instructor.

595. Special Studies
(1–4)

To register for 595 the student must not only have the consent of the instructor, but the material and course of study should satisfy students needs not covered by regularly offered courses. In addition, the amount and level of work proposed should be at the appropriate academic level. Consent of instructor and department required.

599. Thesis and Accompanying Directed Reading
(3 or 6)

Prerequisite: English 500 and classified status. An authorized "Thesis Prospectus Approval Form" is required for enrolling in 599.



Environmental Studies and Planning

The School of Environmental Studies and Planning is one of two distinctive cluster schools of interdisciplinary studies at Sonoma State University. The School is founded on the belief that the current ecological crisis has far-reaching implications for human society as well as for the fate of natural systems and diverse species of plants and animals. The school seeks to integrate knowledge from a variety of disciplines to understand the functioning of ecological systems and the nature of human impact upon these systems. The goal of the School is to prepare students for careers in the environmental professions and for positive action in their own lives in order to help maintain and enhance the quality of the human and natural environments.

All students receive a common core of upper-division instruction related to ecology and the environment based on knowledge from the biological, physical and social sciences, and the humanities. This broad understanding is applied in a particular area of environmental concern through a student's concentration in one of five ENSP study plans. Career-oriented study plans are offered in environmental education; natural resources and parks; energy management and design; water quality; and in the Planning Emphasis (city and regional planning). Students with other specialized interests have the option of developing an individually-designed study plan in consultation with an advisor. Many students have pursued double majors or a major and a minor in conjunction with traditional disciplines to prepare for specific environmentally-oriented careers.

As part of their course of study, all students complete a senior project or internship. Internships with public and private agencies are especially helpful for students who intend to work in planning, natural resource management, parks, water quality, environmental education and energy management.

Chair:

James C. Stewart

Faculty:

Jean Merriman, Stephen A. Norwick, Steven C. Orlick, Walter J. Rohwedder, Kenneth M. Stocking (Professor Emeritus)

Part-Time Faculty:

Joe Armstrong, Lawrence Livingston, Jr., J. Bruce Macpherson, Alan Siegle

Department Office:

Cluster Schools 18, Phone (707) 664-2306

Bachelor of Arts in Environmental Studies

Admission Requirements

Upon applying to Sonoma State University, a student may declare a major in the School of Environmental Studies and Planning. A student planning this major should make an appointment to see a faculty member for academic advising. (Students seeking financial aid to assist them in their studies should inquire about the Kenneth M. Stocking Scholarship for majors in Environmental Studies.)

Advisory Plans for the Freshman and Sophomore Years

In fulfilling their General Education Requirements, students who intend to major in Environmental Studies and Planning should carefully select coures which will meet the prerequisites for the core seminars and their intended study plans. A broadly-based program of lower-division work in the liberal arts and sciences is generally sufficient to meet the requirements for the core seminars. This program should include at least one course in biology, one in physical science, one in philosophy, and two or more in the social sciences, including a course in introductory economics. (Econ 201A Macroeconomics is recommended.)

Additional course work is required for certain study plans. Energy Management Design: General Physics and *either* Pre-Calculus Mathematics, Algebra and Trigonometry, or Analytic Geometry and Trigonometry. Water Quality Studies: General Chemistry and relevant courses in biology such as General Bacteriology and Microbiology. Environmental Education; A detailed statement of requirements is available by writing to the school office.

Requirements for the B.A. Degree (Apply to all Study Plans)

ENVIRONMENTAL STUDIES

Core Requirements	*Units*
* ENSP 301—The Human Environment	4
* ENSP 321—The Biological Environment	4
* ENSP 331—The Physical Environment	4
Plus one of the following three courses depending upon student's study plan:	
ENSP 210—Introduction to Planning	4
ENSP 220—Fundamentals of Energy Use	4
ENSP 355—Toward a Steady State Society	3
Other Requirements for the Major	
ENSP 100AB—Current Issues	2
** ENSP 490—Senior Project or 499-Internship	4–8
Electives in Environmental Studies & Planning	4–5
Total Units for Graduation	36

Six of the 36 units required in any study plan may, in consultation with the advisor, be taken in appropriate course work outside of the School of Environmental Studies and Planning. Courses required for the major and minor must be taken for a traditional letter grade.

Study Plans (Details of all Study Plans are available from ENSP Office)

Plan I.

Individually Designed Plan
For careers in environmental activism, analysis, management, media or other appropriate subject area. A minimum 20 units of specialized course work planned with the aid of an advisor is required.

* Students with strong backgrounds in any discipline related to the content of required courses are encouraged to discuss the possibility of a waiver with their advisors and the instructor of the course.

** A minimum of 4 units must be taken. The Senior Project may be closely related to and include ENSP 409, 411, or 499, and must be part of an emphasis of at least 20 units.

Plan II.

Environmental Education
This major, in combination with other academic courses and the professional education program, meets the requirements for the multiple subject credential. Outdoor environmental education and environmental media students follow somewhat parallel plans.

Plan III.

Natural Resources and Parks
This plan prepares environmentally oriented students for careers in fields related to natural resources management, conservation and park work.

Plan IV.

Water Quality Studies
Water Quality Studies may offer employment for environmentally oriented students in public agencies dealing with water supply, water purification, water policy and water law, or with municipal and utility-operated watersheds. In cooperation with other disciplines, it provides upper-division courses for students who have had previous training in community college water technology programs and gives upgrading training to workers already employed in water-related occupations.

Plan V.

Energy Management and Design
This study plan is designed to prepare students for careers or graduate studies in the fields of residential and commercial energy management, energy efficient architecture and design, energy planning in industry and government, renewable energy applications, and other energy related businesses. Completion of this study plan results in both a Bachelor's degree in ENSP *and* a Certificate of Completion in Energy Management and Design.

Certificate in Energy Management and Design—Students who have completed or are pursuing a Bachelor's Degree in any field may take a specified set of courses to receive a Certificate in Energy Management and Design. The Certificate Program does not lead to a degree, but is focused on a substantial area of study that is practically oriented towards skills and occupations.

Plan VI.

Planning Concentration (City and Regional Planning)

Students in the Planning Concentration follow a general pre-professional curriculum in Planning, and may choose to develop a specialization to suit their interests through a program of recommended electives or a minor.

Graduates may work for a wide variety of governmental agencies or private firms, or may pursue graduate studies in Planning or related fields.

Minor in Environmental Studies and Planning

The purpose of the Minor in Environmental Studies and Planning is to help students from traditional disciplines to apply their expertise to environmental and planning problems. A minimum of 20 units is required. Each student should design a course of study to maximize environmental awareness in disciplines related to his or her major interest. The following course of study is recommended to most students.

Environmental Studies 100AB, 301, 321, 331, plus six units of environmentally and/or planning oriented classes in fields outside the School of which their major department is a member, or six units from the offerings in the School of Environmental Studies and Planning.

Teacher Education

The School of Environmental Studies offers a program in environmental studies which fulfills academic requirements for the Multiple Subject Teaching Credential. This program is offered in conjunction with the SSU Education Department.

Minors for Prospective Teachers

For information on minors that are especially suitable for ENSP majors pursuing an elementary teaching credential see pp. 98 for a description of the Applied Arts minor and the University's special bulletin on *Programs in Teacher Education*.

Environmental Studies and Planning Courses

100AB. Current Issues in Environmental Studies
(1) (Spring/Fall) Department Faculty

Regular weekly school meeting. Student and other reports on environmental action and opportunities for environmental action. Outside speakers, audio and video presentations. Required: 2 semesters. May be taken for CR/NC.

200. Introduction to Environmental Studies
(3) (Fall and Spring) Department Faculty

Lecture-Discussion 3 hours. A short introduction to Environmental Studies and Planning, including: humans in relation to the global ecosystem; an overview of problems of energy use, pollution, resource depletion, population growth, food supply, urbanization, etc.; contributing factors and future prospects.

210. Introduction to Planning
(4) (Fall and Spring) LIvingston, Orlick

Comprehensive survey planning as a systematic and powerful process of problem-solving and goals achievement. Community and regional planning focusing on urban growth, redevelopment, and environmental resource management. Applications of planning in business and industry. General Plans, zoning, energy conservation, open space preservation and Environmental Impact Reports. Evolving implementation techniques.

220. Fundamentals of Energy Use
(4) (Fall) Rohwedder

Designed to assist students in understanding energy as a fundamental measure of organization, structure, and transformation in both natural systems and human society. Principal topics include: energy history, thermodynamics, efficiency laws, energy demand and end use, net energy analysis, energy economics, energy institutions, and energy politics. Analysis of current energy trends and future possibilities. Lectures, student presentations, and field trips.

230. Natural Resources and Parks
(3) (Spring) Merriman

Introduction to supervision and management of parks, watersheds, designated wilderness areas, living and non-living natural resources. Education of the public concerning value of preserving natural resources. Techniques of nature walks, slide presentations, children's programs. Seminar with guest speakers, student projects, field trips. Concurrent enrollment in ENSP 499 Internship recommended.

235. Nature Photography
(2) Merriman

An introduction to field techniques for physical and life scientists, land use planners and educators. Lecture techniques will follow discussion of works related to particular areas of nature photography (landscapes, birds, plants, etc.). Documentary photography using 35mm camera and color-slide format is stressed. Lectures include a review of works of leading nature photographers of the past.

301. The Human Environment
(4) (Fall and Spring) Stewart

Human cultural adaptations in evolutionary/historical perspective. Effects of human technology and social institutions upon the natural environment. Beliefs, values, attitudes in relation to human and non-human environment. Emphasis upon critical thinking and ethical implications of human ideas and behavior.
Prerequisite: At least one course in Philosophy and one course in Social Science.

302. The Human Environment Independent Study
(1-4) (Fall and Spring) Stewart

Contracts for group and individual interdisciplinary study for those qualified to work independently. Internships may be a part of the study.
Prerequisite: ENSP 301 or its equivalent.

304. World Food/Population Crisis
(3) (Spring) Stewart

Examination of current and future prospects of feeding world's expanding human population. Analysis of agricultural techniques and consumption patterns in U.S. and worldwide. Potentials of the sea, synthetic foods, improved varieties, improved agricultural technology, and the "Green Revolution." Personal, social, economic, political, and ecological implications of the crisis.

305. Wilderness and Endangered Species
(3) (Spring) Department Faculty

An examination of the causes and consequences of species extinction, both nationally and globally. Emphasis on wilderness policy in the United States as it relates to extinction and other conflicting cultural values, such as preservation vs. outdoor recreation.

306. Environmental Ethics
(3) (Fall) Department Faculty

An examination of philosophical issues; concepts of extending rights to non-human entities of nature and the question of man's place in nature; logical and conceptual foundations for an environmental ethic.

309. Environmental Education
(3) Rohwedder

Course is designed to introduce the scope and purpose of Environmental and Energy Education, critique existing materials, and investigate program options for schools and education centers. Educational and interpretive techniques are interrelated throughout the course. Field study and one overnight field trip.

313. Environmental Literature
(3) (Fall) Norwick

A survey of great American environmental books including H. D. Thoreau's *Walden,* John Muir's *Mountains of California,* and more recent works by Mary Austin, Edward Abbey, Annie Dillard, and other environmental authors. The natural, political, artistic, and historical environment of the writers, and cultural results of the environmental movement in various major periods.
Prerequisite: Completion of G.E. literature requirement.

314. Architectural Design and Energy Efficiency
(3) (Spring) Rohwedder

Application of energy conserving design principles to individual dwellings and building groupings. Site planning for a variety of building types and for difficult terrain. Retrofitting existing buildings for energy efficiency.
Prerequisite: Previous experience in architectural graphics, or permission of instructor.

315. Environmental Impact Reporting
(3) (Fall) Orlick

The practice and theory of environmental impact assessment and analysis. The process of preparing, managing, and reviewing Environmental Impact Reports and Statements as mandated by state and federal legislation and guidelines. Effective reviewing of, and commenting on, environmental documents. Relationship between EIR's and comprehensive planning activities. Litigation of EIR's

316. Planning Theory and Methodology
(3) (Spring) Orlick

Exploration of evolving planning thought and principles as a basis for understanding planning practice. The comprehensive planning and design process. The values and ethics of the professional planner. Mediating environmental disputes. Basic analytical, methodological, and communication skills utilized in urban, environmental, and business planning.

318. Land Resources Planning
(3) (Fall) Orlick

Environmentally-sensitive land use and site planning. Land suitability for development, carrying capacity, critical and sensitive lands, hazard and risk assessment, other recent concepts. Performance standards and emerging regulatory approaches. Site design principles. Impact assessment and environmental planning.

320. Alternative Energy Futures
(3) Armstrong

The course will cover methodologies for projecting alternative energy futures for the U.S. to the year 2000 and beyond. Alternative scenarios will be generated to meet future projected U.S. energy needs by considering all forms of energy (with specific emphasis on potential roles for renewable forms of energy), and judgment criteria selected to compare their relative merits.

321. The Biological Environment
(4) (Fall and Spring) Merriman

Lecture 3 hours; laboratory 3 hours. Studies of ecosystems; populations, succession; biological controls; species extinction. Field trips.
Prerequisites: BIOL 115 or its equivalent.

322. Biological Environment Independent Study
(1-4) (Fall and Spring) Department Faculty

(See 302 description.)
Prerequisite: ENSP 321 or its equivalent.

*** 324. Ecological Food Production**
(2) (Fall and Spring) Department Faculty

Techniques for organic gardening and small scale farming. Examination of issues facing agriculture today. Topics include greenhouse management, seed and plant propagation, integrated pest management, drip irrigation, organic soil enrichment, crop production and marketing. Knowledge of basic botany preferred. (May be repeated for credit.)

* Fee is charged in connection with this course. It is payable at class sign-up.

329. Health and the Environment
(3) (Fall and Spring) Department Faculty

A study of food additives and nutrition, carcinogens, industrial/occupational safety, pollutants, holistic health, stress, et al.

330. Environmental Health: Selected Topics
(3) (Fall and Spring)

A course allowing detailed study of particular problems or concerns in the area of environmental health. Subject matter will vary from semester to semester. May be repeated for credit with permission of instructor.
Prerequisite: ENSP 329 or consent of instructor.

331. The Physical Environment
(4) (Fall and Spring) Norwick

Develops an understanding of the problems and challenges in environmental control of air, water, soil, natural hazards and non-renewable resources by focusing on the principles of feedback in systems. Computer models of dynamic systems are employed to integrate issues and principles.
Prerequisite: A basic course in physical science, or permission of instructor.

332. Physical Environment Independent Study
(1-4) (Fall and Spring) Norwick

(See 302 description.)
Prerequisite: ENSP 331 or its equivalent.

333. Nature of Soils
(4) (Spring) Norwick

An introduction to soil science emphasizing applications to agronomy, archeology, botany, ecology, engineering, geography, geology, and natural resource planning. Technical exercises emphasize low cost scientific analytical equipment.
Prerequisite: Completion of G.E. Natural Science Requirements.

337. Principles of Energy Management
(3) (Fall) Rohwedder

An introduction to energy management and solar applications for residential and commercial buildings. Fundamentals of active and passive solar design, including: data analysis; heat flow/transfer; building load calculations; DHW system design and sizing; and energy economics. Computer applications and student design projects. Strong algebra background and Physics 210A recommended.

338. Environmental Regulation
(3) (Fall) Norwick

A review of the policies, laws, and public procedures which protect air, water, soil and mineral resources. Emphasis on the history of water use and abuse in California and the relationships of local, state and federal policy and procedures, especially permit processes.
Prerequisite: Completion of California State and Local Government G. E. Requirements.

353. Transportation Planning
(3) (Fall) Orlick

Theory, methods, and tools related to the systematic analysis of city, regional, and rural transportation problems. Land use and transportation interrelationships. Transportation as an integrated system composed of automobiles, public transit, bicycles, and pedestrian travel modes. Energy conservation and environmental impact considerations.

355. Toward a Steady State Society
(3) Macpherson

Relevant tools and perspectives for creating a sustainable society in an age of scarcity. Holistic decision-making methodologies for determining environmentally-sound social policy, political, economic and technological implications of transition to a dynamic steady state; role of ecologically-based ethical beliefs, perceptual models, and other non-economic criteria in the development of social policy for a sustainable society.

360. Assistance Projects
(1-4) Department Faculty

Offers work experience to students functioning as facilitators or assistants under faculty supervision.

365. Appropriate Technology
(3) (Fall) Stewart

Exploration of the concept of appropriate technology and the use of small-scale ecologically sound methods and techniques to support community life. Emphasis upon simple, sustainable technologies which conserve materials and use renewable energy sources. Present and potential applications in the U.S. and Third World countries. Lecture/discussion.

366. System Dynamics and DYNAMO
(3) (Spring) Norwick

A practical course in simulating complex systems using digital computers and dynamic programming. The simulation language DYNAMO is taught. The principles examined in the course can be applied to any simulation language. Applications in land use planning, environmental impact reporting, administration, and public policy are emphasized.
Prerequisite: Junior Standing.

385. Wind, Biomass, and Hydro
(3) (Spring) Department Faculty

Course will focus on functional design of small scale wind, biomass and hydro electric energy sources. Siting, evaluating potential power available, design of fully operable installation, and by-products and waste streams will be discussed. Energy storage mechanisms, interconnections to existing energy networks, and energy cost comparisons will be examined.

395. Community Involvement Program
(1-4) (Fall and Spring) Department Faculty

Involvement in human, social, biological or physical problems of the off-campus community. A total of six units may be applied to the degree.

400. Selected Topics in Environmental Studies and Planning
(1--4) Department Faculty

A course dealing with intensive study of selected topics related to Environmental Studies and/or Planning. Topic varies from semester to semester. The course may be repeated for credit with consent of instructor.

405. Commercial Energy Management
(3) (Spring) Rohwedder

Objectives of the course are to acquaint the student with the full range of energy management techniques and technologies in a commercial or light industrial application; demonstrate the advantages of combining these techniques and technologies into an integrated plan of action; thoroughly exploring how to conduct an economic pay-back analysis of an energy management plan, and investigating various aspects of providing energy management services.
Prerequisite: ENSP 337 or equivalent experience.

409. Developing Environmental Education Materials
(1) (Spring) Rohwedder

An examination of current materials available in environmental education. The development of new material as a class project through discussion, simulation games, task cards, art, photography, and music.
Prerequisite: ENSP 309 or consent of instructor.

410. Environmental Education Independent Study
(1--4) (Fall and Spring) Rohwedder

(see ENSP 302 description.)
Prerequisite: ENSP 309

***411A. Planning Workshop**
(4) (Fall) Orlick

An intensive, year-long project which provides practical experience in preparation of a General (Comprehensive) Plan for an actual community or geographic area. The Fall semester focuses on background studies and field surveys of land use, public opinion, transportation, economic base, and environmental conditions.
Prerequisites: ENSP 210, and ENSP 316, or consent of instructor. Course fee charged.

***411B. Planning Workshop**
(4) (Spring) Orlick

Continuation of ENSP 411A. Spring semester focuses on preparation of the plan, plan implementation program, and environmental impact report following state guidelines. Public presentations of class project.
Prerequisite: ENSP 411A. Course fee charged.

417. Urban Design
(3) (Spring) Orlick

An exploration of the creative process of deliberate design of the physical and visual form of urban communities. The appearance and aesthetic qualities of public open spaces, streets, buildings, neighborhoods, city gateways, signs, and other elements of the urban scene. The effects of public policy and regulations on urban form. The scale, pattern, and image of urban form elements. Historic preservation, planned unit developments, and downtown renewal. Subdivision design and review. No prerequisite, although GEOG 385 helpful.

437. Passive Solar Design
(3) (Spring) Rohwedder

Fundamentals and advanced applications of passive solar design, including: site analysis and design; passive applications (sunspace, trombe wall, convective loop, direct and indirect gain systems); passive performance predictions; and economic payback analysis. Computer applications and student design projects.
Prerequisite: ENSP 337 or permission of instructor.

***437L. Solar Laboratory**
(1) (Spring) Rohwedder

Laboratory application of theoretical principles covered in ENSP 337 and ENSP 437. Hands-on involvement, data analysis, hypothesis testing, and computer applications.
Prerequisites: ENSP 337, or equivalent *and* concurrent enrollment in ENSP 437 or consent of instructor. Course Fee

444. Energy Forum
(1–2) (Spring and Fall) Rohwedder

Speakers, including community professionals and university faculty, covering a wide variety of energy issues with formal presentations followed by discussion period. Forum is student coordinated and has a focus on renewable sources. May be repeated for credit.

445. Energy Management and Design Independent Study
(1--4) (Fall and Spring) Department Faculty

(see ENSP 302 description.)
Prerequisite: ENSP 220 or ENSP 337

457. Land Development Law
(4) (Spring) Livingston

Management of urban and rural land use and development under federal and state law. Regulations, administrative practices, and case law on zoning, subdivision control, growth management, open space preservation, and environmental protection. Evolving methods of public intervention in the land development process.
Prerequisite: ENSP 210 or consent of instructor.

460. Teaching Assistant
(1–6) Department Faculty

Open only to advanced students. Intended to give students experience in assisting the instructor in an Environmental Studies course by doing research and tutoring students in the class.
Consent of the instructor is required.

* Fee is charged in connection with this course, payable at class sign-up.

470. Planning Independent Study
(1-4) (Fall and Spring) Orlick

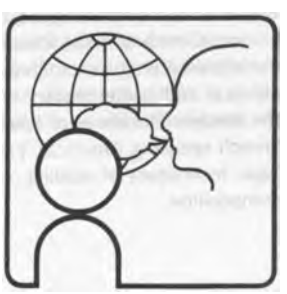
(see ENSP 302 description.)
Prerequisite: Senior standing in the Planning program, or consent of the instructor.

490. Senior Project
(1-4) (Fall and Spring) Department Faculty

Group and some individual studies. This major senior activity may be coordinated with independent studies and/or special problems to total twelve units. Internships are emphasized in senior projects. May be repeated for credit.

499. Internships
(1-4) (Fall and Spring) Department Faculty

For senior students (in most cases) working off campus in work-learning programs in park, planning, environmental education or media, water quality or other positions; with written contract and faculty guidance.



Foreign Languages and Literatures

The programs and courses of the Department of Foreign Languages make accessible to students the languages, literatures and cultures of France, Germany, India, Spain and Spanish America, and of ancient Rome. We recognize the students' need for linguistic competency and cultural sensitivity in the multilingual, multicultural world in which they will live and work. Thus, language is taught as an integral part of its cultural context. Programs and courses are designed to complement academic work in many other fields.

The Department of Foreign Languages offers major and minor programs in French, German, Spanish, and India Studies, and courses in English as a Second Language, and Latin. Courses in the modern foreign languages are taught in the target language; functional control of all language skills (reading, writing, listening comprehension and speaking) is a primary goal.

Through careful academic planning, study of foreign languages can open a wide range of career options in such fields as international business, government service, domestic and international human services, travel, librarianship, translating and interpreting, and teaching. Foreign Language major programs successfully prepare students for graduate study. *The importance of early consultation with departmental advisors cannot be overstressed.* It is the key to meaningful access to academic and career opportunities. It is highly advisable that students combine a major or minor in Foreign Languages with a major or minor in another discipline.

Coursework, minors, and majors in Foreign Languages complement specialized knowledge and expertise in other academic areas. The structure of foreign language major programs facilitates planning of double majors and minors.

In addition to majors and minors offered by other departments, there are interdisciplinary and career minor programs of special interest to Foreign Languages students, including the INTERNATIONAL STUDIES MINOR, the INFORMATION AND RESEARCH CAREER MINOR, and the minor in LINGUISTICS: TEACHING ENGLISH AS A SECOND LANGUAGE.

Features of the Foreign Languages curriculum which can provide valuable pre-professional training and experience include: courses in Foreign Languages for specific purposes such as Spanish for the Health Professions, a program of internships in the public and private sectors, and opportunities for field work, study, and employment abroad.

Department Chair:

William Guynn

Faculty:

Philip Beard, German; Sterling Bennett, German and Classics; William O. Cord, Spanish; Yvette M. Fallandy, French; Francisco Gaona, Spanish; Raymond Lemieux, French and ESL; Howard Limoli, French; Pablo Ronquillo, Spanish; Roshni Rustomji, India Studies; Rosa Vargas-Arandia, Spanish.

Language Laboratory Director:

Helio Tavares

Department Office:

Stevenson 3016, Phone (707) 664-2351

Elementary and Secondary Teaching Credential Preparation

A foreign language is acceptable preparation for a California elementary or secondary teaching credential. To satisfy the academic requirements for the elementary teaching credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must complete a single subject waiver program in French, German or Spanish. Foreign Language majors seeking a teaching credential are encouraged to consult with a departmental advisor, and review the University's special bulletin on *Programs in Teacher Education.* For further information on credentials and professional education requirements see p. 106 of this Catalog.

International Programs

Through the International Programs of the Calfiornia State University, Sonoma State University students may spend an academic year in residence at a foreign university. Courses taken abroad through the International Programs count as residence units in all university programs, and can be completely integrated into an overall academic plan. Total immersion in the cultures of France, Germany, Spain, Mexico or Québec is available. (For more information, see p. 341.)

Certification of Foreign Language Proficiency

Formal and permanent recognition of foreign language mastery can help significantly in advancing students toward career goals. This certification, available to both majors and non-majors, provides a Certificate of Proficiency, a letter specifying the nature of the achievement, and a notation on students' permanent academic records, as evidence of the level of foreign language proficiency attained. To qualify for a Certificate of Foreign Language Proficiency, it is necessary to:

1. Submit a current transcript as a registered SSU student in good standing;
2. Complete French, German, or Spanish 101–102, 201–202, and 301–302 or the equivalent with a grade point average of 3.0 or better. Foreign language courses taken in high school, college, or another university may apply. These courses may also be passed by challenge examination.
3. Pass the two-hour Proficiency test. Consult the department chair for further information at (707) 664-2351.

The Foreign Languages Laboratory

Sonoma State University students have daily access to modern, versatile equipment and an extensive collection of tapes and records of literature, poetry and music in many languages. The tape collection is augmented by cultural slides for use with Caramate projectors. The laboratory provides students with opportunities for listening, responding, recording and playback.

Work in the laboratory complements and enriches work in language classes. Students may also work independently, using self-teaching materials available in many of the less-taught languages.

Placement in Foreign Language Courses

Every effort is made to place students in courses at a level where they can continue to learn most satisfactorily. Thus entering freshmen who have studied foreign language in high school will usually enroll in an appropriate course in the 100–299 sequence, and students transferring from colleges and other universities may maintain continuity of their studies. All students who have successfully completed advanced language study may enroll in upper division courses (300-499).

The faculty of the Foreign Department Languages will assist students in selecting the appropriate course level. The following schedule is recommended.

	Courses Numbered
1. Less than two years of high school study	101
2. Two years of high school study	102
3. Three years of high school study.. or any other 200 course except	201 202
4. Four years of high school study.... or any other 200 course except 201	202

Transfer students with college credit in a foreign language may not receive credit for courses in the same language which duplicate previous work. Exceptions may be made by the Chair of the Department when the following conditions are met:

1. The courses involved are lower-division.
2. The original study was accomplished three or more years prior to enrollment in the language course at Sonoma State University.

Native speakers of French, German or Spanish are encouraged to consult department advisers concerning advanced placement in these programs.

Course Challenges

Students may challenge courses, as provided in the university procedures (see p. 297). It is essential that students interested in this possibility consult instructors of the courses they wish to challenge at the start of the semester.

It is the department's position that native speakers may receive credit by examination for upper-division coursework only, with the exception of Spanish 203, Spanish for Spanish Speakers. Non-native speakers of English may challenge English as a Second Language, ESL 100A and/or 100B for baccalaureate credit.

Foreign Literature in English (FLIE)

The Department of Foreign Languages and Literatures regularly offers courses in foreign literatures in English, for which there is no foreign language prerequisite. For the current listing, consult the class schedule under the FLIE rubric.

FLIE 214. Introduction to World Literature
(3)

Introduction to selected works of world literature from the European traditions of France, Germany, Italy, Russia and Spain; the classic literatures of Greece and Rome; classical and contemporary Indian literature; the modern literatures of Spanish and French speaking Americas. Emphasis on basic techniques of reading, analysis, and composition.

English as a Second Language (ESL) Courses

Courses in English as a Second Language are designed to enable Sonoma State University students for whom English is a second language to improve their proficiency in the English language, especially in the reading and writing skills required for success at the University. Admission to these courses is determined by ESL Placement Test scores. For further information about the University's English competency requirements, see p. 313.

Courses in ESL prepare students for entrance into English 101. Students will also be required to take the Written English Proficiency Test or English 375.

100A. English as a Second Language (3)

English for foreign and other non-native speakers of English at university entry level who need to master the basic skills of college-level writing, including the sentence, the outline, the paragraph, patterns of organization, and short essay writing. Study of English syntax, vocabulary building. Frequent compositions in and out of class are required with a focus on developing clarity and style, using subject matter from a variety of academic disciplines. Limited enrollment. Admission by ESL Placement Test only. Students taking this course may not register for more than 14 units of academic work.

100B. English as a Second Language (3)

English for foreign and other non-native speakers of English at an advanced level. Provides practice in communicating sophisticated ideas and comprehending subtleties of English through reading and writing assignments. Stress on mastering a variety of writing styles and levels of usage in standard written English and on increasing control of vocabulary. Practice in extended writing in and out of class. Limited enrollment. Admission by ESL Placement Test only.

Bachelor of Arts in French

The French program reflects the faculty's belief that language and literature must be studied in the French and francophone cultural context of which they are a part.

Major

The core/special emphasis structure of the French major enables students to develop expertise in both a foreign language and another discipline, something which is both academically sound and professionally desirable. Since course work in French constitutes a minimum of 24 units within the 30 upper division units required for the French major, the remaining units may be chosen in related fields of interest and counted toward a major or minor in another field. Careful academic advising is essential for planning of double majors and minors.

Course Requirements

The major in French for the B.A. degree includes a minimum of 30 semester units of upper division courses (300–400 courses), divided into two sections:

I. Core Courses: 20 units of courses to be completed by all students
II. Concentrations: 10 or more units in one of three areas of study chosen by the student—Literature, Language and Linguistics, or French Area Studies.

Students should carefully study the prerequisites for upper division courses.

Core Courses: 20 units

	Units
French 301–302 Advanced Grammar and Composition	8
French 310–311 Junior Seminar	8
French 325 Phonetics	4
	20

Concentrations: 10 or more units

I. *Literature:* Emphasis in French or Comparative Literature
Required: French 430 Literature 4 units
Electives: 6 or more units of upper division literature courses to be chosen from offerings in the departments of English, Foreign Languages, or Hutchins School.

II. *Language and Linguistics*
Required: French 404 Translation Workshop
OR 4 units
French 405 Writing Workshop
Electives: 6 or more units selected from the following:
Anthropology 380 Language in Cultural Context
Anthropology 382 Language Change
Anthropology 389 Language and Communication
Linguistics 310 Phonological Analysis
Linguistics 311 Grammatical Analysis
Linguistics 320 Meaning, Context and Reference
Linguistics 430 Psycholinguistics
Linguistics 441 Linguistics & Second Language Teaching

III. *French Area Studies:* Humanities, Social Sciences, or Interdisciplinary emphasis.
Required; French 440 Culture and Society 4 units
Electives: 6 or more units selected from the following:
French: choice of upper division electives
AMCS 345 Folklore and Ethnicity
Anthropology 203 Introduction to Cultural Anthropology
Anthropology 342 Organization of Societies
Anthropology 350 Applied Anthropology
Art 410 Early Christian and Early Medieval Art
Art 411 Romanesque and Gothic Art
Art 413 Northern Renaissance Art
Art 414 Northern Baroque Act
Art 418A History of Modern Art
Art 418B History of Modern Art
History 322 European Social History
Music: appropriate upper division courses in the study or the performance of the French repertoire
Philosophy 320 Philosophy in Literature
Philosophy 342 Existentialism

Minor in French

Students wishing to minor in French must complete a minimum of 20 units in French, including French 301–302, or its equivalent, and French 325.

Single-Subject Waiver Program in French

The Foreign Languages Department offers a single-subject waiver program in French. This program meets the state requirement of a minimum of 30 upper-division units. It also requires as a prerequisite for entry the completion of 16 units of lower-division basic skills courses.

Prerequisite: Completion of four semesters of basic skills or equivalent	*Units* 16
French 301–302 Advanced Grammar and Composition	8
French 310–311 Junior Seminar	8
French 325 Modern French Linguistics	4
Upper-Division Electives (to include at least one literature course)	10
	30

Electives:

French 350 Advanced Conversational French (2–4)
French 404 Translation Workshop (4)
French 405 Writing Workshop (4)
French 430 French Literature (4)
French 440 Culture and Society (4)
French 465 Aesthetic and Intellectual Movements in France (4)
French 495 Special Studies (1–4) Limited to a maximum of 4 units

Unless stated otherwise, all courses are conducted in French.

French Courses

101–102 Elementary French
(4–4)

Systematic study of spoken French with practice in understanding, speaking, reading, and writing. Students must take 101L–102L concurrently. No prerequisite for 101. Prerequisite for 102: 101 or equivalent.

101–102L. Language Laboratory, French
(1–1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the Language Laboratory. Must be taken concurrently with 101–102. Credit-No credit only.

195. Elementary Special Studies
(1–4)

Directed and individual study.

201–202. Intermediate French
(3–3)

Review of fundamentals and study of more advanced aspects of grammar with practice in understanding, speaking, reading, and writing. Students must take 201L–202L concurrently.
Prerequisite for 201: French 102 or equivalent. Prerequisite for 202: French 201 or equivalent.

201–202L. Language Laboratory, French
(1–1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the Language Laboratory. Must be taken concurrently with 201–202. Credit-no credit only.

220. Introduction to the Reading of French Literature
(3)

Reading in 19th and 20th century French literature; rapid reading techniques; literary analysis; vocabulary drill.
Prerequisites: French 102 or equivalent. May be used in conjunction with other lower division language courses to satisfy foreign language requirements of other departments of the university.

250. Conversational French
(2–3)

Systematic improvement of fluency, pronunciation and modern idiomatic usage in a framework of both free and directed conversation. Discussion of current newspapers and periodicals. Includes individual and class assignments in the language laboratory.
Prerequisite: French 102 or equivalent; French 202 highly recommended. May be repeated.

295. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward major or minor.

301–302. Advanced Grammar and Composition
(4–4)

Written composition; style and idiom; oral analysis of literary texts.
Prerequisite: French 202 or equivalent.

310–311 Junior Seminar I and II
(4–4)

Literary analysis; cultural, aesthetic and intellectual history. Research and composition skills. Intensive work in oral and written French.
Prerequisite: French 202 or equivalent. French 301–302 should be taken concurrently.

325. Phonetics
(4)

Perfection of pronunciation and intonation through intensive study of phonetics, including individual work, laboratory practice, oral interpretation of French literature. Study of regional and national variations in spoken French.
Prerequisite: French 202 or equivalent.

350. Advanced Conversational French
(2–4)

Systematic improvement of fluency, pronunciation and idiomatic usage in a framework of both free and directed conversation.
Prerequisite: Upper division standing or equivalent. May be repeated for credit.

395. Community Involvement Program
(1-4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific task performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward major or minor.

404. Translation Workshop
(4)

Literary and non-literary texts translated from French to English. A practical approach to the art of translating. Open to both majors and non-majors.
Prerequisite: French 302 or permission of the instructor.

405. Writing Workshop
(4)

Analysis and practice of different writing styles, with attention to context and purpose. Flexible emphases geared to interests and needs of students.
Prerequisite: French 302 or equivalent.

430. French Literature
(4)

Approaches to the study of French literature of major periods and genres will be limited in a given semester to one of the following: modern times and ideas as reflected in the work of an author, movement, or period; the relation between aesthetic and intellectual movements in France; women as authors and subjects of French literature.
Prerequisite: French 310, 311 or consent of the instructor.

440. Culture and Society
(4)

Interdisciplinary approach to the study of culture and society in France and *la francophonie*. The focus in a given semester will be one of the following: Popular art and the popular mentality; French regional culture; film theory, semiotics; language, culture, and sexuality. Consult the Class Schedule for the current topic.
Prerequisite: French 310, 311 or consent of the instructor.

460. French Culture: Practicum
(4)

Active exploration of the living French culture which will be limited in a given semester to one of the following areas: cuisine; music; theater.
Prerequisite: Upper division standing or equivalent. May be repeated for credit.

465. Aesthetic and Intellectual Movements in France
(4)

Introduction to the major ideological and artistic movements in modern France and their impact on cultural and social life. Structuralism and semiotics; post-modernism; impressionism; dadaism and surrealism. May be offered in English. Consult the Class Schedule for current topic.
Prerequisite: upper division standing and consent of instructor.

495. Special Studies
(1–4)

Directed individual study.

499. Internships
(1–4)

Students in the intern program will have an opportunity to apply skills and methods mastered in their course work in French in a variety of situations in public and private agencies. Credit will be given for completion of 3 hours of work (weekly average) per unit, participation in a seminar or conferences, and a final report. Placement must be arranged in advance with Department coordinator.

Bachelor of Arts in German

The German program at Sonoma State University teaches language fluency and acquaintance with a thousand years of German literature, taught in its cultural context. Direct method language instruction provides students with the basis for future work as teachers, graduate students, and in careers where the knowledge of a foreign language is important.

Learning extends beyond the classroom as well: in the bi-weekly traditional *Stammtisch,* an informal gathering of faculty and students at which German is spoken and sung, in German-only excursions and in a full range of paid summer job opportunities aborad.

Interdisciplinary German Major

The requirements for the major in German are divided into two sections:

I. Basic requirements: 34 units (22 lower-division, 12 upper-division), to be completed by all students; and
II. Study Concentrations: 20 units of upper-division work in one of three concentrations to be chosen by the student.

Basic Requirements

	Units
Ger 101–102 Elementary German	8 (4–4)
Ger 101L–102L Laboratory for first-year students	2 (1–1)
Ger 201–202 Intermediate German	8 (4–4)
Ger 201L–202L Laboratory for second-year students	2 (1–1)
Ger 250 *or* 251 Conversation and Pronunciation	2
Ger 301–302 Conversation and Composition	8 (4–4)
Ger 405 The Art of Translating	4
	34

Study Concentrations

I. *International Affairs*
II. *German History and Culture*
III. *German Language and Literature*

Concentration I: International Affairs

	Units
Basic Requirements	34

This concentration which combines courses in international business, trade, finance and foreign policy with the study of modern Germany, prepares students for careers in the international sphere.

Requirements:	*Units*
Ger 310 Germany Today	4
Econ 303 International Economic Development	4
or	
Econ 375 Money and Banking	4
Mgt 393 Introduction to International Business	4
Pol 342 International Politics and Foreign Policy	4
Total	20

One course from among the following: Econ 403, Econ 495, Mgt 476, Mgt 495, Mgt 498, Pol 315, Pol 345, Pol 351, Pol 444, Pol 447, Pol 495.

Concentration II: History and Culture

	Units
Basic Requirements	34

Area Requirements: *20* units from among the following courses, to include courses from at least *three* of the five disciplines listed. (Required courses marked with an asterisk *.)

1. *German*	*Units*
*Ger 310 Germany Today	4
2. *History*	
Hist 402 Middle Ages	4
Hist 403 Renaissance and Reformation	4
Hist 404 Europe—Age of Absolutism	4
Hist 405 Europe—Age of Dominance	4
Hist 406 Contemporary Europe	4
Hist 407 War and Peace in the Twentieth Century	4
Hist 414 History of Germany, 1500--present (by special arrangement)	4
Hist 495 Special Studies	1-4
3. *Sociology* (Consult instructor and major advisor regarding appropriateness of these courses in any given semester)	
Soc 419 Seminar: Sociology of Power	4
Soc 431 Sociology of Religion	4
Soc 495 Special Studies	4
4. *Anthropology* (Consult instructor and major advisor regarding appropriateness of these courses in any given semester)	
Anth 342 Organization of Societies	4
Anth 352 Special Topics in Culture Change	4
Anth 353 Psychological Anthropology	4
Anth 380 Language in Cultural Context	4
Anth 382 Language Change	4
Anth 495 Special Studies	4
5. *Hutchins School of Liberal Studies*	
LIBS 371 Consciousness and History	3

Concentration III * German Language and Literature

	Units
Basic Requirements	34
Area Requirements (20 units):	
Ger 401 Survey of German Literature and Culture, 1200–1750	4
Ger 402 Survey of German Literature and Culture, 1750–1900	4
Ger 403 Survey of German Literature and Culture, 1900–Present	4
Upper Division Electives (including German Literature in English)	8

Minor in German

Students wishing to take a minor in German must complete a minimum of 20 units in German, of which 8 units must be in approved upper-division courses and include German 405.

"Zertifikat: Deutsch Als Fremdsprache"

The second-year German curriculum is consciously oriented toward students' earning the internationally recognized proficiency certificate "Deutsch als Fremdsprache", offered by the DAAD (German Academic Exchange Service). Our intermediate course sequence (201–202) culminates in the administration of the certificate exam.

Single-Subject Waiver Program in German

The Foreign Languages Department offers a single-subject waiver program in German. The program meets the state requirement of a minimum of 30 upper-division units. Additionally, it requires as a prerequisite for entry the completion of 16 units of lower-division basic skills courses.

Prerequisite: Completion of four semesters of basic skills or equivalent	*Units* 16
German 301–302 Conversation and Composition	8
German 401 Survey of German Literature and Culture 1200-1750	4
German 402 Survey of German Literature and Culture 1750–1900	4
German 403 Survey of German Literature and Culture, 1900–present	4
German 405 The Art of Translation	4
German 425 Applied Linguistics	4
Upper-Division Electives	4
	32

Electives

German 310 Germany Today (4)
German 356 German Through Song (2)
German 495 Special Studies (1-4) Limited to a maximum of 4 units

German Courses

The German language will be used extensively in all German courses except where noted "taught in English".

101. First-Year German
(4)

Includes the best of the old and the new in language learning techniques. Intensive drill in German is designed to advance students to early fluency. Actual use of an internationally applicable, idiomatic German will proceed in increasing degrees from the very first day. 101L (language lab) must be taken concurrently. Students should also enroll in 150: Beginning Conversation. No prerequisite for 101.

102. First-Year German
(4)

Continuation of 101. Successful completion of 101 and 102 guarantees a thorough initial exposure to all basic grammatical and syntactical aspects of the German language, plus a high degree of confidence in ordinary conversational situations. 102L (language lab) must be taken concurrently. Students should also enroll in 151.
Prerequisite for 102: German 101 or equivalent.

101L–102L Language Laboratory, Elementary German
(1–1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the Language Laboratory. Must be taken concurrently with 101–102 or other elementary German courses. Credit/no credit only.

150–151. Beginning Conversation
(2)

Practice in free conversation, games, and songs. For first-year students.

195. Elementary Special Studies
(1–4)

Directed and individual study.

201. Intermediate German
(4)

Review and elaboration of 101–102, supplemented by selected readings in such areas as philosophy, literature, art, music, history, science, and popular culture. Students must enroll concurrently in 201L (language lab) and should enroll in 250 (Intermediate Conversation) as well. Faster students may earn credit for 202 during same semester.

202. Intermediate German
(4)

Continuation of the review, reading and discussion program begun in 201, supplemented by a regular schedule of written work. By the end of 202, students' mastery of German should enable them to earn the "Zertifikat: Deutsch als Fremdsprache".

201L–202L. Language Laboratory, Intermediate German
(1–1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the Language Laboratory. Must be taken concurrently with 201–202. CR/NC only.

250. Phonetics and Conversation
(2)

A systematic study of the German sound system; drills for perfecting pronunciation; practice in conversation. May be repeated for credit.
Prerequisite: German 102 or equivalent.

251. Conversation
(2)

Systematic improvement of fluency, pronunciation, and modern idiomatic usage in both free and directed conversation. May be repeated for credit.
Prerequisite: German 102 or equivalent.

256. German Through Song
(3)

A musical approach to refining students' German language usage and increasing vocabulary.
Prerequisite: German 101 or equivalent.

295. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward the major.

301–302. Conversation and Composition
(4–4)

Extensive discussion in German and practice of grammatical principles, idioms, vocabulary, and style. Normally, one written composition will be assigned per week.
Prerequisite: 202 or equivalent.

306. German Culture and Civilization in English
(4)

An examination of the growth of German cultural and political patterns from the earliest times to the 18th century. Topics covered include the Holy Roman Empire, the development of early German art, literature, philosophy, and architecture, the rise of Protestantism; and the 30 Years' War and its effects. (Note: History 415 covers the Seventeenth Century to the present.)

310. Germany Today
(4)

A general introduction to present-day Germany and its people, attitudes, customs, and popular culture. Reading and discussion of current and recent material from German newspapers and magazines. Film, slides, and recorded music will also be used.

340. German Literature in English
(4)

Not a survey course. Emphasis as to period, genre, author, or authors will vary from semester to semester. May be repeated for credit. No prerequisite.

356. German Through Song
(3)

Same format as German 256, but requires completion of a medium-length written project in addition to normal assignments and classwork.
Prerequisite: German 201 or equivalent.

395. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward major.

401. Survey: German Literature and Culture through the Eighteenth Century
(4)

From *Parzival* to *Faust:* Studies in German literature and cultural history from the Middle Ages to the end of the eighteenth century. Discussion of the development of German thought and cultural expression, spanning the Medieval, Renaissance, Baroque, Enlightenment, and "Sturm und Drang" periods. Conducted in German; designed for students wishing to acquire advanced reading, speaking, and writing skills.
Prerequisite: German 202 or equivalent.

402. Survey: Nineteenth-Century Literature and Culture
(4)

Studies in German literature and cultural history, spanning the period from Goethe's maturity to the death of Nietzsche. Discussion will focus on German Romanticism and on the concurrent rise of national consciousness. Conducted in German; designed for students wishing to acquire advanced reading, speaking, and writing skills.
Prerequisite: German 202 or equivalent.

403. Survey: Twentieth-Century Literature and Culture
(4)

Studies in German literature and cultural history (including film) from Freud and Mann to Grass and Herzog. Treatment of the most significant cultural themes of Twentieth-Century Germany: war, fascism, guilt, regeneration. Conducted in German; designed for students wishing to acquire advanced reading, speaking, and writing skills.
Prerequisite: German 202 or equivalent.

405. The Art of Translation
(4)

Intensive practice in translation from German to English, and vice versa, of prose (both literary and media-style), drama, and poetry. Thorough attention will be paid to the pitfalls of translation as well as to developing the special artistry which good translation demands.

495. Special Studies.
(1–4)

Directed individual study; discussions and reports on selected topics.
Prerequisite: German 202 or equivalent.

Latin

Latin Courses

101–102. Elementary Latin
(3–3)

A college level course in Elementary Latin designed to give students at the end of one year a good reading knowledge of standard Latin of the classical period. The course will be taught with strong emphasis on the Latin element in English. No prerequisites.

195. Special Studies
(1–4)

For individualized study at the lower-division level. May be used to supplement work in the first and second-year Latin courses. Consent of instructor required.

Bachelor of Arts in India Studies

In addition to Foreign Languages faculty in India Studies, the following members of other academic departments of the University offer courses in the India Studies program:

Coordinator:

Roshni Rustomji

Faculty:

Barry Ben Zion, Economics; Eleanor Criswell, Psychology; Victor Daniels, Psychology; Nirmal Singh Dhesi, English; Susan Garfin, Sociology; Leland Gralapp, Art; LeVell Holmes, History; Han Sheng Lin, History; Stanley McDaniel, Philosophy; Peter Mellini, History; William Poe, History; Thomas Rosin, Anthropology; E. Gardner Rust, Music; Roshni Rustomji, India Studies; Alan Sandy, English; Gordon Tappan, Psychology; Robert Tellander, Sociology

The B.A. in India Studies is an interdisciplinary program that allows students to choose their own direction to an extent unique among Asian Studies programs in California. Breadth can be achieved through the study of different aspects of the cultures which interfuse in India and the region. Greater depth can be achieved through focused study within a specific discipline or within a cultural sub-area. The major complements many minors and provides students with the option of providing a unique, personal direction to their B.A. curriculum.

The program focuses on the symbolic and experiential content of Asian civilizations, as well as their economic, social, political, and historical dynamics. This focus on symbolic content necessitates a careful understanding of arts, ideas, and practices in terms of their own Asian cultural context, and care in translating them into a contemporary western context. Also required is critical reflection on the reasons for renewed western interest in the east. Students are assisted in meeting these challenges of the program through special courses, seminars, independent study projects, and field experience in India for those with adequate preparation.

The India Studies Program is undergoing a Program Review and revision. It is imperative therefore that students entering this Program after Fall, 1986, consult with the Program Coordinator.

Major

The major consists of 36 units.

The student enters the major through the two prerequisite core courses, India Studies 301 A & B, then builds greater breadth and depth in the subject area by selecting additional units from the "basic list." Students may choose the remaining 20 units of electives from all Asian Studies courses offered at the university, whether they are on the basic list or not. Among the 36 units must be at least one course in the humanities, one in the social sciences, and one in psychology. Students are encouraged to make an experience in India part of their program but no financial support for this is available. Competitive grants and fellowships, however, are available from both government and private foundations. Students interested in an Asian culture other than India can pursue their interest with a major in India Studies by taking the basic 16 units in India and the balance in courses dealing with the culture that most interests them.

Graduation with Distinction

A more structured program is encouraged for students who plan to continue their studies at the graduate level. Distinction in the major requires:

1. The major requirements of 36 units with at least one course in the humanities, one in the social sciences and one in psychology dealing with Asia.

2. A Field of Emphasis: The basic list requirement is replaced by a field of emphasis. 18–20 units in India Studies courses must focus on either Social Sciences, Philosophy/Psychology or the Humanities.

3. A Senior Project: A paper prepared in the field of emphasis under faculty supervision and evaluation.

Students planning to go to graduate school should structure their area specialty in India Studies for Distinction in the major and should gain the method and theory of a specific discipline by completing a minor in another department.

Minor in India Studies

The minor consists of any 18 units in Indian and Asian Studies. India Studies 301A and 301B must be included in these 18 units.

Basic List of Courses

	Units
Anthropology 375—Civilizations of India	4
Art 417A—Oriental Art	3
Music 452—Music of India and the Near East	3
Philosophy 360—Eastern Philosophy	3
Politics 452—Third World Political Systems	4
Psychology 321—Psychology of Yoga	2–4
India Studies 101A—Elementary Sanskrit	3–4
India Studies 101B—Readings in Sanskrit	3–4
India Studies 102AB—Elementary Hindi	3–3
India Studies 301A—Indian Civilization: The Sacred Tradition	4
India Studies 301B—Indian Civilization: The Secular Tradition	4
India Studies 305—Experimental Courses	1–4
India Studies 315—Introduction to Indian Music	3
India Studies 316—Indian Devotional Poetry	3

India Studies 401—Seminar on India 4
India Studies 493—Field Experience in India 4–12
India Studies 495—Special Studies 1–4

Other Courses on Asia

	Units
Anthropology 203—Introduction to Cultural Systems	4
Art 417B—Oriental Art	3
Geography 430—Seminar in the Regional Geography of Asia	4
Geography 460—Seminar in Area studies that deal with Asia	4
History 305—Islam	4
History 320—Ancient Thought and Culture	4
History 336—Introduction to the Far East	4
History 435—History of China	4
History 436—Chinese Thought and Culture	4
History 438—History of Japan	4
History 498—Senior Seminar: Asian History	4
Music 451—Music of the Far East	3
Psychology 329—Asian Psychology	1–4
Psychology 335—Seminar in Zen	4
Psychology 490—Psychology seminars that deal with Asian psychology	4
Psychology 496—Tutorials that deal with Asian psychology	1–16
Sociology 431—Sociology of Religion	5
Sociology 462—Seminar: Comparative Sociology	5

Other courses may be taken in addition to the above courses to fulfill the India Studies requirements, with the approval of the advisor.

India Studies Courses

101A. Elementary Sanskrit
(3–4)

This course covers elementary Sanskrit grammar, the reading of Sanskrit in the Devanagari script, and translation of easy texts.

101B. Readings in Sanskrit
(3–4)

This course is a continuation of the study of Sanskrit grammar and consists of readings from various Sanskrit texts.

102AB. Elementary Hindi
(3–3)

Conversation and simple texts are used to introduce the student to Hindi. Work in the Language Laboratory supplements practice in spoken Hindi.
Prerequisite for 101B: 101A or consent of instructor.

***301A. Indian Civilization: The Sacred Tradition**
(4)

An exploration of the culture and thought of India with an emphasis on the philosophical and spiritual tradition.

***301B. Indian Civilization: The Secular Tradition**
(4)

An exploration of the culture and thought of India with an emphasis on the secular rather than religious tradition.

305. Experimental Courses
(1–4)

315. Introduction to Indian Music
(3)

This course covers the elaborate melodic and rhythmic systems (*Raga* and *Tala*) of Indian music: an analysis of modal structure, melodic structure, melodic construction, ornamentation and the principles of drumming; historical factors in the development of the music from the vedic period to present. Class participation in learing simple song lines and experimenting with Indian instruments.

316. Indian Devotional Poetry
(3)

Study of devotional poems in terms of their importance in daily life. Explanations of song texts and the lives of Saint musicians.

401. Seminar on India
(4)

An examination of specific Indian problems, customs, periods of history, or other aspects of Indian culture. Different topics will be selected for study each semester. (Consult class schedule for specific topic). May be repeated for credit as often as different topics are offered.

493. Field Experience in India
(4–12)

495. Special Studies
(4) I and II

* Fulfills General Education requirement in Humanities.

Bachelor of Arts in Spanish

The culture and literary traditions of Spain, the growing interest in the politics, culture and commerce of Latin America, the proximity of Mexico, and the presence of a large Spanish-speaking population in California and the University's service area, all shape the curriculum of the Spanish program, and provide excellent reasons for the study of Spanish. The need for Spanish-speaking personnel in government and human services may be seen in the five percent salary increment offered them. The Spanish faculty offer Spanish, for Specific Purposes (Health Professions, Business Spanish, for Speakers of Spanish) as well as a full range of courses in language, literature and culture.

Courses taken abroad in the CSU International Program may be counted toward the major or minor.

Major

Course Requirements

The course requirements for a Major in Spanish for the BA degree are divided into two groups:

1. *Basic Requirements*—Thirty-five (35) units of courses, identical for all majors.
2. *Concentration*—Selection, by the student, of one of three (3) plans, each of which contains specific courses directed to a field of major academic interest in Hispanic Studies.

Basic Requirements

	Units
*Spanish 101–102 Elementary Spanish	5–5
*Spanish 101L–102L Language Laboratory	1–1
**Spanish 201–202 Intermediate Spanish	3–3
**Spanish 201L–202L Language Laboratory	1–1

* Course substitutions, when approved by the faculty in Spanish, will be accepted.

** Spanish 203 will be accepted in lieu of Spanish 201, 201L, 202, and 202L.

	Units
*Spanish 301 Advanced Composition	3
Spanish 303 Introduction to Spanish Phonetics	3
Spanish 304 Introduction to Civilization of Spain	3
Spanish 309 Introduction to Civilization of Spanish-America	3
Spanish 425 Spanish Linguistics	3
	35

Concentrations

PLAN I: *Linguistics* provides excellent preparation in contrastive linguistics for secondary and bilingual teaching programs, and for graduate work in general linguistics.
PLAN II: Hispanic Literature and Culture prepare students for secondary school teaching, and graduate work in Spanish and Spanish-American Literature and Culture.
PLAN III: International Affairs is an interdepartmental program which prepares students for work in Latin America or Spain, and for entrance into graduate programs in foreign trade.

Plan I: *Concentration in Linguistics*

	Units
Anthropology 380 Language in Cultural Context	4
or	
Anthropology 389 Language and Communication	4
Anthropology 382 Language Change	4
Linguistics 310 Phonological Analysis	4
Linguistics 311 Grammatical Analysis	4
Linguistics 320 Meaning, Context & Reference	4
Linguistics 430 Psycholinguistics	4
Linguistics 441 Linguistics & Second Language Teaching	3
Spanish 426 Seminar in Modern Varieties of Spanish	3
	34

Plan II: *Concentration in Hispanic Literature & Culture*

Spanish 401 Studies in Literature, Culture and Folklore of Spain	3
Spanish 403 Studies in Literature, Culture and Folklore of Spanish America	3
Spanish 496 *OR* 497 Seminar in Spanish *OR* Spanish American Literature, Culture and Folklore	3
9 upper-division units of supporting courses in the Social Sciences or Humanities related to Spain or Spanish America. Courses to be chosen with the approval of the student's advisor	9
	18

Plan III: *Concentration in International Affairs*

Spanish 300 Business Correspondence in Spanish	3
Math 131 Introduction to Discrete Mathematics	3
Econ 201 Introduction to Economics	4
Mgmt 493 Introduction to International Business	4
Mgmt 463 International Marketing	4
An elective to be chosen by the student in consultation with an advisor in Management Studies	3–4
	21–22

Minor in Spanish

Completion of the *Basic Requirements* for the Major shall constitute a minor in Spanish. Unless stated otherwise, all courses are conducted in Spanish.

Single-Subject Waiver Program in Spanish

The Foreign Languages Department offers a single-subject waiver program in Spanish. The program meets the state requirement of a minimum of 30 upper-division units. Additionally, it requires as a prerequisite for entry the completion of 16 units of lower-division basic skills courses.

	Units
Prerequisite: Completion of four semesters of basic skills or equivalent	16
Spanish 301 Advanced Composition	3
Spanish 303 Introduction to Spanish Phonetics	3
Spanish 304 Introduction to the Civilization of Spain	3
Spanish 309 Introduction to the Civilization of Spanish-America	3
Spanish 425 Spanish Linguistics	3

	Units
Upper-Division Electives (selected from Spanish 401–497 and to include at least one literature course)	15
	30

Electives

Spanish 401 Studies in the Literature, Culture and Folklore of Spain (3)
Spanish 403 Studies in the Literature, Culture and Folklore of Spanish-America (3)
Spanish 495 Special Studies (1–4) Limited to a maximum of 4 units
Spanish 496 Seminar in Spanish-American Literature, Culture and Folklore (3)
Spanish 497 Seminar in Spanish Literature, Culture and Folklore (3)

Spanish Courses

100X. Intensive Elementary Spanish
(10)

Intensive study of the fundamentals of Spanish grammar with practice in pronunciation, understanding, speaking, reading, and writing. Language Laboratory 100L must be taken concurrently with this course.

100L. Language Laboratory, Intensive Elementary Spanish
(2)

To be taken concurrently with Spanish 100X. Required minimum in the Laboratory is 4 academic hours (200 minutes) per week.

200X. Intensive Intermediate Spanish
(6)

Intensive review of fundamentals and study of more advanced aspects of grammar with practice in understanding, speaking, reading, and writing. Language Laboratory 200L must be taken concurrently with this course.
Prerequisite: Spanish 100X or equivalent.

200L. Language Laboratory, Intensive Intermediate Spanish
(2)

To be taken concurrently with Spanish 200X. Required minimum in the Laboratory is 4 academic hours (200 minutes) per week.

250X. Intensive Intermediate Conversation
(3)

This course is for students who have completed Spanish 101–102 or the equivalent. Source material for conversation will be chosen by the students from the textbook and supplementary material distributed in class. The emphasis is on providing vocabulary to stimulate conversation and on improving the students' ability to express themselves in Spanish. Grading will be based on class participation, the presentation of a dialogue or skit—generally presented as a team project with the assistance of the instructor—and the final grade.

101–102. Elementary Spanish
(5–5)

Systematic study of the fundamentals of Spanish grammar with practice in pronunciation, understanding, speaking, reading, and writing. Spanish 101L–102L must be taken concurrently.
Prerequisite for Spanish 102: Spanish 101 or equivalent.

101L–102L Language Laboratory, Elementary Spanish
(1–1)

A minimum of two academic hours (100 minutes) weekly of practice session in the Language Laboratory. Must be taken concurrently with 101–102. Credit/no credit only.

104. Spanish for the Health Professions
(3)

Study of basic Spanish grammar with practice in pronunciation, understanding, speaking and writing. Vocabulary and linguistic patterns will focus on the needs of nurses, physicians, and other medical personnel in order to facilitate communication with Spanish speaking patients. Three ½ hour practice sessions per week in the laboratory or at home will be required. No prerequisite.

150. Elementary Conversation
(2)

Directed conversation in Spanish for elementary level students. Includes individual and class assignments in language laboratory.
Prerequisite: Spanish 101 or equivalent OR current enrollment in Spanish 101.

195. Elementary Special Studies
(1–4)

Directed and individual study, discussions, and reports on selected topics.
Prerequisite: Spanish 102.

201–202. Intermediate Spanish
(3–3)

Review of fundamentals and study of more advanced aspects of grammar with practice, on an intermediate level, in understanding, speaking, reading, and writing. Spanish 201L–202L must be taken concurrently.
Prerequisite for 201: Spanish 102 or equivalent.
Prerequisite for 202: Spanish 201 or equivalent.

201L–202L. Language Laboratory, Intermediate Spanish
(1–1)

A minimum of two and a half hours (150 minutes) weekly of practice session in the Language Laboratory. Must be taken concurrently with 201–202. Credit/no credit only.

203. Spanish for Speakers of Spanish
(5)

This course is designed for Spanish-English speaking students who have received the greater part of their language education in English, and who need to develop and expand their language skills in standard Spanish by speaking, writing, reading, and listening comprehension. Successful completion of this course will substitute for Spanish 202 or its equivalent.
Prerequisite: Permission of instructor.

250–251. Conversational Spanish
(2–2)

Free and directed conversation in Spanish to improve pronunciation, fluency, and modern idiomatic usage. Includes individual and class assignments in the language laboratory.
Prerequisite for 250: Spanish 102 or equivalent. May be repeated for credit.
Prerequisite for 251: Spanish 250 or equivalent. May be repeated for credit.

295. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Student receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward the major or minor.

Unless otherwise indicated, the prerequisite to all 300 and 400 courses is Spanish 202 or Spanish 203, or equivalent.

300. Business Correspondence in Spanish
(3)

Business correspondence in Spanish, including letter forms and commercial terminology.
Prerequisite: Spanish 202 or equivalent.

301. Advanced Composition
(3)

Compositions, including preparations of critical essays and studies, to improve skills in writing.

303. Introduction to Spanish Phonetics
(3)

The sound system of Spanish. Theory and practice. No prerequisite.

304. Introduction to the Civilization of Spain
(3)

Readings and discussions of the culture of Spain including its history, literature and arts.

309. Introduction to the Civilization of Spanish-America
(3)

Readings and discussions of the culture of Spanish-America including its history, literature and arts.

316. Spanish *OR* Spanish-American Literature in English
(3)

The literature of Spain and the Spanish-speaking countries of the Western Hemisphere. Conducted in English.
No prerequisites.

350. Advanced Conversation
(2)

Free and directed conversation in Spanish. May be repeated for credit.
Prerequisite: Spanish 251 or consent of instructor.

395. Community Involvement Program
(1–4)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward the major or minor.

401. Studies in the Literature, Culture and Folklore of Spain
(3)

Study of a particular period, theme, or art form of Spanish literature, culture and folklore. Course content will vary from semester to semester. May be repeated for credit provided there is no duplication of subject.

403. Studies in the Literature, Culture and Folklore of Spanish-America
(3)

An advanced study in one or more aspects of Spanish-American literature, culture and folklore. May be repeated for credit provided there is no duplication of subject.

425. Spanish Linguistics
(3)

Phonology and morphology of the Spanish language in historical perspective, from spoken Latin to modern regional dialects.

426. Seminar in Modern Varieties of Spanish
(3)

Phonetic and morphological character of contemporary spoken Spanish: national languages and regional variants (e.g., Galician, Judeo-Spanish, Afro-Cuban, Gauchesque).
Prerequisite: Spanish 425.

495. Special Studies
(1–4)

Directed and individual study, discussions, and reports on selected topics.

496. Seminar in Spanish-American Literature, Culture and Folklore
(3)

Directed and individual study, discussion, and reports on selected topics, directly related to aspects of Spanish-American literature, culture and folklore.

497. Seminar in Spanish Literature, Culture and Folklore
(3)

Directed and individual study, discussions, and reports on selected topics, directly related to aspects of Spanish and Hispanic literature, culture and folklore.

499. Internships
(1–4)

Students in the intern program will have an opportunity to apply skills and methods mastered in their course work in Spanish in a variety of situations in public and private agencies. Credit will be given for completion of 3 hours of work (weekly average) per unit, participation in a seminar or conferences, and a final report. Placement must be arranged in advance with Department coordinator.



Geography

A Major in Geography provides a study of both the natural and cultural environment. This blend of the natural and social sciences offers a broad based field of knowledge for a liberal arts education.

A small department with close student-faculty relationships, Geography provides a course of study that is well rounded, yet flexible enough to fit specific educational goals of students. Concentrations available within the major include: Academic, Earth Science, and Cultural Studies. Within the range of required courses, students will broaden their research and writing skills, work on various practical projects and problems, and gain field experience. For those who plan to pursue graduate studies in Geography, the major provides the necessary knowledge and skills through a balance of cultural and physical coursework, methodological viewpoints, and geographic techniques. There is a strong intern program which makes possible "on the job" experience.

The Geography Department has a fully equipped cartographic laboratory, extensive collections of maps, aerial photographs and remote sensing imagery, and houses one of the most complete historical weather libraries in California. A facsimile weather map recorder provides students with current weather data to complement historic resources.

Students pursuing studies in climatology, meteorology or oceanography are eligible to compete for the annual Call Memorial Scholarships. Students who will have upper division standing may apply for the $1000 Geography Scholarships.

Students who have graduated in Geography at Sonoma State University have gone into primary, secondary and higher education; to graduate programs in schools across the country; into environmental analysis and regional planning firms; into local and regional planning agencies; into state and federal agencies; and into many private businesses where geographical knowledge has provided them with a well balanced background.

Department Chair:

William K. Crowley

Faculty:

Timothy A. Bell, William J. Frazer, Claude R. Minard, Jr.

Department Office:

Stevenson 2026, phone (707) 664-2194

Bachelor of Arts in Geography

Major

	Units
General Education	48
Geography Courses	42
Supporting Subjects	8
Foreign Language and/or electives	26
TOTAL	124

Geography Core: (32 units)

Geography 202 World Regional Geography	4
Geography 203 Cultural Geography	4
Geography 204 Physical Geography	4
Upper Division Physical Course	4
Upper Division Cultural Course	4
Regional Course	4
Techniques Course	4
Geography 490 Senior Seminar in Geography	4

Geography Electives: (10 units)

To be selected in consultation with faculty adviser.

Supporting Courses: (8 Units)

To be selected in consultation with faculty adviser. A course in Statistics or Computer Science is strongly recommended. Up to 5 units of the Geography Internship Program may be utilized as supporting courses.

Concentrations

In place of selected Geography electives, students may opt for one of the following concentrations:

Earth Sciences

Upper division courses selected from the following list: ..... 10 units
- Geography 305—Oceanography
- *Geography (Geology) 306—Environmental Geology
- Geography 310—Meteorology
- Geography 360—Geomorphology
- Geography 370—Climatology
- *Geography (Biology) 416—Biogeography

Supporting Subjects:
- Courses in Biology, Geology and other Natural Sciences and Environmental Studies may be selected to enhance and broaden the Earth Science Concentration. Courses must be selected with the approval of the student's advisor.

Cultural Studies

Upper division courses selected from the following list: ..... 10 units
- Geography 320—Political Geography
- Geography 330—Historical Geography
- Geography 335—Rural Geography
- Geography 338—Social Geography
- Geography 343—Economic Geography
- Geography 350—Urban Geography

Supporting Subjects: ..... 8 units
- Courses in Anthropology, History and other disciplines dealing with human culture may be selected to enhance and broaden the Cultural Studies concentration. Statistics, Computer Science and the Geography Internship Program (Geog. 499) may be selected with approval of the advisor.

Minor in Geography

	Units
Geography 202—World Regional Geography	4
Geography 203—Cultural Geography	4
Geography 204—Physical Geography	4
Upper Division courses	8
TOTAL	20

Elementary and Secondary Teaching Credential Program

A Major in Geography is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must complete the single subject social science waiver program. Geography majors seeking a teaching credential are encouraged to consult with a Department advisor, and review the University's special bulletin on *Programs in Teacher Education*. For further information on credentials and professional education requirements see p. 106 of this Catalog.

Geography Courses

GENERAL **

311. Geography of Wine
(3)

California's wine industry in perspective with a brief look at wine origins and world production. An examination of the various wine growing regions of California. Included are discussions of climate, soil, wine history, grape-growing, and winemaking. Guest speakers who are experts in enology and viticulture will be featured.

312. Field Geography of Sonoma County Wine
(1)

An examination of viticultural practices and winemaking operations in Sonoma County. This course may be taken independently of Geog. 311. The course includes preliminary lectures and a weekend field trip.

314AB. Field Experience, Northern California
(1–2)

Field experience is provided in a variety of areas not usually offered in the regular geography courses. The course titles and contents may vary from semester to semester and may be repeated for credit. See the current class schedule for particular interest areas offered.

377. Current Topics in Geography
(1)

A series of lectures designed to acquaint the student with the interests of professional geographers in the 1980's. May be repeated for up to four (4) units of credit.

---

* Environmental Geology is taught by the Geology Department and Biogeography by the Biology Department, they are accepted for credit in the Geography Major

** Courses in this section are designed for non-majors.

† Fulfills Special Emphases (Physical Sciences) General Education requirement.

PHYSICAL

†204. Physical Geography
(4) Minard

A systematic exploration of the physical elements of geography. Atmospheric elements, meteorological, and climatological processes and patterns; their effect on soil and vegetation distribution. Landforms, geologic structures, erosional and depositional processes and forms. Field trips and work with weather and topographic maps are an integral part of the course. Prerequisite: Completion of a lower division Physical Science General Education Course.

305. Oceanography
(3-4) Minard

An introductory course which considers the age, origin, and topography of the ocean basins, the composition of seawater, the ocean's energy budget, climate, tides, currents, and waves. The resource potential, ecological problems, shoreline processes, and the relationship of humanity to the sea, past, present, and future is explored.

306. Environmental Geology
(3) Anderson

Lecture, 3 hours. Study of geological principles and processes as they relate to our natural environment emphasizing the impact of man on the geological environment. Major topics will include earthquakes and their associated hazards; landslides, slope stability, and building construction; groundwater and pollution; shoreline processes and coastal development; engineering geology and construction of highways and dams; development of natural resources, conservation, and ecology. Specific content will vary from year to year depending on individual instructor.
Prerequisite: Geology 102, Geography 204 or consent of instructor.

310. Meteorology
(3-4) Minard

A systematic study of the earth's atmosphere stressing those elements (temperature, humidity, solar radiation, pressure and wind) which influence the weather and climate on a local and world-wide scale.

360. Geomorphology
(4) Minard

Lecture 3 hours; laboratory 3 hours. Detailed study of the earth's landforms; emphasis upon geologic structures; erosional and depositional processes and interrelationships with soils, vegetation and hydrology. Use of topographic maps, geologic maps and cross sections and aerial photos in the interpretation of landforms. Field trips and field reports.
Prerequisites: Geography 204, Geology 102 or consent of instructor.

370. Climatology
(3-4) Minard

An exploration of the atmosphere, how it differs from place to place and time to time. The role of radiation, temperature, humidity, evaporation, cloudiness, precipitation, and surface factors: topography, exposure and altitude in differentiating world climates. Climate's influence on man physically and culturally in history and prehistory. Climate change, drought and flood, and solar radiation are among the topics investigated in detail.

416. Biogeography
(4) (Alternate, Fall) Isaac

Lecture, 2 hours; laboratory, 6 hours; some overnight field trips. Study of patterns of geographic distribution of terrestrial plants and animals with explanation based on ecology and evolution.
Prerequisites: Biology 116, 117 and 300, or equivalent.

CULTURAL

***203. Cultural Geography**
(4) Bell, Frazer

A study of the inter-relationships between man and the physical environment. Attention is focused on man's role in changing the face of the earth, and on the manner in which the cultures of peoples have influenced their utilization of the environment. Diverse theories of man-environment relationships are discussed.

320. Political Geography
(3-4) Frazer

An inquiry into the structure and characteristics of political units in order to compare the concepts of state and nation state. The nature of boundaries, frontiers and shatter zones is studied in detail and the development of geo-political theories is traced.

330. Historical Geography of North America
(3-4) Bell, Frazer

A study of the settlement history of North America and of the changing concepts of man-environment relationships in the chronology of the Europeanization of the American landscape. Investigations into where and why people settled as they did, and the origins of the economic and spatial relationships that constitute the present American scene will be the focus of the course.

335. Rural Geography
(3-4) Bell

The origin, change, and spread of domesticated plants and animals. Consideration of diverse agricultural systems, rural settlement types and land uses, and modern trends in rural land uses and agriculture.

****338. Social Geography**
(3-4) Bell

Studies aspects of demography, migration, and the spatial dimension of social organization. Included in the course are the spatial perspectives of social well-being, poverty, crime, and ethnicity. The spatial structure of human settlement as well as political, religious and social values will be discussed.

* Fulfills General Education requirement for Social Sciences.
** Fulfills upper-division General Education requirement in Integrated Person.

343. Economic Geography
(3–4) Frazer

The study of the various ways by which people make a living in varied cultural and physical environments. Principles of locational decision making are examined and their influence on bringing people and materials together. Topics of discussion will include manufacturing, transportation, and marketing.

350. Urban Geography
(3–4)

A consideration of urban origins, the diffusion of the city and modern day inter- and intra-city phenomena. Topics to be discussed include urbanization, comparative urban forms, urban functional organization, land use, distribution of cities and their territories, and urban problems—pollution, housing, and open space.

REGIONAL

***202 World Regional Geography**
(4)

Selected cultural regions are utilized as the basis for study. Economic development, political problems and man-land relationships are stressed.

390. Geography of California
(2) Minard

A regional study of California. Geomorphic and climatic regions are delineated and areal patterns of population and transportation are correlated with environmental, historical, and contemporary influence. The location and nature of economic activities are studied, emphasizing the relationship between economic activity, population distribution, and water availability.

***391. The Regional Geography of North America**
(3–4) Bell, Frazer

Offerings will vary and will focus upon special topics of interest, such as problems of population growth and distribution, resources and economic development, and regionalism in the continent.

392. Latin America: Culture and Environment
(3–4)

A consideration of topics of special importance to Latin America, including population growth, urbanization and economic development. Specific countries will also be examined in detail with an emphasis on settlement patterns and environmental characteristics.

420. Seminar in the Regional Geography of Western Europe
(3–4) Bell

Offerings will vary and will focus upon special topics of interest, including the physical, cultural, historical, and economic relationships of Europe and its regions.

430. Seminar in the Regional Geography of Asia
(3–4) Frazer

Offerings will vary and will focus upon special topics of interest, such as population, problems of land use, and problems of economic and political development.

460. Seminar in Area Studies
(3–4)

This course will provide offerings in special problem areas. For example: China and Southeast Asia, arid lands, Oceania and underdeveloped lands may be discussed.

TECHNIQUES

318. Field Experience—Baja California, Mexico
(3)

This course provides the student an opportunity to do field work in an alternate cultural setting. The field experience consists of two stages: (1) observation of physical and cultural features in the northern and central sections of the peninsula: and (2) team studies of towns and villages involving interviewing, data collection and mapping. The course includes a weekly lecture conducted on campus.
Prerequisite: Consent of instructor.

380. Map, Air Photo, and Satellite Interpretation
(4)

Lecture 2 hours; laboratory 6 hours. Observation and analysis of the physical and cultural environment through interpretation of topographic maps, aerial photographs, and non-photographic remote sensing imagery. Emphasis on fundamental geometric properties of maps, photos, and satellite imagery and their use in field investigations involving past and present land use, resource evaluation, geology, soils, vegetation, hydrology, etc.

385. Cartography and Graphics Design Techniques
(4) Bell

An introduction to a broad range of communication techniques including: a variety of map types and their construction, compilation and display of data, various lettering techniques, paste-up layout, model building, basic design, and the use of various media. Separate tracts within the course will provide skills for prospective planners, energy management students, and cartographers. Lecture 2 hours; laboratory 6 hours. Examination of the map as a functional communication system designed for the display of information. Emphasis is placed upon basic communication principles and theories as related to cartography and the development of compilation and display techniques by the student. Topics include generalization and symbolization, graphic design, thematic mapping, and computer mapping.

SENIOR SEMINAR AND SPECIAL PROGRAMS

490. Seminar in the Development of Geographic Thought from Ancient to Modern Times (Senior Seminar)
(4) (Fall Semester only)

The seminar traces the varying concepts of geographic thought in the western world from ancient Greece to modern times. Special emphasis will be placed upon the development of geographic thought in the United States during the 20th century.

* Fulfills General Education requirement for Social Sciences.

495. Special Studies
(1–4)

Special Studies may be arranged to cover an area of interest not covered in the courses otherwise offered by the department. Such courses are only offered by consent of the proper faculty member and with conditions agreed upon prior to enrollment.

499AB. Geography Internship Program
(2–5)

Students in the intern program will be given the opportunity to gain practical experience using geographical skills by working in a variety of county and city agencies in the Sonoma State University service area. Credit is given for two hours per unit work per week as arranged with the intern coordinator.

GRADUATE STUDY

The Geography Department does not offer an M.A. at the present time. However, students in graduate programs (Special Interdisciplinary M.A., Cultural Resources Management, History M.A., etc.) may arrange to do graduate level research with members of the geography faculty. Students should consult with the chair of the Geography Department and their graduate advisor before arranging for graduate level studies in geography.

595. Special Studies
(1–6)

Advanced research and writing. Students work under close supervision of faculty members. Subject matter variable. May be repeated for credit.



Geology

Department Chair:

Walt Vennum

Faculty:

Thomas Anderson, William H. Wright, Rolfe C. Erickson

Part-Time Faculty:

Matthew James

Department Office:

Darwin 126, phone (707) 664-2334

Geology is the study of the materials, structures, processes and history of the earth. Philosophically, it allows us to realize our place in the physical universe within the enormity of geologic time. Practically, it leads to understanding of earth processes, the formation of rocks and minerals, and the energy supplies and materials that support our civilization.

The evolution of modern geologic thought was based on field studies; thus, Geology is primarily a field science. The basis for field analysis is a firm background in the principles of Geology. The Department is committed to undergraduate training that includes a well-balanced treatment of geologic principles with an emphasis on field studies. Students take a fundamental curriculum which concentrates on the analysis of rocks and minerals, geologic map interpretation and report writing. Techniques of field study are part of the fundamental curriculum. Two field mapping classes are required. Required courses in physics, chemistry and mathematics support understanding of geologic principles.

Within the general field of geology, students may choose from major programs that lead to either the B.A. Pre-Professional Plan or Pre-Professional B.S. degree. Because of the selectivity involved in choosing a program that meets their own particular interests and goals, students must consult with a departmental advisor about their plan of study and their course load each semester.

Required Nonelective Courses for the Geology B.A. or B.S.

	Units
Geology 205—Mineralogy	2
Geology 303—Advanced Principles of Geology	4
Geology 304—Geologic Mapping and Report Writing	1
Geology 305—Optical Mineralogy	3
Geology 307—Igneous and Metamorphic Petrology	4
Geology 308—Igneous and Metamorphic Field	
Geology 311—Stratigraphy and Sedimentation	4
Geology 312—Stratigraphy and Sedimentation Field	
Geology 317—Structural Geology	4
Geology 318—Structural Geology Field	
Geology 320—Field Geology	4
Geology 413—Paleontology	4
Geology 427—Advanced Field Geology	4
	37

Bachelor of Science in Geology

Major

This plan is intended to give the student basic professional competence in geology. It provides an excellent foundation for graduate school or a professional career for those students who have or desire a strong background in mathematics.

	Units
Major Courses	46
General Education	48
Supporting Courses	20
Electives	10
	124

Course Requirements

	Units
Required Geology Courses	37
Upper Division Geology Electives	9
	46

Required Supporting Courses

	Units
Chemistry 115AB—General Chemistry (6 in G. E.)	4
Physics 114, 116—Introduction to Physics I (lecture and laboratory) (5) and Physics 214, 216—Introduction to Physics II (lecture and laboratory) (5)	10
Mathematics 161—Calculus I with Analytic Geometry	4
Mathematics 211S—Calculus II with Analytic Geometry	2
(Mathematics 211—Calculus II, 4 units highly recommended)	
	20

Bachelor of Arts in Geology

Major

This plan is intended to give the student basic professional competence in geology, suitable as a foundation for either graduate school or a professional career.

The geology course content is the same as in the B.S. degree, but the calculus and physics requirements are less rigorous.

	Units
Major Courses	46
General Education	48
Supporting Courses	16
Electives	14
	125

Course Requirements

	Units
Required Geology Courses	37
Upper Division Geology Electives	9
	46

Required Supporting Courses

	Units
Chemistry 115AB—General Chemistry (6 in. G. E.)	4
Physics 209AB, 210AB—General Physics with Laboratory	8
Mathematics 161—Calculus I with Analytical Geometry	4
	16

Elementary and Secondary Teaching Credential Preparation

A Major in Geology is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, geology majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must complete the single subject waiver program in physical science. Geology majors seeking a teaching credential are encouraged to consult with a department advisor, and review the University's special bulletin on *Programs in Teacher Education.* For further information on credentials and professional education requirements see pp. 99 of this Catalog.

Minor in Geology

Completion of a minimum of 20 units in Geology courses will constitute a minor in geology. Students should consult with an advisor in the Geology Department regarding required courses.

Geology Courses

102. General Geology
(3) (Fall, Spring) Department Faculty

Lecture, 2 hours; laboratory, 3 hours. A course to satisfy the General Education requirement in physical science with lab. An introduction to the principles of physical and historical geology and their application to an understanding of our landscape and natural environment. Topics of local interest to Sonoma County and the Bay Area will be emphasized. Specific content will vary depending on individual instructor. One or more field trips will be taken. Does not count as a course for the major.

120. Regional Field Geology
(3) (Spring) Departmental Faculty

Lecture, 1 hour; 10-day required field trip. A course to satisfy the General Education requirement in physical science with lab. Field study of rocks, minerals, and landforms and the processes which form them. A 10-day field trip to Death Valley area will be taken during spring vacation. Not intended for geology majors.
Prerequisites: Geology 102 or equivalent; concurrent enrollment acceptable. Students must be in good physical condition.

202. Rocks, Time and Evolution
(3) (Fall, Spring) Erickson, James

Lecture, 3 hours. A course to satisfy the General Education requirement in physical science. The evolution of plants and animals from beginning compound synthesis to the present, as shown in the fossil record and as interpreted by the evolutionary theories of Darwin, Wallace, Mendel, and others. The course is designed for general educational interest and is not intended for majors in geology.

205. Mineralogy
(2) (Fall) Erickson, Vennum

Lecture 1 hour; laboratory 3 hours. Principles of crystal chemistry, properties and origin of common rock forming minerals. Laboratory sessions emphasize hand specimen mineral identification through determination of both physical and chemical characteristics.
Prerequisites: Completion of or concurrent enrollment in Chemistry 115A and Geology 303 or equivalents.

233. Geology of Mountains
(3) (Fall) Wright

Lecture, 2 hours plus one discussion-demonstration per week; required field trip. A course to satisfy the General Education requirement in physical science, specific emphasis. The study of physical processes that act to form mountain ranges. Discussion of rock types, structures and surface features of mountain ranges with special reference to the Sierra Nevada and Coast Ranges. The origin of mountain ranges according to the geosynclinal and plate tectonic theories. The course is not intended for majors in geology.
Prerequisite: Geology 102 or 202 or equivalent.

302. Geological Oceanography
(3) (Fall) Anderson, James

Lecture, 3 hours. Origin and morphology of the ocean basins; marine environments; factors controlling the distribution and deposition of marine sediments.
Prerequisite: Geology 102, or consent of instructor.

303. Advanced Principles of Geology
(4) (Fall) Departmental Faculty

Lecture, 3 hours; laboratory, 3 hours. Advanced treatment of the principles, methods, and tools of geology emphasizing the materials which constitute the earth and the processes which act or have acted upon them in the present and the geologic past. Rquired of *all* prospective geology majors; recommended for those strongly interested in science.
Prerequisite: Geology 102 or equivalent; strong science background recommended. For students with strong geology background, an equivalency exam is offered during registration each semester.

304. Geologic Mapping and Report Writing
(1) (Fall) Departmental Faculty

Field studies and report preparation done in conjunction with Geology 303. Required weekend field trips.
Prerequisite: must be taken concurrently with Geology 303 by Geology majors.

305. Optical Mineralogy
(3) (Fall) Erickson, Vennum

Lecture 1 hour; laboratory 6 hours. Introduction to crystallography and the principles of optical mineralogy. Laboratory exercises are devoted to understanding the properties of crystal lattices and the fundamentals of mineral identification with the petrographic microscope.
Prerequisites: Math 107 or equivalent algebra level and 105D, completion of or concurrent enrollment in Geology 205 or equivalent.

306. Environmental Geology
(3) (Fall and Spring) Wright, Anderson

Lecture, 3 hours. Study of geological principles and processes as they relate to our natural environment emphasizing interaction between human activities and the geological environment. Major topics will include the nature and behavior of rocks and soils; earthquakes and their associated hazards; landslides, slope stability, and building construction; groundwater and pollution; stream processes and flooding; shoreline processes and coastal development; engineering geology and construction of highways and dams; development of natural resources, conservation, and ecology. Specific content will vary from year to year depending on individual instuctor.
Prerequisite: Geology 102 or consent of instructor.

307. Igneous and Metamorphic Petrology
(4) (Spring) Erickson, Vennum

Lecture, 2 hours; laboratory, 6 hours. A study of the origin, properties, classification and occurrence of igneous and metamorphic rocks. Laboratory exercises in the classification and description of minerals, textures, and structures of the more common rock types. Laboratory work will emphasize both hand specimen and microscopic petrography.
Prerequisites: Geology 305 or equivalent. completion of or concurrent enrollment in Chemistry 115B or equivalent.

308. Igneous and Metamorphic Petrology Field Course
(1) (Spring) Erickson, Vennum

Field studies done in conjunction with Geology 307. Required weekend field trips.
Prerequisite: Geology 304; must be taken concurrently with Geology 307.

311. Sedimentary Petrology
(4) (Fall) Anderson

Lecture, 3 hours; laboratory, 3 hours. The description, classification, and origin of sedimentary rocks. Discussion of weathering and origin of sediment, sediment transportation and sedimentary structures, clastic and non-clastic classification and petrology. Hand specimen and thin section petrography and other techniques for studying sedimentary rocks will be used in the laboratory.
Prerequisites: Geology 307, 308.

312. Stratigraphy and Sedimentation Field Course
(1) (Fall) Anderson

Field studies done in conjunction with Geology 311. Required weekend field trips.
Prerequisite: must be taken concurrently with Geology 311.

317. Structural Geology
(4) (Fall) Wright

Lecture, 3 hours; laboratory, 3 hours. Introduction to theoretical and experimental rock deformation; description and genesis of folds, faults and related minor structures; interior structure of the earth and plate tectonics. Laboratory study of structural problems.
Prerequisites: Geology 303, 304, Math 107 or equivalent.

318. Structural Geology Field Course
(1) (Fall) Wright

Field studies done in conjunction with Geology 317. Required weekend field trips.
Prerequisite: Geology 317 or concurrent enrollment.

320. Field Geology
(4) (Spring) Department Faculty

Lecture, 1 hour; 12 days of field work. Principles of geologic mapping, interpretation of geologic maps, use of surveying instruments, preparation of field reports.
Prerequisite: Geology 311, 312, 317, 318. Students must be in good physical condition.

323. Hydrology
(3) (Spring) Anderson

Lecture, 3 hours. Required field trip. Water as a natural resource, the hydrologic cycle, distribution of water on the earth. Atmospheric water, soil water, runoff, and groundwater as related to water supply and use. Applications to problems of flood control, water management, and water pollution, with special emphasis on California.
Prerequisites: Geology 102 or consent of instructor; Math 106 or 107.

326. Stratigraphy and Earth History
(4) (Alternate Spring) Anderson

Lecture, 3 hours; laboratory, 3 hours. Required field trip. The principles of historical geology will be discussed with special emphasis given to the application of these principles to the geologic development of North America. The geologic history of California will be treated in detail. The use of sedimentary rocks, fossils, and structural and tectonic principles will be discussed, especially as they relate to our understanding of historical geology. Laboratory work will include a study of sedimentary rocks and their properties, fossils and their occurrence and distribution, the construction and interpretation of various types of geologic maps, and detailed studies of selected maps representative of the various geologic provinces of North America.
Prerequisites: Geology 303 or consent of instructor.

360. Geomorphology
(4) Minard

Lecture 3 hours; laboratory 3 hours. Detailed study of the earth's landforms; emphasis upon geologic structures; erosional and depositional processes and interrelationships with soils, vegetation and hydrology. Use of topographic maps, geologic maps and cross sections and aerial photos in the interpretation of landforms. Field trips and field reports.
Prerequisite: Geography 204, Geology 102 or consent of instructor.

395. Community Involvement Program
(1–4) (Fall and Spring) Department Faculty

C.I.P. involves students in community problems such as tutoring, aiding in school science classes and advisement of county agencies. A total of 6 units of C.I.P. credit may be applied toward a degree. May be taken by petition only. Not applicable as a geology major elective.

396. Internship in Geology
(1–4) (Fall and Spring) Department Faculty

Professional geologic work for a geologic firm or agency. 45 hours of work per unit. Not applicable as a geology major elective.
Prerequisite: Geology 303 and consent of instructor.

400. History of Physical Science
(3) (Alternate Spring) Department Faculty

Lecture, 3 hours. A survey of the historical development of the physical sciences. This course is the same as Physics 400 and Chemistry 400.
Prerequisites: Upper class standing and consent of the instructor.

406. X-Ray Mineralogy
(2) (Fall) Vennum

Lecture 1 hour, laboratory 3 hours. Introduction to the use of x-ray diffraction and powder techniques.
Prerequisite: Chemistry 115B, Geology 305 with a grade of C or better and consent of instructor.

410. Geophysics
(3) (Alternate Spring) Wright

Lecture, 2 hours. Laboratory 3 hours. Required field trips. The principles of physics as they are related to the earth. Physical basis for the methods of geophysical investigation: seismology, gravity, magnetics and electro-magnetics. Application of geophysical methods to geological problems such as oil exploration and plate tectonics. Field work and analysis of geological problems using geophysical instruments. Extensive use of computer.
Prerequisites: Geology 102, or 303, Math 162, Physics 114.

413. Paleontology
(4) (Spring) James

Lecture, 3 hours; laboratory and/or field, 3 hours. An introduction to the morphology, taxonomy and evolution of invertebrate and vertebrate faunas and fossil plants.
Prerequisite: Geology 102 or 303 or consent or instructor.

422. Geochemistry
(3) (Alternate Fall) Erickson

Lecture, 3 hours. Introductory Cosmochemistry and origin of the elements; meteorites; the earth as a chemical system, chemistry of processes at the surface of the earth; mineral crystal chemistry; introduction to geochronology and stable isotope variations in nature; thermodynamics and its geological application; geochemical prospecting.
Prerequisite: Geology 303, Chemistry 115AB, Math 161, or consent of instructor.

425. Economic Geology
(3) (Alternate Spring) Vennum

Lecture, 2 hours; laboratory, 3 hours. Classification, origin, and alteration of metallic ore deposits. Laboratory sessions on hand sample identification of ore and alteration minerals and petrographic analysis of selected ore suites. Introduction to the reflecting light microscope.
Prerequisites: Completion of or concurrent enrollment in Geology 307 and Chemistry 115B or equivalent.

*** 427. Advanced Field Geology**
(4) (Summer) Department Faculty

A minimum of five weeks of detailed mapping in igneous, metamorphic and sedimentary rocks, and the preparation of field reports and geological maps.
Prerequisite: Senior standing in geology, Geology 320 strongly recommended.

495. Special Studies
(1–4) (Fall and Spring) Department Faculty

Individual study under guidance of an advisor of an advanced field, laboratory or literature problem. Students must qualify and adhere to the Department policy on Independent Study.**
Prerequisite: Approval of advisor.

496. Selected Topics in Geology
(1–3) Department Faculty

An intensive study of an advanced topic in geology. May be repeated for additional credit with new subject matter.
Prerequisite: Adequate preparation for topic under consideration.

* Students may also complete this course at another college or university but should do so only in consultation with the Geology Department. Students must demonstrate equivalence in terms of field hours and course content to Geology 427 as offered at Sonoma State University.

** Policy on Independent Study Geology 495.

1. Student must have a grade point average of 3.0.
2. The student must have demonstrated ability to work independently and do quality work in field classes, etc. The student must submit a detailed proposal of work to do, schedule and results expected.
3. The student must have a faculty sponsor who is willing to advise the project and will set up a schedule of meetings for this purpose. This will be reported on the University form for this purpose and signed by the student, faculty advisor, and department advisor.
4. A copy of all documents and two copies of the final paper or report will be filed with the department office before a grade will be assigned.



Gerontology

The study of Gerontology provides students with a broad multidisciplinary perspective to examine the aging process and to understand the significance of age in biological, social, cultural, economic and political processes. Participation in the Program, encourages students to view aging as a normal part of the life cycle, to become aware of the aging process so that they may view it in others with understanding, and eventually in themselves with equanimity, and to consider work in the field of aging, either as a volunteer, or as a professional. The Program primarily focuses upon the experience of aging in the United States although comparative analyses of other societies are developed. By applying an integrated liberal arts perspective to the issues, problems and dilemmas posed by a longer life span and a dramatically increased population of older persons, students develop their critical faculties and problem solving abilities. The field of Gerontology offers students opportunities to engage in first-hand research, to develop conceptual analyses, and to plan community projects, as well as developing a strong background for career development. Those who already work, as volunteers or staff in agencies serving the elderly, will find the program valuable in updating their training.

Students who plan to pursue professional degrees in medicine, dentistry, nursing and social work will find that participation in the Program will assist them in understanding the problems of their future clients. Students may choose to complete 1) the minor in Gerontology, 2) A certificate in Gerontology, or, 3) a Special Major in Gerontology at either the Bachelor's or Master's levels. In the Special Major Program, students construct an individually designed interdisciplinary major in consultation with the Gerontology Program Coordinator and Special Major Advisor.

Coordinator:

Kathleen Charmaz

Department Office:

Stevenson 2084, 2089, Phone (707) 664-2456/2561.

Minor in Gerontology

22 units as follows:

Required courses	*Units*
Biology 318—Biology of Aging	3
Gerontology 300—Basic Gerontology	3
Gerontology 319—Aging and Society	4
Gerontology 499—Internship in Gerontology	4
Psychology 421—Psychology of Aging	4
	18

Electives:

4 units to be chosen from the following list:

American Multi-Cultural Studies 433—Aging and Ethnic Minorities	4
Biology 224—Human Physiology	3
Biology 380—Human Nutrition	4
Economics 393—Economics of Health Systems	4
Gerontology 332—Death and American Culture	4
Gerontology 400—Women and Aging	4
Gerontology 452—Health Care and Illness	4
Physical Education 450—Leading Physical Fitness Programs	2
Politics 490A—Politics of Health and Aging	3

Psychology 422—Living and Dying 4
Psychology 490—The Mature Years 4

Certificate in Gerontology

The Certificate Program is open to those students who are completing a B.A. degree or who have previously received a Bachelor's degree.

28 units as follows:

Required Courses	*Units*
Biology 318—Biology of Aging	3
Gerontology 300—Basic Gerontology	3
Gerontology 319—Aging and Society	4
Gerontology 499—Internship in Gerontology	8
Psychology 421—Psychology of Aging	4

Electives

6 units may be chosen from the list above

Gerontology Courses

Gern. 300. Basic Gerontology: A Survey of Concepts, Issues and Services for the Elderly
(3) Staff

Introduces the study of aging from biological, psychological, sociological, and environmental perspectives. Aging is presented as a normal stage of development with both positive and negative aspects. Specific issues discussed include: Health care, Housing, Income Maintenance, Advocacy. Open to all students.

Gern 315. Lecture Series
(2)

Lecture, presentations and panels on thematic issues in the field of aging. Invited speakers will be drawn from local community programs, Bay Area research organizations and academic disciplines. May be repeated for credit.

Gern 319. Aging and Society
(4) Charmaz

Examination of aging throughout adulthood. Analysis of theories of aging, their foundations in social science theory and their policy implications. Exploration of the meanings and consequences of increasing longevity for society and the individual with emphasis on the social psychological implications for women, minorities and those who are poor.

Gern 332. Death and American Culture
(4) Charmaz

The relation of cultural values to practices, attitudes and views about death. Application of sociological and psychological theories to topics on death and dying, such as death conceptions, terminal care, suicide, war and grief. Emphasis on the social psycho psychology of dying, caregiving, grieving and being suicidal.

Gern 399. Student Instructed Course
(1–4)

A course designed by an advanced student, approved by the program, and taught by the student under the supervision of his/her faculty sponsor. Consult the class schedule for topic to be studied. May be repeated.

Gern 400. Women and Aging
(4) Charmaz

A sociological analysis of the ways in which the aging process affects women. The structure of opportunities, aspirations, actual situations, lifestyles and beliefs are explored in relation to aging women from different social class and ethnic backgrounds. The implications of aging for women's self-images and interactions are analyzed.

Gern 452. Health Care and Illness
(4) Charmaz (Cross listed as Soc 452)

A dual focus on the social organization of health care and the social psychology of illness. Analyses of the structure of care, patient-practitioner relationships and treatment ideologies. Emphasis on the patient's experience of illness, intimate relationships and self-images.

Gern 495. Special Studies
(1–4) Charmaz

Students may propose to participate in independent projects or continuing research with the approval and guidance of the faculty member. The special study may extend for more than one semester. This course may be repeated for credit.

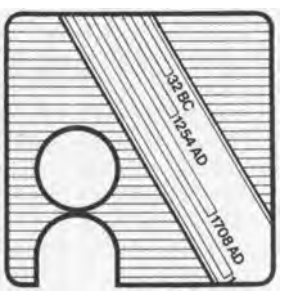
Gern 499. Internship
(1–4) Charmaz

Field experience in an agency or organizational setting in which the student combines work with academic preparation in programs concerned with aging and or health.

Gern 500. Social and Psychological Issues in Aging
(4) Charmaz

Analysis of experiencing the aging process and the social implications of it. Exploration of relationships between psychological status in later life and social supports. Examination of effects of social values and social policies on interactions between older people, their families and service providers. Advanced discussion of current theories, research and issues in aging.
Prerequisite: Graduate standing or permission of instructor.

History



History is an integrative discipline which studies both our collective and our individual pasts. It is holistic because it is involved with all of humanity in all of its dimensions, interests and activities, from the economic and political to the psychological and cultural. Thus, the study of history encourages students to reflect upon and analyze the interrelationship of ideas and material circumstances and of individual and group behavior as revealed in a wide range of human institutions and activities. The study of the ways in which humanity has organized itself, interacted and explained its existence, not only promotes the development of a historical perspective on the present but also provides a means of assessing the potential for change. The study of other cultures and their histories also fosters the development of a broader worldview as well as other perspectives on one's own culture. In addition, the study of history provides insight into the sources of one's thoughts, aspirations and behavior as well as the appreciation of a shared cultural tradition.

The History Major is designed both to provide the basis for an excellent liberal arts education and to meet the needs of individual students. Within the specific requirements of the Major, students receive basic instruction in the history of their own country as well as that of other cultures. They are also introduced to methods of historical inquiry, to different philosophies of history, and to historical writing. Beyond these requirements, students may arrange course work which meets their needs and interests. Course offerings provide opportunities to study selected areas and periods as well as individually designed research projects.

In addition to preparation for teaching and graduate work within the discipline of history, the Program provides an excellent background for many post-baccalaureate programs, including law, library science, archival research, and government careers. Students who plan to pursue graduate work or a teaching career are advised to diversify their studies rather than concentrate on any single geographic area or nation-state. Those who plan extensive graduate study are encouraged to include foreign language courses in their programs. Credential candidates should consider securing classroom experience in a community involvement program.

Besides preparing students for teaching and graduate work within the discipline of history, the History Major provides an excellent background for graduate study and careers in law, investigative reporting, library science, archival research, records management and government service. Students with specific career objectives should consult departmental supporting subjects or minors in related fields.

The History Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in History, refer to page 315.

Department Chair:

Anthony White

Faculty:

Robert Brown, Theodore Grivas, Dennis Harris, LeVell Holmes, Donald Johnson, Robert Karlsrud, Albert Laferriere, Han-sheng Lin, Daniel Markwyn, Peter Mellini, William Poe, Glenn Price, Stephen Watrous.

Department Office:

Stevenson 2070, Phone, (707) 664-2313

Bachelor of Arts History

Major

Each student plans the 40 unit major program in consultation with a departmental advisor.*

Lower Division

	Units
History 251 and History 252	6
History 201 and History 202	6

Upper Division

	Units
History 391	4
History 498 or 499	4
Additional Courses in History	20
(Must include one upper division course in European History and one course in an area of the world other than the United States or Western Europe, and 17 units must be upper division.)	
Total History Units Required	40
General Education Courses	49
F. Minor and/or Elective and/or Foreign Language and/or Credential Courses	35
Total Units Required for a B.A. Degree in History	124

Advisory Track in Historic Preservation

A specialization in historic preservation may be developed within the history major through advisement and petition. Interested students should consult Professor Daniel Markwyn or Professor Peter Mellini. History Department.

Minor in History

The History Minor consists of any 20-unit pattern in history courses chosen in consultation with a Departmental faculty advisor. Students planning a history minor for teaching purposes are urged to complete the entire lower division basic survey sequence covering both World and United States history and a course in "The Study of History."

Elementary and Secondary Teaching Credential Preparation

A Major in History is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must pass the National Teacher's Examination in Social Science, or complete the single subject waiver program in history or social science. History Majors seeking a teaching credential are encouraged to consult with the department's credentials advisor. For further information on credentials and the professional education requirements see p. 106 of this Catalog.

* Courses graded CR/NC or ABC/NC may not be used to fulfill major requirements.

Master of Arts in History

Requirements for Admission to Candidacy

1. A B.A. degree from an accredited institution. Students with undergraduate majors in fields other than History are expected to complete at least one prerequisite course.
2. A grade point average of 3.0 or better in the undergraduate major (and in previous graduate courses attempted) as evidenced by the transcripts furnished.
3. Completion of the Graduate Record Examination (Aptitude Tests: Verbal and Quantitative and the Advanced Test in History) with scores acceptable to the departmental graduate studies committee. By special arrangement, alternative options to the GRE may be taken.
4. Three letters of recommendation testifying to the student's ability, character, and potential for graduate study in history.
5. Completion and acceptance of separate application for admission to the University Graduate School (Office of Admissions and Records) and to the History Department.
6. Favorable recommendation for admission to candidacy by the departmental graduate studies committee after review of the complete file.

Refer to section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Requirements for the M.A. Degree in History

1. Formal admission to candidacy for the M.A. degree in History.
2. A grade point average of 3.0 or better for all work attempted in graduate status and in all work approved as a part of the specific pattern of study. With the approval of the student's committee chairman and the Graduate Adviser, a maximum of nine units of postgraduate transfer or extension credit (or any combination of the two) may be included as part of the student's specific pattern of study. At least 15 units of the study pattern must be taken after admission to candidacy. All courses are to be taken for letter grade.
3. All requirements for the M.A. Degree in History, including any conditional requirements stipulated at the time of admission to candidacy, must be satisfactorily completed within seven years from the time of admission to candidacy.
4. With the approval of the student's committee chairman and the Departmental Graduate Adviser, the satisfactory completion of one of the following two options:

A. Master's Thesis Option *(chosen in consultation with committee chairman):*

	Units
Courses at the "300" or "400" level	15
Graduate courses at the "500" level (including grad. seminar)	9
Master's Degree Thesis Research (History 599)	6
Total Units Required for the M.A. in History	30

B. Field Examination Option *(chosen in consultation with committee chairman):*

Courses at the "300" or "400" level	15
Graduate courses at the "500" level (including grad. seminar)	12
Field Examination Reading and Research (History 598)	3
Written and Oral Field Examinations	0
Total Units Required for the M.A. in History	30

Graduate Advisory Track in Public Historical Studies

The advisory track in Public Historical Studies is an interdisciplinary course of study of particular use to graduates with degrees in Anthropology, Geography, History, and Environmental Studies. For requirements see above and the Chairman of the Public Historical Studies Committee.

History Courses

Lower Division

201. Foundations of World Civilization
(3) (Fall, Spring) Department Faculty

An introduction to the early, classical and medieval civilizations that have most influenced the modern world. Developments (from pre-history to 1500 A.D.) include the Eastern traditions of India, China, and Japan; the world of Judaism, Christianity, and Islam; the classical Mediterranean civilizations; tropical Africa; and the medieval and Renaissance cultures of the emerging West. Required of all history majors.

202. Development of the Modern World
(3) (Fall, Spring) Department Faculty

An introduction to modern and contemporary history from A.D. 1500 to the present. Developments include the impact of Western expansion on the Americas, Africa, and Asia, the industrial and political revolutions of the 18th and 19th centuries, World Wars I and II, decolonization and the emergence of the super powers. Required of all history majors.

241. History of the Americas to Independence
(3) White

A survey of the English, Spanish and Portuguese colonies in America from the conquest to independence using the comparative approach. Includes Native American cultures, European backgrounds, colonial societies, economic development, slavery, religion, the frontier, independence movements, art and literature, and national character, Satisfies the state code requirement in history.

242. History of the Americas Since Independence
(3) White

A survey of the United States since independence, using the comparative approach. Topics include: colonial legacies, religion, men and women, race relations, economic development, political organization, expansion and conflict, education, foreign relations and art and literature. Satisfies the state code requirement in history.

251. History of the United States to 1865
(3) (Fall, Spring) Department Faculty

A general survey of the major developments in United States History from the discovery and colonization of the New World through the Civil War. Satisfies the State Code requirement in U.S. History. Required of all history majors.

252. History of the United States Since 1865
(3) (Fall, Spring) Department Faculty

A general survey of the major developments in United States History from the end of the Civil War to the present day. Satisfies the State Code requirement in U.S. History.

Optional discussion sections have been designed to pursue in greater depth the issues raised in regular class meetings of the lower-division courses in World History and the History of the United States. Although enrollment in these discussion sections is optional, a student must be concurrently enrolled in the appropriate course, e.g., 201, 202, 251 or 252.

201C. Colloquium: Foundations of World Civilization (1)
202C. Colloquium: Development of the Modern World (1)
241C. Colloquium: History of Americas to Independence (1)
242C. Colloquium: History of Americas since Independence (1)
251C. Colloquium: History of the United States to 1865 (1)
252C. Colloquium: History of the United States Since 1865 (1)

295. Community Involvement Program
(1–4) (Fall, Spring) Department Faculty

History oriented community service projects developed by students after consultation with a member of the History faculty and approved by the department. May be taken for one or two units as determined by the departmental faculty sponsor. Applies only as general elective credit toward graduation.

Upper Division

301. Global Issues—Global Perspectives
(2–4)

A seminar-type class in which students will study current global issues using foreign newspapers, magazines and radio broadcasts. After looking at their historical development, the class will discuss these issues as well as how they are presented or interpreted by the different news organs, national and foreign.

304. The Ancient Near East
(4) Poe

A study of the cultures of southwest Asia and the east Mediterranean from the emergence of the early civilizations in the fourth millenium to the rise of Islam in the sixth century A.D.

305. Islam
(4) Poe

A history of the Arabic speaking peoples from their earliest records through their cultural florescence in the middle ages to the Turkish domination of the Middle East.

306. The Middle East Since 1453
(4) Mellini

Major themes in Near Eastern and Islamic History since the rise of the Ottoman Empire. The course of European dominance, the Islamic and Arab nationalist movement, and the twentieth-century social and economic changes will be stressed.

330. Introduction to African History
(4) Holmes

Survey of African civilizations from the eighteenth century until 1950, including cyclical developments; indigenous organizational patterns; Arab and European conquests and colonization; and the development of political independence since 1945. Special attention to indigenous institutions which enabled most African politics to survive foreign domination.

336. Introduction to the Far East
(4) Lin

An analysis of the lifestyle, culture and history of the Far East, including religion and ancestor-worship, trade and cuisine through their historical evolution to present practices. An examination will be made of both similarities and differences among Chinese, Japanese, Korean and Vietnamese culture and developments, as well as the practical value and relevancy to Western audiences of the subject matter.

339. Introduction to Latin America
(4) White

A study of the major political, social, economic and cultural developments in Latin America since the Spanish conquest with a major focus on the 20th Century. Includes major political movements and leaders, economic development, religion, male and female, cultural values, art and literature, and relations with the United States and other countries.

340. History of Mexico
(4) White

A study of the Mexican people from the early native cultures to the present, with particular emphasis on the Mexican Revolution of 1910 and the major political, social, economic and cultural developments of modern Mexico. Includes major Indian cultures, the Conquest, religion and the Catholic Church, literary and artistic expressions, *machismo* and women, and relations between Mexico and the United States.

345. Revolution in the Modern World
(4) White

A study of the major revolutionary movements since the 18th Century with particular focus on Mexico, Russia, China, Cuba and other Third World countries. Looks at origins, phases, ideological factors, revolutionary personalities and consequences.

348. Creative History: Writing Historical Fiction
(4) White

A class project in which students study a historical event or period and then write short stories on individuals living through the period. Uses novels, short stories, and anthropological studies as well as historical accounts.

349. Historical Themes
(2–4) Departmental Faculty

Studies of particular themes, issues, and topics of special interest to general students as well as majors. Includes such courses as "History and Human Aggression," "History of Death," "Psychohistory," and "Women's Biography." Consult the class schedule for the specific course each term and the Department of History for course descriptions.

350. Technology and Historical Change
(3–4) Department Faculty

This course will explore the relationship between technological change and the shaping of Western society from classical antiquity through the Renaissance. Equally, it will investigate the influence of social, political, and economic ideas and practices upon the development of technical systems. Some attention will be given to the nature of technological systems and their diffusion of technological improvements.

358. History of Journalism and the Media
(4) Mellini

The evolution of journalism and the media since the print revolution to the present. The development of newspapers, magazines, books and the broadcast media is outlined and analyzed. There is emphasis on the First Amendment, and how journalism is shaped by technical, legal, political constraints and tradition.

362. Society and Architecture
(4) Mellini, Markwyn

An analysis of the interrelationship between the built environment and history, focused largely on the United States, but with California structures utilized as a "laboratory". Traces this relationship from the European heritage and Colonial era to the present, with extensive use of visual materials.

363. Local History
(3) Markwyn, Harris

A study of Sonoma County history from pre-contact days to the present and of the relationships between the County and both the Bay Area and the State of California. Attention will be paid as well to methods of finding and interpreting the scattered sources upon which local history must be based.

370. History Forum
(2) Department Faculty

A semester lecture series on a specific theme or topic presented by members of the department, other SSU faculty and guest speakers. May be audited or taken for credit. OPEN TO THE PUBLIC.

371. Special Topics in European History
(2–4) Departmental Faculty

Includes such courses as "European Social History," "Emergence of European Labor," "The Gothic Cathedral in History," and "The Renaissance Personality." Consult the class schedule for the specific course each term and the Department of History for course descriptions.

372. California History
(4) Markwyn

A survey of California history from earliest European contacts to the present. Special attention will be given to major economic, political, and social issues, and to the continuing role of the natural environment and its resources.

375. Special Topics in American History
(2–4) Departmental Faculty

Includes such courses as "American Labor History," "American Thought and Culture," "Religion in American History," "Labor History," and "Nature & American History." Consult the class schedule for the specific course each term.

380. 20th Century World
(4) Department Faculty

An exploration of the origins and development of 20th century ideas, institutions and systems in global perspective. Forces which have united and divided the contemporary world community are examined: imperialism, science, democracy, communism, nationalism, militarism, racism, cultural traditionalism, and technological disparities. Focus is on Europe, Russia, Asia, Africa, Latin American and the Middle East.

391. The Study of History
(4) (Fall, Spring) Department Faculty

An examination of the various philosophies and methodologies which have shaped European and American historiography. Consideration is given to the relationship between the historian and the climate of opinion, to varying interpretations of historical events, to the place of history as a literary art, and to the techniques of historical research and writing.

395. Community Involvement Program
(1–4) (Fall, Spring) Department Faculty

History oriented community service projects developed by students after consultation with a member of the History faculty and approved by the department. May be taken for one or two units as determined by the departmental faculty sponsor. Applies only as general elective credit towards graduation.

397. Old Testament History
(4) Poe

An introduction to the political, social, and religious history of the Hebrews and ancient Israel. The course will make extensive use of the Old Testament as a primary source for historical interpretation. The course will focus upon the developmental aspects of Hebrew institutions and their relationship to neighboring cultures.

401. History of Rome
(4) Laferriere, Poe

A history of the Roman people from the Age of the Gracchi to the Age of Constantine. The course will emphasize the social, political, economic and cultural changes that occurred during that period with a view to understanding the impact that Rome made on the world.

402. The Middle Ages, 476–1450: The Age of Chivalry
(4) Laferriere

"Mediterranean" history from the fall of Rome through the decline of the Holy Roman Empire, covers the cultural, religious, social, political, intellectual, and economic life of the Middle Ages; the Crusades; and the relationship of Western Europe to the Byzantine and Moslem world.

403. Europe, 1450–1650: Renaissance and Reformation
(4) Laferriere, Watrous

A study of Western European History covering the flowering of Italian art and literature, its expansion and influence, the religious conflict, the loss of European unity, the rise of nation states, the Age of Discovery, and related political, social, economic, and intellectual developments of the period.

404. The Enlightenment to World War I (1650–1914)
(4) Department Faculty

A political, social and cultural history that explores the origins of modern Europe. Topics include the Scientific Revolution, the Enlightenment, the French Revolution, the Industrial Revolution and impact of Europe on the world, the growth of liberalism and socialism, and the causes of WW I.

407. War and Peace in Twentieth Century
(4) Brown

Through history, literature and film this course will examine the meaning of war and peace as a theme of twentieth century civilization. Topics to include: national and class war, the League of Nations, the death camps, militarism and pacifism.

418. Origins of Modern Russia
(4) Watrous

From the roots of Russian history in the Kievan, Mongol and Muscovite periods to the rise of Imperial Russia under Peter the Great up to the Crimean War. Topics include the nature of Russian society, culture and government and Russia's relations with the West.

419. Modern Russia and the Soviet Union
(4) Watrous

The transformation of Russia through reform, industrialization, war, and revolution. Focus includes Populism and Marxism, the Revolution of 1905, the transition to a Soviet state in 1917, and the Soviet Union under Lenin, Stalin, and their successors.

420. Tudor and Stuart Britain, 1485–1714
(4) Brown

A study of English history from the end of the Wars of the Roses through the reign of the Stuarts. Includes late renaissance England, the development of the Tudor national state, the Elizabethan Age, the English Civil War, and the Glorious Revolution.

421. Modern Britain, 1707 to the Present
(4) Mellini

The evolution of British society from a constitutional monarchy to the welfare state. Topics include the British overseas, the industrial revolution, Victorian culture, the impact of the two twentieth-century wars, and the evolution of the welfare state.

430. Western and Southern Africa in the 20th Century
(4) Holmes

An analysis of major political and economic issues influencing African people and institutions in the 20th century. Major areas and issues for study are colonial struggles for independence, European policies in Africa, philosophies of nationalist leaders, problems of developing nations, and the role of the military in post-independent Africa.

432. Seminar in U.S. Economic History
(4) Harris

Economic development of the U.S. since the Revolution. Topics include: capital formation and the growth of business concentration; distribution of national income; problems of agriculture; growth of the labor movement; patterns of inflation and depression; international relations and U.S. economic development.

435. History of China
(4) Lin

A general survey of the history of China from earliest times to the present. Particular emphasis will be given to the rise of the People's Republic of China and its impact on pre-revolutionary political, social, economic and cultural patterns.

436. Chinese Thought and Culture
(4) Lin

A study of Chinese thought and culture from the stone age to the present, concentrating on the development of Confucianism, Taoism, and Buddhism; Chinese science, technology, and medicine; literature, the concepts of peace and war, sinicization of Western ideas, and the thought of Mao Tse-tung.

438. History of Japan
(4) Lin

A study of the development of Japan from earliest times to the present day. Particular emphasis will be given to Japan's modern transformation, especially in the twentieth century.

439. History of India Since the Moguls
(4) Holmes

Studies the economic and social forces leading to India's independence and the major national issues influencing India in international affairs and as a leader in the Third World. Attention will be given to the social and political philosophies of Gandhiji, Nehru and other prominent national leaders in the 20th century.

445. Readings in History: Honors Course
(4) Departmental Faculty

Readings of the classics of historical writing. Students will read fifteen or more great works in history and meet for discussions with the instructor. Selections vary from one semester to another and represent the most important histories from the time of the Greeks to the present.

446. Women in American History
(4) Wexler

The changing roles, status and consciousness of women in North and South America. Emphasizes the origins and expressions of sexism, feminist thought and strategy, and female contributions to American society and culture.

448. Military History
(4) Laferriere

An examination of strategic planning, tactical innovation, military systems, and campaigns from the invention of gunpowder to the development of nuclear power. Particular attention will be paid to the wars of the twentieth century, their causes and consequences.

451. Colonial and Revolutionary America, ca. 1550–1800
(4) Markwyn

A study of the social, political, economic and intellectual foundations of American society from the age of European exploration to the end of the eighteenth century. Topics include European backgrounds, relations with native peoples, social and political origins and implications of the American Revolution, the Constitution of 1787, and the struggle over the Republic's direction at century's end.

454. United States, 1790–1890
(4) Karlsrud, Price

A study of the major political, social, economic, diplomatic, and intellectual developments in America from the establishment of the Federal government through 1890. The Federalist, Jeffersonian, and Jacksonian eras, expansion and sectional change, background causes and effects of the Civil War, 19th Century immigration and urbanization, and the rise of America as a world industrial power, are among the topics to be discussed.

456. The Rise of Modern America, 1877–1929
(4) Harris

Selected topics in the development of an industrial society and the appearance of a consumer economy, the rise of an urban society and the rural backlash, immigration and cultural diversity, the emergence of the United States as a world power, and the business civilization of the 1920's.

458. U.S. Since 1929
(4) Johnson

This course will emphasize economic and political development from the Great Stock Market Crash in 1929 to Watergate. Franklin Roosevelt and the New Deal, The Cold War, the economic transformation of America after World War II and the moves toward a more comprehensive Presidency are some of the topics.

464. Business Enterprise in America
(4) Johnson

Examination of the outstanding figures (and scoundrels) who made fortunes in merchandizing, international trade, banking, railroading, manufacturing, advertising and speculation—their motivations, institutions, and their impact upon the eras in which they lived. Includes an analysis of the historical and present-day significance of the stock markets and commodity exchanges. Cross-listed as Management 494.

466. United States Foreign Relations
(4) Harris, Price

An examination of American diplomatic history and practice from the Revolutionary era to the present time. Covers consideration of humanitarian, economic, and strategic imperialism; isolationism and collective security; and the concept and implications of total war, undeclared war, and "cold" war. Features in-depth studies of the development of new principles and policies in major diplomatic actions.

468. Blacks in American History
(4) Holmes

A study of African culture, social philosophy and political influences in the United States from the pre-colonial period until the Reagan Administration. Major themes will be placed on Black political philosophies and strategies during the periods of Reconstruction, WW I and WWII, the Civil Revolts of the 1960s, and the contemporary period of political activism.

469. Urban America
(4) Harris

Selected topics in United States urban history including changing patterns of urbanization, the emergence of commercial and industrial cities and the rise of the suburbs, municipal politics and reform, urban migrants and immigrants, attitudes toward the city, and the role of cities in American life.

471. The American West
(4) Grivas

A regional history of the Trans-Mississippi West. Covers an analysis and evaluation of the major political, social, and economic events relating to the western United States.

472. California to 1900
(4) Grivas

Colonization and expansion of New Spain. The development of political, social, and economic institutions of Mexican California. The American conquest and the first fifty years of statehood.

477. American Social History
(4) Karlsrud, Markwyn

Studies American society from the seventeenth century until the present. Topics include European influences, social mobility, class structure, race and ethnicity, generalizational difference, social movements, the changing roles of women, and the place of such terms as "the American dream," "Melting Pot," and "Rugged Individualism" in the evolution of a distinctly American character.

495. Special Studies
(1–4) (Fall, Spring) Department Faculty

Individualized studies in historical topics, themes, periods, and/or areas beyond the scope of the established curriculum. Open from one to four units as determined by the departmental faculty sponsor. Not to be used as a substitute for 498—Senior Seminar, or 499—Senior Thesis. (Note: For additional information see the comments on Special Studies in the "Regulations and Procedures" section of this catalog.)

497. Internship in History
(1–6) (Fall, Spring) Department Faculty

Field experience in city, county, state and federal agencies and with private business and community organizations. Enrollment by prior arrangement only. May be repeated three times for credit.

498. Senior Seminar
(4) (Fall, Spring) Department Faculty

Directed studies in a seminar setting on a particular topic or theme (see class schedule for the specific topic selected by the instructor). Combines secondary reading and original research leading to the completion of a research project.

499. Senior Thesis
(4) (Fall, Spring) Department Faculty

Offered as an alternative to the senior seminar. Designed for students who want to pursue a major research topic with an individual instructor.

Graduate Studies in History

500. Seminar in History and Historical Methods
(2–4) Harris, Markwyn, Poe

Study and application of historical methods. Particular attention will be paid to the historian's vocabulary, to the theoretical foundations of the methodologies studied, and to history's relationships with other disciplines.

501. Seminar in Culture, Society and Policy Analysis
(4) Harris

An analysis of recent work in family, urban, social, and economic history with particular emphasis on that research conducted within a cultural resource management and policy analysis context. Emphasis will be placed on the concepts and methodologies employed and upon the application by students in a research context. Prerequisite: History 372, 391, or 500.

595. Special Studies
(1–4) (Fall, Spring) Department Faculty

Individualized studies in historical topics, themes, periods, and/or areas beyond the scope of the established curriculum. Open only to graduate students from one to four units as determined by departmental faculty sponsor and by the graduate adviser.

596. Research and Teaching Assistance
(1–2) (Fall, Spring) Watrous

Directed participation and experience in developing teaching methods, course organization, and research techniques. Open only to advanced graduate students with consent of instructor and graduate co-ordinator.

597. Graduate Seminar: Historical Themes and Issues
(4) (Fall, Spring) Department Faculty

Advanced studies and/or research projects in historical themes and issues extending beyond the scope of conventional political, geographic, and/or chronological subdivisions.

598. Field Examination Reading and Research
(3) (Fall, Spring) Department Faculty

Directed reading and research activities. Open only to graduate students with classified standing in History who have selected the Field Examination Option for the M.A. Degree. Preferably taken for credit during the semester in which the Field Examinations are scheduled.

599. Master's Degree Thesis Research
(6) (Fall, Spring) Department Faculty

Extensive individual research and writing project under the direction of the student's Thesis Committee Chairman. Open only to graduate students with classified standing in History who have selected the Thesis Option for the M.A. Degree. Preferably taken for credit during the semester in which the M.A. Thesis is scheduled for submission in final form. An authorized "Thesis Prospectus Approval Form" must be presented in order to enroll in Hist. 599.

Humanities 185. Introduction to LISP

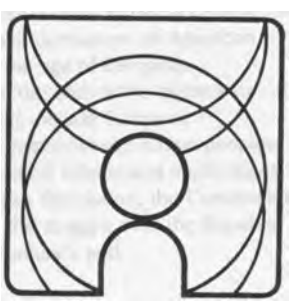
The fundamental commands of the computer language LISP will be covered with an emphasis on applications in Artificial Intelligence. LISP lends itself especially well to "middle-out" programming, and the course will explore the implications of this fact.
Prerequisite: Consent of instructor. Although there are no formal prerequisites, prior experience with the Cyber is helpful.

Humanities 300. Written and Oral Analysis
(3)

Students practice the techniques of critical reading and thinking, of expository writing, and of oral expression. They examine the principles of thinking, speaking and writing with a view to the multitude of purposes and the variety of contexts for which these activities are crucial.
Prerequisites for this course are English Composition and critical thinking or logic; and passage of WEPT test or English 375.

This course counts toward the fulfillment of the General Education requirements in Category A, Communication and Critical Thinking.

It does *not* count toward fulfillment of the General Education requirements in Category C, Arts and Humanities.



Humanities



Hutchins School of Liberal Studies

The Hutchins School of Liberal Studies is an interdisciplinary school offering lower-division students an alternative General Education Program, and upper-division students a major in Liberal Studies leading to a B.A. degree. A Minor in Integrative Studies is also offered.

The Hutchins School has several distinctive features:

—An emphasis on active participation in one's own education, on self-motivation, and on "learning to learn."
—Small, seminar-type classes.
—Close cooperation and a feeling of community among students and professors.
—A unified General Education program, in which courses freely combine material from the humanities, the social sciences, and the natural sciences.
—A diverse faculty, each member trained in more than one field of study, to help students learn how to approach a problem from several points of view.
—Courses organized around themes or questions, rather than around the traditional division of subject matter into disciplines (see course descriptions below).
—Frequent opportunities to engage in independent study projects.

The Hutchins School aims to give each student both the structure needed for intellectual development and the flexibility needed for personal growth. To this end, the student works closely with a faculty advisor in planning a program that will suit his or her individual interests while also providing the basic skills necessary to pursue those individual concerns.

Whatever their particular interests, all Hutchins students are strongly encouraged to learn to read perceptively, to think both critically and imaginatively, to express their thoughts and feelings in writing, speech, and other media, and to make productive use of dialogue and discussion. In short, Hutchins asks its students to take themselves seriously as readers, writers, and thinkers.

This approach greatly assists students in their preparation for a wide variety of careers in which *creative, independent thinking* and *effective communication* are the prime requisites. Hutchins School graduates do especially well in teaching, counseling, social services, law, media, journalism, and many types of business. They have entered graduate programs in fields as diverse as American studies, anthropology, English, history, library science, management, religion, sociology, and theatre arts.

Hutchins School courses are open to students majoring in other fields, and Liberal Studies majors are encouraged to take courses in other departments, or even to pursue a minor in an area in which they have a special interest or hope to be employed.

Students seeking a Multiple-Subject teaching credential with emphasis in Elementary or Early Childhood Education can enroll in the multiple-subject option of the Liberal Studies major. For more information on the requirements see page 99 of this catalog. Students may transfer to another program at the end of any semester without loss of credit successfully completed in the Hutchins program.

Provost:

Frederick Rider

Faculty:

Les K. Adler, Susan Barnes, Maurice Blaug, Michael Coleman, Ardath Lee, Lu Mattson, Lou Miller, Edgar Morse, J. Anthony Mountain, Warren Olson, Jeannine Schuler-Will, Jacqueline Strain, Richard Zimmer

Department Office:

Cluster Schools 44, phone (707) 664-2491

Bachelor of Arts in Liberal Studies

Admission

The Hutchins School accepts students at any undergraduate level (freshman, sophomore, junior, senior) either for the Fall or Spring semester. Students seeking admission to the Hutchins School should list "Hutchins School" as their major when applying to Sonoma State University (code: # 49015). Students must also submit an application directly to the Hutchins School. This application form may be obtained at the Hutchins School office, Cluster Schools 44, or by writing to the Provost of the Hutchins School, Sonoma State University.

Liberal Studies Degree Requirements

Students must fulfill the degree requirements specified for all graduates of Sonoma State University. To graduate with a Major in the Hutchins School, each student must complete:

General Education Requirements:
- The Hutchins School lower division General Education program, plus 3 units of mathematics and 9 upper division units of SSU approved General Education*

OR

- The Disciplinary General Education lower division program and 9 units * of the upper division General Education program at SSU, or at another institution and approved by SSU.

Hutchins Major
- 40 units of upper division courses taken in the Hutchins School (see Upper Division)

Electives
- Taken in the Hutchins School or elsewhere at SSU—a sufficient number of units to total 124.

	Units
Total	124

Lower Division: Interdisciplinary General Education Program

The lower division program of the Hutchins School fulfills, with the exception of mathematics, all the Sonoma State University General Education requirements. The program consists of four interdisciplinary seminars of 12 units each (Liberal Studies 101, 102, 201A/B/L, and 202, described below).

Each of these seminars consists of 10 to 15 students and a single instructor. Learning proceeds by a process of reading, writing, and discussion, in which each student is urged to take an active part. A weekly lecture or film supplements the discussions. Frequent papers and research projects develop skills that will be useful in future study. Regular tutorials help students to improve their writing. A variety of experiential exercises, independent projects (both scholarly and creative), occasional field trips and extracurricular social gatherings enrich the seminar. The emphasis throughout is on the critical examination of contemporary problems in their historical context. Each student is expected to arrive at conclusions which are both personal and well-informed.

At the end of every semester the student receives an official grade of Credit or No Credit. The student also is given a copy of a detailed, graded evaluation of his or her work. This is placed in the student's Hutchins file but not entered on the official university record or used to compute a grade point average. This evaluation assesses the student's cognitive skills, seminar participation, understanding of the course content, writing skills, independent project, and special course assignments. A written commentary indicates the way in which the student should improve in order to become an effective, life-long learner. Thus, the evaluation conveys a great deal more information than does a single letter-grade. The unofficial grades can, at the student's request, be made available to other schools agencies, or prospective employers who need a quantitative measure of his or her abilities.

* Hutchins upper division students who select the Multiple Subject option to secure the teaching credential are exempt from this 9 unit requirement.

A student who does not work well within the Hutchins program may receive "Credit" with a probationary or terminal qualification. If the student is terminated, or remains on probation for two semesters, he or she must transfer out of the Hutchins program. Application for re-admission may be made after the student has spent at least one semester in the Disciplinary General Education program.

Lower Division Course Offerings

101. The Human Enigma
(12)

Drawing on materials about small-scale societies, ancient Greek culture and contemporary civilizations, this course concentrates on Western values, the concept of human nature, the growth of self-awareness and the development of scientific and abstract thought. Consideration is also given to the contribution of Classical Greece to the modern world of computer high technology. (Fall Semester)

102. Exploring the Unknown
(12)

An investigation of the meaning and limits of knowledge with respect to the nature of the mind and physical reality. These issues are pursued through several different but interrelated fields of study including literature, art, philosophy, and science. The course considers Newtonian and quantum mechanical theories of physical reality, the religions of varied cultures, the functions of myth and religious language and includes a brief survey of nonordinary states of consciousness. The term concludes with a section focusing on death and the meaning of life. (Spring Semester)

199. Student Instructed Course
(2)

May be repeated for credit

201A. In Search of Self
(8)

Focuses on the individual, exploring how social environment, personal history and unconscious processes influence our perceptions and actions. This course develops a fuller understanding of these processes through scientific investigation and creative expression, employing materials drawn from biology, psychology, sociology, literature and the arts. (Fall Semester)

201B. The American Experience
(4)

An examination of the major historical, political, social and economic components of the American Experience. This course satisfies the state code requirement in U.S. History, U.S. Constitution and California State and Local Government. (Fall Semester)

***201L. Laboratory**
(1)

Explores the biological aspects of the human "self"—the body—and the process of scientific inquiry.

202. Challenge and Response in the Modern World
(12)

An examination of modern accomplishments and problems that have derived from the mechanical model established in the 17th and 18th centuries. Attempts made to alter this paradigm are also considered. Focus is placed on the Scientific Revolution, Industrial Revolution, 19th century social and psychological theories, and the hopes and fears generated by the political revolutions and the scientific-technological innovations of the last one hundred years. (Spring Semester)

Upper Division

The Hutchins School major consists of 40 units and leads to a B.A. in Liberal Studies. One option in the major, the Multiple Subject option, fulfills the academic requirements for the Multiple-Subject Elementary or Multiple-Subject Early Childhood Emphasis Credential Programs (see pp. 106ff.)

The major has several components, designed to insure both breadth and concentration and to involve the student in both cooperative and independent styles of learning:

—All upper division students are required to take the CORE Seminar Program:
301A Society and Self (3)

* Laboratory fee is charged in connection with this course. It is payable at class sign-up.

301B The Individual and the Material World (3)
401A Human Experience and the Arts (3)
401B Consciousness and Reality (3)

The four core seminars are offered sequentially over four semesters. (Students who completed the lower division General Education program in the Hutchins School are exempt from this requirement.)

—During their first semester, all upper division students new to Hutchins are required to take Liberal Studies 302, *Introduction to Independent Study* (2 units). In subsequent semesters, students may, if they wish, take additional independent study up to a total of 16 units.

—Students have a wide latitude of choice among *elective seminars* to complete the remainder of the upper division program. New seminars are added to the curriculum each semester. A representative list appears under "Electives," below.

—*Internships*, involving study in connection with off-campus employment can also be counted toward the major (see below).

—All students except those who select the Multiple Subject option complete a *Senior Project* (Liberal Studies 402, 1–4 units), which may be a thesis, a creative project, or an internship. This project affords students an opportunity to draw together their learning, insights and activities in finished form and serves as a means of unifying their educational experiences in the Hutchins School.

Adjustments to the above requirements may be made under special circumstances. For instance, a student of proven ability whose interests require more elective classes may petition the faculty for permission to take fewer than 4 (but not less than 1) of the core seminars. A student who has demonstrated an ability to do independent work may seek faculty approval to do more than 16 units of independent study. More extensive departures from the common requirements are discussed in the next section.

Please note: A student entering the Hutchins upper division with a grade point average of 2.0 or below will be placed on probation for one semester. Any student whose work proves unsatisfactory in quality or inappropriate to the program will not be allowed to continue in the Hutchins School.

SPECIAL OPTIONS WITHIN THE MAJOR

Multiple Subject Option: See page 107.

This option, which leads to a B.A. in Liberal Studies, is designed primarily for students who intend to earn a California Multiple-Subject Elementary or Multiple-Subject Early Childhood Emphasis Credential. Students completing the Hutchins "waiver program" need not take the National Teachers Examination. Those seeking the Multiple-Subject credential should make an appointment with the Multiple-Subject (Ryan Act) Academic Advisor in the Hutchins School at the beginning of their first semester for assistance in planning their Multiple-Subject academic program. They should also contact the SSU School of Education for information about the series of professional preparation courses which may be completed concurrently with the Hutchins Multiple-Subject Option. For information on minors that are especially suitable for Liberal Studies majors pursuing the elementary teaching credential see p. 44 for a description of the Applied Arts minor and the University's special bulletin on *Programs in Teacher Education*.

For further information on credentials and requirements for professional education programs see the special bulletins and p. 106 of this Catalog.

Requirements:	*Units*
Interdisciplinary Core Seminars	9
Three Core Seminars to be selected from Liberal Studies 301A, 301B, 401A, 401B	9
Liberal Studies 302—Introduction to Independent Study	2
English	6–7
A. English 379—The Study of Language	3
or	
Liberal Studies 327AB—The English Language	4
and	
B. Liberal Studies—elective seminars dealing with selected issues in English	3
or	
Humanities 300—Written and Oral Analysis	3
Natural Sciences and Mathematics	12–13
Mathematics	
A. Lower division mathematics course.*	
B. Math 300—Theory of Arithmetic	3
Natural Sciences	
A. Lower or upper division course in physical or biological science *	3
B. Biology 314	3
or	
Biology 332	3
or	
Liberal Studies 322—Microcosm-Macrocosm (Biology 115 or its equivalent is prerequisite for all courses under B.)	4
C. Liberal Studies 485—Science and Society (Spring)	3
Social Sciences	3
Liberal Studies elective seminars dealing with selected issues in the social sciences	3
Humanities	3
Liberal Studies elective seminars dealing with selected issues in the humanities	3
Recommended:	
Liberal Studies 354—Masterpieces of the Humanities	3
or	
Liberal Studies 380—Exploration of Humanistic Disciplines	3
(Students who have not taken course work in fine or performing arts [Art, Music, Theater Arts, or Dance] will be advised to do so.)	
Electives	3–6
In consultation with an advisor, students will select additional upper division elective courses, independent study, or internship, to complete the major of 40 units.	
Total Major Units	40

Note: For the completion of the waiver program, students must complete eighteen to twenty-four units in each of four areas: English, humanities, social sciences, and natural sciences/mathematics, for a total of

* These units do *not* count toward the major; they do, however, count toward the credential.

84. These units accrue from all appropriate lower and upper division courses that the student has taken at accredited universities. Within each of these areas, units should be distributed over a variety of courses sufficient to indicate breadth rather than narrow specialization in a discipline. Students seeking the Multiple Subject Credential may also wish to pursue a Minor in Applied Arts (see p. 44).

Individually Designed Plan

Strongly self-motivated students may develop a course of study focusing on a problem or area of interest not fully covered in our regular classes. In consultation with an advisor, the student combines Hutchins core and elective courses, extensive independent study, a senior project, and complementary courses offered outside of Hutchins to form a coherent program.

Children's Center Permit

Some of the courses which will partially fulfill the requirements for the Children's Center Instructional Permit and the Children's Center Supervision Permit can also be taken in Hutchins. (See p. 106)

Internship/Field Experience Plan

Students considering professional careers in law, politics, the media, health professions or business may want to consider an internship. Students interested in combining academic work with a job-related or volunteer placement may choose with the consent of the Hutchins Internship Coordinator a series of courses leading to the Hutchins Internship. Students should have some volunteer experience such as Community Involvement Program (see LIBS 395) or work-related experience before beginning an internship. Normally, in the semester before the internship, the student will prepare a substantial independent study project (3 units) relating to the placement. During the internship, the student will enroll in the Internship Seminar (LIBS 398, 3 units). An analytical or theoretical paper concerning the student's work in the placement is required. Students may waive the Internship Seminar if their placements are not in the campus service area (e.g., placements in Sacramento or Washington, D.C.).

Minor in Integrative Studies

The Hutchins Minor is designed to help the student in a traditional discipline understand the relation that his major field of study bears to a number of other areas of inquiry and expertise.

The minor consists of 20 units, taken in the Hutchins School, and is distributed as follows:

—*Introductory Core Course* (3 units). During the first semester of upper division work each student will enroll in whichever core seminar is currently being offered (either Liberal Studies 301A, 301B, 401A, or 401B). These seminars are intended to prepare the student to make informed decisions about contemporary problems in the social, artistic and scientific realms and to understand and cultivate the insights and values derived from history, philosophy, psychology, religion, and the arts.

—*Introductory Independent Study Project* (2 units). A Hutchins professor with expertise in the general area of the student's major field will help him or her design a project relating some aspect of that field to other areas of study, and will continue to advise the student in planning work to complete the minor.

—*Hutchins Elective Seminars* (13 units). In consultation with his or her minor advisor, the student will select interdisciplinary Hutchins courses totaling 13 units. These courses need not be chosen because of their specific relationship to the student's major. Rather it is intended that through these courses the student acquire a breadth of exposure to the ideas of a number of disciplines.

—*Senior Independent Study Project* (2 units). The student will design a final project which specifically relates his or her major field of study to other disciplines. The minor advisor will help arrange for the student to work with the Hutchins faculty member whose areas of expertise bear most closely on the student's major area of study or of interdisciplinary interest. Whenever possible, arrangements will be made to obtain assistance, at least in evaluation of the project, from a faculty member from the student's major department.

HUTCHINS UPPER DIVISION COURSE DESCRIPTIONS

Required Courses:

301A. Society and Self
(3)

An introduction to the complex interrelationship between the individual and society. Social interest, self interest, the role of the individual in a social context and socialization and character formation will be studied within the framework of contemporary social issues.

301B. The Individual and the Material World
(3)

Man's approach to the material world is twofold: knowing it as object, and relating to it aesthetically and spiritually. The first is exemplified in the Copernican, Darwinian, and Einsteinian revolutions; the second in the writings of poets, philosophers and ecologists. The seminar will examine both approaches.

302. Introduction to Independent Study
(2)

To be taken in the first semester of study in the upper division major.

401A. Human Experience and the Arts
(3)

Communicative and visual arts will be explored to determine how they shape and are a product of the process of human symbolic interaction. The course will consider the expression of human values reflected in architecture and urban design and will study the roles literature, philosophy, and art have had historically. Consideration will also be given to current expressions in the arts.

401B. Consciousness and Reality
(3)

A survey of the structures of consciousness and the processes of reality construction which are fundamental to human experience and inquiry in any field. The various seminars may cover the concepts of consciousness and the unconscious found in such fields as phenomenology, psychobiology, sociology, psychoanalysis, transpersonal psychology, Eastern philosophy and intellectual history.

Electives:

305. Hutchins Community Course
(1)

This is a weekend course which involves the entire faculty of the Hutchins School. There are guest lecturers, workshops, small group discussions, and a variety of readings focusing on an interdisciplinary topic of contemporary concern to be announced. Credit/No Credit only. May be repeated for credit.

310. Independent Study for Juniors
(1–4)

Prerequisite: LIBS 302 or equivalent; approval of appropriate faculty member. May be repeated for credit.

315. Special Studies
(1–4)

Prerequisite: LIBS 302 or equivalent; approval of appropriate faculty member. May be repeated for credit.

320. Elective Seminars
(3)

New topics will be offered each semester. Schedule and descriptions available in Hutchins office. Recent offerings have included Music and Religion, Male Sexuality, New Visions in the Arts, The Feminine Psyche, and Seeing Nature Whole. May be repeated for credit.

322. Microcosm and Macrocosm
(4) Blaug

An interdisciplinary course which explores the breadth and interrelatedness of scientific explanation. While designed for students pursuing the Multiple-Subject Option, this course is open to all upper division students. Prerequisite: Biology 115 or equivalent course or consent of instructor.

326. Censorship and the Arts
(3) Mattson

What "shocks" a society says much about its needs and values. This seminar will examine some representative examples of society's attempts to rule certain things out of its public consciousness. Discussions focus on Shaw, Ibsen, Lawrence, Wilde, Selby and others; banned art and music; legal decisions governing media.

327A. The English Language
(2) Mattson

Taken in conjunction with LIBS 327B, this course is an intensive review of the grammar and syntax of the English sentence. Intended primarily for teaching credential students.

327B. The English Language
(2) Mountain

Taken in conjunction with LIBS 327A, this course supplements the study of grammar with the study of fiction, poetry, drama, and the essay, with attention to the history of the English Language.

328. Growing Up In America
(3) Adler

An interdisciplinary seminar concentrating on the changing concept and nature of childhood in European and American history.

329. Perspectives on the Human Body
(3) Blaug

People have always had to come to terms with the strengths and limitations of their physical bodies. The human organism acts in both a social and a physical world. This course will be concerned with the ways in which the body's requirements for food, clothing, shelter, communication, health and beauty have been expressed throughout human history. Materials are drawn from the social sciences, humanities, human biology, and ecology.

330A. Children Should Be Seen and Heard
(3) Barnes and Zimmer

A close inspection of child development through the windows of Western culture, emphasizing relevant social and cultural factors as well as major theoretical views of physical, emotional, and personality growth. Subjective views of childhood experience will be contrasted with objective observations. Readings from Erikson, Freud, Hall, Goodall and others.

330B. Children Should Be Seen and Heard
(3) Barnes and Zimmer

Course focuses on selected topics in child development and socialization not covered in A: abnormality, testing, play and therapy, and social-psychological issues.

332. Passages
(3) Barnes and Zimmer

This course explores the new field of naturally developing adult life crises. The issues are explored through authors such as Sheehy, Erickson, Lessing and Fitzgerald. It is designed to complement our offerings in child development, to show that developmentality in all ages must be considered.

333. Androgyny
(3) Barnes

Cultures are described as matriarchal or patriarchal, people as male and female, qualities as feminine and masculine. How rigid are these distinctions? What happens when a culture or person becomes extremely one-sided? Is the state or attitude of androgyny possible, and if so, how does it manifest itself?

335. Perception and Form in the Arts
(3) Schuler-Will

Rudolf Arnheim's *Art and Visual Perception,* one of the most important attempts to understand the psychology of perception and the visual arts, will form the core material. We will study dynamics of line, color, motion and space through a variety of art forms. Two museum visits are included. Several articles on the philosophy of visual thinking will be studied as well. Class discussions will involve extensive art slide viewing and interpretation by the group.

345. Literature and Society
(3) Adler and Mattson

This seminar deals with the interrelationship between literature and society during several periods of American cultural development. Selected authors ranging from American transcendentalists through recent American writers are considered along with their relationship to American social, political and economic development.

352. Science and Values
(3) Morse

Relationships between the way the physical world works and the needs and desires of people; how science and knowledge serve human needs. Video tape and films that raise issues such as the Pill, I.Q., genetic research, etc., provide discussion regarding decisions we confront.

354. Masterpieces of the Humanities
(3)

This seminar examines in detail a number of works from the humanities which have come to be considered masterpieces. While we will specifically be interested in each work and what has made it to be highly regarded, we will also study various questions in intellectual history as they are made appropriate by the works themselves. Seminar materials change over four semesters reflecting an historical sequence from classical to modern times. May be repeated for credit.

355. Economics and Democracy
(3) Miller

An investigation of major economic questions and the political structures under which they are resolved. Topics include employment, monetary policy, government regulation, and environmental issues.

360. Seminar
(2)

Topics will vary from semester to semester. May be repeated for credit.

361. Interdisciplinary Tutorial
(1-4) Staff

Topics and material for this course will be developed individually by instructors and will vary from semester to semester. May be repeated for credit.

362. Religious Consciousness
(3) Coleman

This course will attempt to discover and delineate universal features of religious experience by means of a comparative study of the major religions. It will also deal with the major critics of religion such as Freud, Nietzsche, and Dostoevski, and modern studies that pertain to religious issues.

370A Seminar: Creative Processes
(2)

A series of exercises designed to give students fuller access to their capacities and to provide practice in putting those capacities to productive use—in the arts, in problem-solving, and in daily life. May be repeated for credit.

370B. Seminar: Self-Awareness
(2)

Methods of exploring and expanding self-awareness will vary from semester to semester, and may include such techniques as autobiography, intensive journal-keeping, Gestalt exercises, dream analysis, meditation, etc. The course may be repeated for credit.

380. An Exploration of Humanistic Disciplines
(3)

A study of the skills and patterns of inquiry and expression employed in philosphy, art, music, theatre, and literature to discover the distinctive character of each. Such inquiry will be based on actual experience in the disciplines.

395, Community Involvement Program
(1-4)

Students volunteer for unpaid placements within the community approved by the coordinator of the Hutchins Internship/Field Experience Program. These placements include work in social service, education and the media. Students participate in four meetings per semester focusing on work related issues; they also prepare a short paper about their placement and keep a time log. Students may take up to 6 units in C.I.P., a maximum of four in any one semester. One unit is equivalent to 30 hours of volunteer work per semester. C.I.P. units count as elective credit, not as Hutchins major credit. See all-University regulations covering C.I.P. Credit/no credit only.

398. Field Experience
(3)

This course is designed to provide supervised field experience to students in their chosen field. May be repeated for credit. Credit/no credit only.

399. Student Instructed Course
(2)

Credit/no credit only. May be repeated for credit.

402. Senior Project
(1-4)

May be repeated for credit.

410. Independent Study for Seniors
(1-4)

Prerequisite: LIBS 302 or equivalent; approval of appropriate faculty member. May be repeated for credit.

412. Interdisciplinary Approaches to the Social Sciences
(3)

A study of the major foci of the social sciences. Social-scientific paradigms and methodological issues are discussed as are the distinctively applied questions addressed by the social sciences. Specific topics vary from semester to semester but are drawn from among the fields of anthropology, economics, ethnic studies, geography, history, political science, psychology, and sociology.

415. Special Studies
(1-4)

May be repeated for credit.

420. Elective Seminars
(3) Staff

These courses will be offered under different titles each semester, as new topics arise. Past offerings have included Consciousness and History, Sleeping and Dreaming. May be repeated for credit.

422. Contemporary Political Analysis
(3) Miller and Zimmer

An examination of the interplay between changes in social organization and different political systems. Students are expected to do field research and library research on the different levels. Readings include Durkheim, Harrington, Nisbet, Harris, Adams, et al.

424. Expressionism in the Arts
(3) Schuler-Will

Expressionism in twentieth century arts as a concept comprising a mystical and revolutionary world view embracing painters, sculptors, architects, composers, writers. New directions and interrelations in the arts at the turn of the century that laid the foundation for modern art forms. Readings from Eliot, Jarry, Joyce, Kafka, Kandinsky, Nietzsche.

425. The Feminine Experience
(3) Barnes

This course will examine fiction and non-fiction written by women with the intent to analyze, explore and clarify the concept of feminine power. We will employ Jung's concepts of anima, animus and androgyny in our exploration.

426. Fiction and Natural Philosophy
(3) Morse

An interdisciplinary seminar in which we will read and discuss a wide variety of novels to discover how different authors use scientific, philosophical, and theological themes in writing fiction. We also read and respond to the student's own fiction and/or essays.

428. The Law: An Interdisciplinary Approach
(3) Zimmer

A workshop-seminar on many facets of the law with a focus on law as a necessary consequence of social organization. Material will be drawn from anthropology, sociology, and political science. Students will engage in community research on selected topics. Readings: Malinowski, Hoebel, Fuller, Kaplan.

430. Love and the Growth of Self
(4) Coleman

This seminar assumes that there exist higher forms of love and that these are intimately related to self-transformation. How are higher forms of love to be understood? How are they achieved? Do we change our ways of loving to undergo self-transformation? Or do changes in the nature of love result from self-transformation?

432. The Past Dimension: Studies in the Historical Imagination
(3) Adler, Mountain, Zimmer

An interdisciplinary seminar considering the distinction and interwoven relationship between history and literature. What is the relation between documented fact and imaginative re-creation? Where do fiction and historical fact combine and where do they separate? Readings from Henry Adams, Becker, Styron, Mailer, and others.

435. Discovery of the Unconscious
(3) Barnes

The concept of an "unconscious" is a relatively new discovery in Western thought. This course will focus on individual and cultural manifestations of the unconscious in art, literature, religion and psychological awareness throughout human history. This course will combine theoretical and personal approaches to the unconscious.

436. Themes in the Literary Humanities
(3) Mountain

This seminar investigates the way in which literary works both define the cultures they come from and express deep changes occurring in those cultures. Specific themes for the seminar are chosen each semester the seminar is offered.

442. Sources of Modern Womanhood: The Experience and Legacy of Victorian Women
(3) Strain

In this seminar we will try to reach an understanding of those Victorian values and patterns of behavior associated with women that have persisted from the mid-nineteenth century into the late twentieth century.

460. Independent Study Tutorial
(2) Staff

The topics and materials for this course will be developed individually by instructors and will vary from semester to semester. May be repeated for credit.

465. Experiencing History
(4) Adler and Miller

An experimental course employing simulation techniques to re-create in the classroom the experiential reality of current and historical events.

485. Science and Society
(3)

This course will convey to students the connection between scientific discovery and their own lives; the nature of the continuum between pure science and technological application; science's "Western" context; the concept of scientific knowledge as the tested consensus of scientists; and selected studies of contemporary issues.

Other Elective Seminars taught in the past and which will be repeated include: Creativity (Blaug, Mattson, Barnes); Becoming a Sexual Person (Rider); Work, Leisure and Society (Olson); The Next Ten Years (Zimmer); The Future of Relationships (Zimmer); Discovery of the Primitive (Schuler-Will); Aesthetics and Social Space (Schuler-Will, Zimmer); Arthur Koestler and the 20th Century (Adler); Sexuality in Historical Perspective (Rider); Transformations (Coleman); Portrayals of Women in the Humanities (Strain); Seeing ature Whole (Blaug); Exploring America (Miller); Energy Politics and Policies (Miller); Observing and Recording Human Behavior (Miller).

Interdisciplinary Studies (ITDS) coordinates a number of programs and courses, bridging established disciplinary and departmental offerings, and provides a valuable stimulus to interdisciplinary and cross-cultural studies within the liberal arts and sciences curriculum of the University.

Available through Interdisciplinary Studies are:

Special Major (B.A./B.S.)
Special Major (M.A./M.S.)

The Special Major Program (B.A./B.S. and M.A./M.S.) is designed for students who wish to prepare and follow individualized, interdisciplinary undergraduate or graduate courses of study which cannot be pursued through traditional majors. For requirements, see description of SPECIAL MAJOR below.

Coordinator:

Robert Tellander

Department Office:

Advising Center or Cluster School 58, Phone (707) 664-2762

INTERDISCIPLINARY STUDIES COURSES

200. Introduction to Library Research
(2)

Introduction to general reference tools. Practice in using card catalog, periodical indexes, microforms, government documents and general reference works. Designed to assist future research. A basic level course open to all students. (Cross listed as English 292)

300A. Advanced Library Research Tools
(1)

Provides in depth study of reference works in different disciplines. Library assignments will be the preparation of three pathfinders or guides to materials to major subject divisions. (Cross listed as English 392A) Prerequisite: ITDS 200

300B. Bibliography
(1)

Preparation of an annotated bibliography on a limited topic and writing of a search strategy describing the research methods employed. (Cross listed as English 392B) Prerequisite: ITDS 200

495. Special Studies
(1–4) (For approved and classified Special Majors Only)

499. Senior Paper or Project
(3)

A senior paper or project to be prepared under the supervision of the student's faculty committee. The senior paper or project should present the synthesis of the student's interdisciplinary program of study. The paper or project will be graded by the student's faculty committee and will be presented orally to the ITDS Committee at the completion of the student's senior year.



Interdisciplinary Studies

595. Special Studies
(1–4) (For approved and classified Special Majors Only)

599A. Thesis and Interdisciplinary Research
(2–4)

599B. Thesis and Interdisciplinary Research
(2–4)

599A/B must be taken sequentially and for a total of 6 units. For classified Special Majors M.A./M.S. only.

SPECIAL MAJOR

The Special Major program is designed for students who wish to prepare and follow individualized, interdisciplinary undergraduate or graduate courses of study which cannot be pursued through traditional majors.

Bachelor of Arts/Sciences in the Special Major

The purpose of the Special Major is to provide a carefully controlled opportunity for exceptional students to design, with faculty approval, a course of study leading to a Bachelor of Arts or a Bachelor of Sciences degree when legitimate academic and professional aims are not adequately accommodated by standard degree majors. Such a provision is not intended to bypass normal graduation requirements or substitute for standard degrees included among existing and projected programs in the approved academic master plan.

CAUTION: This is a unique major that suits individual goals and is personally valuable, but it may pose professional obstacles. Prerequisites for higher degrees and career goals should be reviewed before proceeding with a Special Major.

At the present time, a special major cannot be used to satisfy the requirements for a teaching credential program unless the student passes the National Teachers Examination. For additional information, the student should contact the Education Department. As a supplement to an approved teaching major, a Special Major could be a distinct advantage. By itself, it might be too specialized unless it meets the criteria for approved majors commonly taught in the public schools.

Procedures

A student should be thoroughly acquainted with the purpose of the Special Major, the regulations and procedures pertaining to the major and the expectations of the persons who authorize its approval.

I. In order to be considered for the Special Major program the student must have more than one full year of academic work i.e., 31 units or more of academic work for the Special Major still to be completed to meet minimum degree requirements (i.e., 124 units—B.A., 132 units—B.S.). The application proposal includes an acknowledgment by the student of this requirement.

II. It is recommended that a Special Major applicant have a grade point average of at least 3.0.

III. Before developing a Special Major application, the student must consult with the Coordinator of Interdisciplinary Studies (ITDS).

IV. The student assumes responsibility for contacting academic advisors in the departments/programs in which he/she wishes to take courses, and plans with the advisors a coherent, original and feasible course of study. There must be at least two advisors, each from a different department/program.

V. The student then submits an application in duplicate to the ITDS Coordinator. The application package consists of the following:

A. Application cover sheet (form available in ITDS office).

B. Transcripts of all college work completed. (It is the student's responsibility to make available transcripts, including those concerning SSU coursework.)

C. A written rationale (limited to two typed pages) for pursuit of the Special Major (BA/BS), including:
   1. Title of the Major;
   2. Description of the interdisciplinary nature of the program of study;
   3. Explanation of why existing programs do not meet the student's educational needs;
   4. Names and signatures of the faculty members who are advisors for the major;
   5. A list of the Core (24–26 units) courses and Supporting (24–26 units) courses which constitute the Special Major program of study.
      a. The unit total in the major should be 48 (minimum) to 50 (maximum). No courses applied to General Education requirements or professional Education courses may be included in the Special Major.
      b. Core courses must consist of upper division (300/400 level) courses only. All Core courses must be taken for letter grade (i.e., A–F). No student-instructed courses may be included in the Core courses.
      c. Supporting courses:
         (1) May include some lower division courses (exclusive of those applied to General Education requirements).
         (2) May overlap, to some extent, with a second major; identify any such overlapping courses.
         (3) May be taken CREDIT/NO CREDIT. (cf. current SSU catalog regarding constraints concerning Credit/No Credit courses.)
      d. There must be descriptions of any Special Studies (495) courses included in the Core/Supporting list. A description must include name and signature of the faculty sponsor and a statement concerning the purpose, mode of study and method of evaluation of the special study. (N.B. Special Studies are limited to a maximum of 4 units per course; a student may have *in all areas for graduation no more than 12 units of special studies;* a student may not pursue in special studies a course which is listed in the catalog and which is normally offered within a two-year period.)

VI. Advisors should be provided by the student with a copy of the Special Major application.

VII. There are two deadlines each semester for filing a Special Major application. (For current deadlines, see the Schedule of Classes.) Filing an application with the ITDS Coordinator does not assure acceptance into the Special Major program. Each proposal must be reviewed by the ITDS Subcommittee on Special Majors, which submits recommendations for approval (or rejection) to the University Tutor.

VIII. As soon as possible after the program of study is approved, the student should file a Change of Major petition with the Registrar's Office. The petition must be signed by the ITDS coordinator.

IX. Upon approval of a Special Major, the major advisors are provided by the ITDS Coordinator with a copy of the approved program of study. In addition, a file is established for the student in the ITDS COORDINATOR's office. Any changes in curriculum are placed in this file via a letter submitted to the ITDS Coordinator; the designated changes must be accompanied by advisors' signatures of approval.

X. Students should maintain close communication with their Special Major advisors, who are responsible for recommendations for graduation "with distinction."

Master of Arts/Sciences in the Special Major

The purpose of the Master of Arts/Sciences in the Special Major degree program is to make available to exceptional students a flexible interdisciplinary graduate curriculum. The program is intended for those students whose particular interests, backgrounds, or professional objectives are not served by traditional M.A. degree programs. Admission is limited to students whose individualized programs can be organized around a special topic or a cross-disciplinary inquiry which is original and involves work in more than one department. Interested students should contact the Coordinator of the Institute of Interdisciplinary Studies, who initiates the application and screening process. The Coordinator also helps the student identify three faculty advisors from at least two departments to serve as the student's committee.

Requirements for Admission to Master of Arts/Science in the Special Major:

1. Admission as an unclassified graduate student.
2. A grade point average of at least 3.0 for the last 60 units of college work attempted.
3. The GRE Aptitude Test is *required before* filing the application. Other graduate achievement tests may also be required by participating departments from the Special Major student.

Additional Guidelines

1. Special Majors Masters students should take *at Sonoma State University* two graduate-level courses exclusive of Special Studies, Internship, and Thesis/Project. This is so that the University can be assured that there has been adequate and appropriate peer interaction with other graduate students, and that an appropriate proportion of the graduate courses taken were offered by the institution granting the degree. Thus, approximately one-half of the graduate level units required for the Master's degree should be in Sonoma State University graduate courses which have a format other than individualized study.
2. Graduate Special Majors programs should not duplicate existing graduate programs in public universities in the greater Bay Area. The reason for this guideline is that the Special Major program should be reserved for students whose special interest crosses disciplinary lines and finds appropriate faculty expertise at Sonoma State University. The Special Major should not be used to duplicate formally structured programs at other institutions within commuting distance.

Procedures

The candidate for this degree must comply with the regulations governing graduate study at Sonoma State University, as described in the SSU catalog. In addition, the student must fulfill the general requirements for the Master's Degree as well as the following:

1a. Submit to the Graduate Studies Committee (through the Institute of Interdisciplinary Studies) an application for a Special Major M.A./M.S. Application forms are available in the ITDS Office and the Office of the Dean of Graduate Studies.
It is *important* to confer with the ITDS Coordinator *before* you submit your application. The ITDS Coordinator should also be consulted in the initial stages of planning the course proposal.

1b. The application form must be signed by the three faculty members of the student's Master's Committee and the Chairperson must be identified.

2a. A proposed program of study specifying the units of required coursework (minimum 30–maximum 32) must be included in the application.

2b. Complete at least 15 units of the required 30–32 units *AFTER* approval of the prgram of study by the Graduate Studies Committee.

2c. 21 of the 30–32 required units must be completed in residence.

2d. At least 15 of the 21 in-residence units must be graduate (500 level) courses, including a graduate course in research methods and a graduate seminar.

2e. A total of 6 units should be taken sequentially in 3 unit blocks for the preparation and completion of the thesis. ITDS 599 A/B is used by the student for this requirement.

2f. Only 6 of the 21 in-residence units may be Special Studies courses numbered 495 and/or 595.

2g. Only 9 units of extension or transfer credit (or combination of the two) can be included in the 30 units.

2h. Student teaching and student instructed courses cannot be included in the 30 units.

3. A written rationale for the degree program (see application form) and a description of the proposed thesis topic, signed by the student's Masters Committee, must be attached to the application form.

4. Attach descriptions of any Special Studies (495/595) courses or internship courses included in the program of study. A description must include name and signature of the faculty sponsor and a statement concerning the purpose, mode of study and method of evaluation of the special study/internship.

Foreign Language Studies

For students seriously interested in imparting an international emphasis to their baccalaureate work, the study of at least one foreign language is essential. Without the broadened cultural-linguistic flexibility and heightened self-understanding which result from learning a foreign language, one can see the world only through the filter of his own langauge and culture. The way to move beyond one's own innate nationalism to a truly international perspective is to learn the language, and therewith the habits and thought patterns, of another people.

The University offers foreign language programs in French, German, Spanish, and India Studies, with occasional courses in Russian, Japanese, Latin, Greek, and American Sign Language as well. The major programs (French, German, Spanish, India Studies) all offer various interdisciplinary study options, allowing students maximum flexibility in choosing a program that fits their specific needs. Please refer to the Foreign Languages section of the catalog, p. 126 ff., for a detailed description of each program.

Additionally, career advising programs are offered in each of the major languages, designed specifically for students who wish to combine their academic concentration with a career involving travel and/or correspondence abroad.

The paramount intent in all these courses and programs is to move students smoothly and rapidly towards genuine fluency in speaking, writing, and understanding the foreign language. The large number of Sonoma students who go on to apply their language skills to work or study abroad testifies to our programs' success in this endeavor.

International Studies Programs

Students who wish to pursue a course of study with a strong international emphasis can choose among campus-based major programs in foreign area studies, minors in International Studies and Teaching English as a Second Language (TESL), and foreign languages courses designed to meet specific academic and career objectives. Study Abroad opportunities can be integrated into all of these curricular options.

Foreign Area Studies B.A. Programs

In addition to the area studies options in the various Foreign Language programs mentioned above, the University offers an advisory plan entitled:

Special Major (B.A.) In International Studies

It is possible to develop an individually designed Special Major (B.A.) in a particular area of International Studies by drawing on relevant courses offered in several different departments. The *International Studies Minor* could form a core for an academic plan of this kind. Examples of the unique program possibilities available under this option include the following:



International Studies

Latin American Studies

Students interested in Latin America may design an interdisciplinary Special Major (B.A.) in Latin American Studies. A wide range of courses on Latin America is offered in the departments of Anthropology, Foreign Languages, Geography, History, Management Studies, Mexican American Studies, Politics and Psychology. Study in Latin America is available through an independent Study Abroad project or at the three Latin America study centers of the California State University International Programs in Brazil, Mexico and Peru. Students interested in developing a major in Latin American Studies should consult Professor Anthony White, History Department. Guidelines for the design of a Special Major appear on page 181ff.

Third World/International Development Studies

Students interested in the history, culture and problems of developing nations may design an interdisciplinary Special Major (B.A.) in Third World Studies. A varied selection of courses on the Third World is offered in the Social Sciences and the Humanities and may be combined and integrated in an academic program which prepares the student for living and working in Third World societies, as well as developing an understanding of non-Western cultures. Direct experience and study in Third World cultures is available through the California State University International Programs, at field stations directed by other CSU campuses, and through Independent Study Abroad projects. The CSU International Programs also offers an *International Development Studies* program in Sweden. Interested students should consult Professor Anthony White, History Department. Guidelines for the development of a Special Major appear on page 181ff.

Minor in International Studies

The Minor in International Studies is a 20 unit interdisciplinary program recommended for students preparing for professional, managerial and service careers in international affairs or business and complements majors in the social sciences, humanities and natural sciences. Recognizing the increasing interdependence of the world, the Minor is designed to increase the awareness and understanding of other cultures as well as develop a broader perspective on global issues and international relations. The Minor, therefore, provides an opportunity to explore and compare the social structures, cultures, political institutions and economic systems of other countries as well as study relations between them. It also permits the development of a concentration or emphasis on a particular country, culture or region.

Students interested in a Minor in International Studies should meet with the Program Coordinator to design their program prior to enrolling in courses in the Minor. The minor shall consist of 20 semester units which include one course from three of the following five subject areas and courses in at least two departments outside the student's major.

I. Societies and Environment

Anthro 340 Living in a Pluralistic World
Anthro 345 Human Ecology
Anthro 389 Ethnography of Communication
ENSP 301 The Human Environment
Geog 202 World Regional Geography
Geog 203 Cultural Geography
Linguistics 356 Speech Communities in Contemporary Society
Soc 460 Seminar: Comparative Sociology

II. Alternative Political and Economic Models

Anthro 346 Economic Anthropology
Geog 320 Political Geography
Geog 343 Economic Geography
Hist 345 Revolution in the Modern World
PolSci 350 European Parliamentary Democracies
PolSci 351 Totalitarianism and Authoritarianism
PolSci 452 Third World Political Systems

III. International Relations

Econ 303 International Economics
Geog 345 Third World Development
Hist 342 The United States and the Third World in the 20th Century
Hist 466 United States Foreign Relations
PolSci 342 International Politics and Foreign Policy
PolSci 345 Model United Nations
PolSci 444 United States Foreign Policy
Mgt 493 Introduction to International Business

IV. Regional and Foreign Language Emphasis

Any course in modern foreign languages or courses on any of the following regions or countries in the departments of Anthropology, Geography, History, India Studies, Political Science or Sociology:

Africa
Asia
Europe
India
Latin America
Middle East
Pacific Basin
Russia

V. Global Issues: Interdependence and Change

Anthro 363 Traditional Communities in Transformation
Econ 303 International Economics
ENSP 304 World Food/Population
ENSP 365 Appropriate Technology
Hist 301 Global Issues, Global Perspectives

Coordinator: Dr. Anthony White, History Department Stevenson 2070 664-2313

The California State University (CSU) International Programs offers students the opportunity to continue their studies overseas for a full academic year while they remain enrolled at their home CSU campus. The International Programs' primary purposes are to enable selected students to gain a firsthand understanding of other areas of the world and to advance their knowledge and skills within specific academic disciplines in pursuit of established degree objectives.

A wide variety of academic majors may be accommodated by the 26 foreign universities cooperating with the International Programs in 16 countries around the globe. The affiliated institutions are: the University of Queensland (Australia), the University of Sao Paulo (Brazil); the universities of the Province of Quebec (Canada); the University of Copenhagen (through Denmark's International Student Committee's Study Division); the University of Provence (France); the Universities of Hamburg, Heidelberg, and Tubingen (Germany); the Hebrew University of Jerusalem (Israel); the University of Florence (Italy); Waseda University (Japan); the Iberoamericana University (Mexico); Massey University and Lincoln University College (New Zealand); the Catholic University of Lima (Peru); National Chengchi University (Republic of China/Taiwan); the Universities of Granada and Madrid (Spain); the University of Uppsala (Sweden), and Bradford and Bristol Universities (the United Kingdom). Information on academic course offerings available at these locations is in the International Programs Bulletin which may be obtained from the International Programs representative on campus.

Eligibility for application is limited to those students who will have upper division or graduate standing at a CSU campus by the time of departure, who possess a cumulative grade point average of 2.75 or 3.00, depending on the program, for all college level work completed at the time of application, and who will have completed required language or other preparatory study where applicable. Selection is competitive and is based on home campus recommendations and the applicant's academic record. Final selection is made by the Office of International Programs in consultation with a statewide faculty selection committee.

The International Programs supports all tuition and administrative costs overseas for each of its participants to the same extent that such funds would be expended to support similar costs in California. Students assume responsibility for all personal costs, such as transportation, room and board, and living expenses, as well as for home campus fees. Because they remain enrolled at their home CSU campus while studying overseas, International Programs students earn full resident credit for all academic work completed while abroad and remain eligible to receive any form of financial aid (other than work-study) for which they can individually qualify.

Information and application materials may be obtained from International Student Programs, Village 102 or by writing to The California State University International Programs, 400 Golden Shore, Long Beach, California 90802-4275. Applications for the 1987–88 academic year overseas must be submitted by February 1, 1987.

International Programs



Linguistics

The fundamental concern of linguistics is with description and explanation of the inter-relatedness of thinking and speaking. This concern takes many forms: among others, inquiry into the nature of language as speech, as knowledge, and as communication; inquiry into the history of languages and how languages change; inquiry into how language is acquired, and into the nature of language learning and teaching.

The Linguistics Minor Program offers grounding in general linguistic principles, together with the widest possible selection of elective courses. Through this study plan, students are able to develop interests in particular areas of linguistics as strong complements to majors in related disciplines.

In addition to a 20-unit Linguistics Minor, the Linguistics Program offers a 24-unit Certificate Program (a.k.a. Career Minor) in Teaching English as a Second Language (TESL). The TESL Program is a Minor in applied linguistics with a specific focus: the application of (psycho/socio)linguistic principles and methods to the teaching of American English as a second/foreign language. For details concerning this course of study, see p. , or the fact sheet available from the offices of the Linguistics Program and Admissions and Records. For details concerning admission to the program and application for certification, consult the Linguistics Program Coordinator.

Note: The TESL course of study meets 24 of the 30 units required for alternatives in the Fifth Year Program in Education (see p. 108). Interested persons should contact the Linguistics Program Coordinator, and the Coordinator of Fifth Year Programs in Education.

Note: It is possible to develop a special interdisciplinary major with a strong emphasis in linguistics (see pp. 181). Interested persons should contact both the Special Major Program Coordinator, and the Linguistics Program Coordinator. For students wishing to develop a comparative and historical linguistics emphasis, the following language courses are particularly pertinent:

	Units
India Studies 101A—Elementary Sanskrit	3-4
101B—Readings in Sanskrit	3-4
Latin 101-102—Elementary Latin	3-3

Also, through the special emphasis in the Anthropology major (see p. 37), a student may create a course of study in anthropological linguistics which incorporates a number of the Linguistics Program courses.

Coordinator:

Shirley Silver (Anthropology)

Faculty:

Eli Katz

Program Office:

Stevenson 2026, phone (707) 664-2312
664-2944/2419

Minor in Linguistics

20 units, 12 of which must be in the following courses:

	Units
Linguistics 200—Introduction to Linguistic Studies	4
Linguistics 310—Phonological Analysis	4
Linguistics 311—Grammatical Analysis	4
	12

Electives

8 units to be chosen from other Linguistics courses and/or the following linguistically-oriented courses offered by established departments.

	Units
American Multicultural Studies 355—Language and Ethnicity	4
Anthropology 380—Language in Cultural Context	4
Anthropology 382—Language Change	4
Anthropology 386—American Indian Languages	4
Anthropology 389—Language and Communication	4
Anthropology 482A-B—Linguistic Field Methods and Laboratory	4-4
Anthropology 490—Topical Seminars in Anthropology	4
Computer and Information Science 150—Computer Programming I	4
Computer and Information Science 151—Computer Programming II	3
Computer and Information Science 158L—Introduction to LISP	3
Computer and Information Science 250—Assembly Language Programming	3
Computer and Information Science 255—Programming Languages	3
Computer and Information Science 354—Data Structures and Algorithmic Analysis	3
Computer and Information Science 452—Compiler Design and Construction	3
Computer and Information Science 480—Artificial Intelligence	3
Education 410—Second Language Pedagogy	2
English 341—Explorations in Language	3
English 379—Study of Language	3
English 489—Topics in English Linguistics	3
English 588—Seminar: Study of Language	3
Liberal Studies 327A—The English Language	2
Mathematics 454—Automata Computability and Formal Languages	3
Mexican American Studies 326—Bilingualism in the Chicano Community	4
Philosophy 200—Introduction to Logic	3
Philosophy 352—Philosophy of Language	3
Philosophy 386—Topics in Logic and Language	3
Philosophy 374—Artificial Intelligence	3
Spanish 303—Introduction to Spanish Phonetics	3
Spanish 425—Spanish Linguistics	3
Spanish 426—Seminar in Modern Varieties of Spanish	3

Linguistics Courses

200. Introduction to Linguistic Studies
(4) (Fall)

The nature and structure of language; psycholinguistics: language and the mind, child language acquisition; sociolinguistics: role and function of language in the context of personal and group interactions and identities; anthropological linguistics: language and other communication systems in culture and society; comparative and historical linguistics: how language changes; applied linguistics: using the skills and insights afforded by the scientific study of language.

310. Phonological Analysis
(4) (Fall)

Introduction to articulatory phonetics; methods and practice in the analysis of sound systems. Emphasis on American English.
Prerequisite: Linguistics 200, or consent of instructor.

311. Grammatical Analysis
(4) (Spring)

Methods and practice in the analysis of the morphological and syntactic components of language.
Prerequisite: Linguistics 310, or consent of instructor.

320. Meaning, Context, and Reference
(4) (Spring alternate years)

Introduction to the linguistic approach to the study of meaning, including the ways in which meaning is determined by language use.
Prerequisite: Linguistics 200, or consent of instructor.

357. Dialects, Sociolects and Speech Communities
(3) (Spring)

Focus on the systematic study of language varieties spoken in particular geographical regions (i.e. dialects) and/or by members of particular social classes/groups (i.e. sociolects), with attention given to the application of the study of dialectal/sociolectal variation to teaching American English to speakers of other languages. Consideration also given to such topics as language attitudes, political power and linguistic equality, language and sociopolitical institutions.
Prerequisite: Linguistics 200, or consent of instructor.

410. English Grammar and ESL
(3) (Fall)

Exploration of, and suggestions for classroom teaching of, aspects of English structure that ESL/EFL students find particularly difficult. Emphasis is on such features of English as tense-aspect; modals; articles; measure words, collective nouns and quantifiers; phrasal verbs; non-referential IT/THERE; focus constructions; complementation; logical connectors.
Prerequisite: Linguistics 200, or consent of instructor.

430. Psycholinguistics
(4) (Spring, alternate years)

In-depth study of (1) the basic processes involved in acquiring, producing and understanding language, and (2) the relations between language and thought.
Prerequisite: Linguistics 200, or consent of instructor.

441. Linguistics and Second Language Teaching
(3) (Fall)

The relation of aspects of linguistic theory to second language teaching theory and methodology. Discussion of psychological, social and linguistic aspects of second language acquisition/learning, and a communication-oriented approach to second language teaching. Consideration of the utility of descriptive, contrastive and error analysis.
Prerequisite: Linguistics 200, or consent of instructor.

442. Teaching English as a Second Language
(3) (Spring)

Application of (psycho-socio) linguistic principles/methodology to teaching standard American English as a second language. Introduction to ESL teaching approaches/methods/techniques. Practice in preparation/evaluation of teaching materials. Observation of ESL classes at SSU and in the University's service area.
Prerequisite: Consent of instructor.

490. Topical Seminar
(1-4) (Fall and Spring)

In-depth consideration of specific linguistic, applied linguistic or linguistically-related topics. Topics will vary from semester to semester. Course may be repeated for credit.
Prerequisite: Linguistics 200 and junior standing; or junior standing and consent of instructor.

495. Special Studies
(1-4) (Fall and Spring)

Students interested in Special Studies in Linguistics are to fill out a Special Studies application by no later than the end of the first week of the semester.
Prerequisite: Linguistics 200, or an appropriate upper division course in Linguistics or another discipline; approval of supervising faculty member and approval of Program Coordinator.

499. Internship in Applied Linguistics
(1–4) (Fall/Spring)

Students have an opportunity to apply linguistic principles and methods in a variety of situations in public/private sectors in the University's service area. Especially appropriate for practical experience in teaching English as a second language, or in the development of ESL teaching materials. Offered CR/NC only. Course may be repeated for credit.
Prerequisite: appropriate coursework in linguistics, which may be taken concurrently.



Management

The purpose of the Management curriculum is to provide a broad education preparing the student for imaginative and responsible citizenship and leadership in business and society—domestic and worldwide.

The study of management emphasizes issues and problems inherent in modern enterprise. Particular attention is given to the role and responsibilities of managers in the decision making processes of corporations, government, labor, and other enterprises of society.

The Bachelor of Arts degree in Management includes a group of core course requirements and a broad range of fields of concentration. The fields of concentration include: Accounting, Business Economics, Finance, Marketing, Management Systems and Organization Theory, International Management, Organization Behavior and Human Resources, Management Science, and a special concentration developed by agreement between student and advisor.

The Accounting concentration prepares students for management level accounting positions in business, government or public accounting. Specialized courses are offered in financial accounting, cost accounting, and taxation.

The Business Economics concentration provides courses in macro and micro economic theory, managerial economics, mathematical economics, and money and banking. Employment would be expected in strategic pricing, cost analysis, statistical forecasting and marketing research.

The Finance concentration is designed to prepare the student for a career in financial management, financial analysis and planning, investment banking, insurance and real estate.

The Marketing concentration provides creative careers in advertising and promotion, and in product development as well as in marketing research, and sales management. Courses are offered in marketing principles, channels of distribution, sales management, promotion, consumer behavior, marketing management and international marketing.

The Management Systems and Organization Theory concentration leads to careers in management at many levels in organizations. Resources managed effectively may result in production of useful goods or in providing services in a satisfying work environment. The closely related concentration in Organizational Behavior and Human Resources includes courses preparing the student for positions in general management, personnel, labor relations, public relations, wage and salary administration, and training. The international aspects of management are included in the courses in international business and international marketing.

The computer is integrated with mathematics, business, and economics to model complex business situations in the Management Science concentration. Employment opportunities include positions in government, insurance, marketing research, business forecasting, inventory control, production control and in general management.

The primary objective of the M.A. Degree Program in Management is to prepare graduates for positions of leadership in organizational settings in the private sector, in government, or in the community. It provides students with various approaches, tools, and knowledge which are useful in management. Students develop a working knowledge of contemporary management, and an appreciation of the economic, social,

legal, and political trends in the increasingly complex management environment.

Completion of a thesis, creative project or comprehensive examination and intensive study in a specific area give students the opportunity to focus closely on management problems of particular interest to them.

Students may expect to find innovation and experimental classwork of various types including: interaction research with portable videotape equipment; research design and implementation; field work and field trips; student presentations; computer decision games; interesting speakers; and exciting source materials in new fields. Management courses are offered throughout the regular daytime schedule and in the evenings to accommodate working students.

Sonoma State University is in the process of developing the degree of Master of Business Administration (M.B.A.). This degree may be implemented during the 1986–88 period of this catalog. Requirements for admission and completion of the M.B.A. Degree will be substantially different from those currently associated with the Master of Arts in Management (M.A.). Students must consult with the Graduate Advisor, School of Business and Economics, to determine the details of the school's requirements for the M.B.A. Degree.

Department Chair

Sherri C. Anderson

Faculty:

Chester Allen, Michael Baldigo, Jeffrey T. Doutt, Saul Eisen, Robert Girling, George Johnson, Wyman Hicks, Paul Juhl, Wingham Liddell, Wallace Lowry, M. Joyce McLaughlin, Michael Noble, William L. Reynolds, Sandra Schickele, Keith Taylor, Delmar Valleau, Judith Wright.

Department Office

Stevenson 2042, phone (707) 664-2377

Bachelor of Arts in Management

Prerequisites:

All Management Majors must meet the GE Math Requirement and take Economics 201A and Economics 201B as prerequisites for all upper division courses. Courses marked with asterisks may be taken by non-majors with the consent of instructor.

Core Requirements:

Management	*Course Title*	*Units*
230A and 230B	Principles of Accounting	8
315	Statistics for the Social Sciences [1]	4
325	Legal Environment of Management	4
340 or 344 *	Introduction to Human Resource Mgt. Behavioral Science in Management	4
318 or 350 *	Intro. to Systems Approach to Mgt. or Mgt. Theory and Organizational Behavior	4
360	Marketing Environment	4
370	Intro. Managerial Finance	4
416	Production/Operations Management	4
491	Seminar in Mgt. Theory & Policy	4
		40
Field of Concentration (to be chosen from the following list)		12

AREAS OF CONCENTRATION:

Accounting
Business Economics
Finance
Marketing
Management Systems and Organization Theory
International Management
Organizational Behavior and Human Resources
Management Science

Special Concentration	*Units*
Supporting Units	3
TOTAL:	55

[1] Approved substitutes will be accepted, e.g., Economics 317, *Applied Statistics in Economics and Business*, and Mathematics 165, *Elementary Statistics*.

Minor in Management

A Minor in Management shall consist of twenty (20) units in Management courses chosen in consultation with a department faculty advisor. At least twelve (12) units must be upper division.

Master of Arts in Management

Admission Requirements

Admission to the graduate program in Management requires meeting the minimums for admission to the university and a recommendation for admission to the Master of Arts degree program by the Management department.

The requirements for admission to postbaccalaureate study (work beyond the bachelor's degree) at Sonoma State University are in accordance with Title 5, California Administrative Code. The minimum requirements are: a) to hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed academic preparation as determined by an appropriate campus authority; b) to have attained a grade point average of at least 2.50 (A=4) in the last 60 semester (90 quarter) units attempted. Students from other countries must have a grade point average of 3.00 (A=4); and, c) to have been in good standing at the last college attended.

Refer to the Section on Post-Baccalaureate Degrees in the front of this catalog (p. __).

The departmental recommendation for admission to the Master of Arts program in Management is based upon evidence that the student shows high promise of success in the program, completion of the prerequisite courses, and passing of the Sonoma State University Written English Proficiency Test (WEPT). The specific indicators of high promise which are considered are: a) the candidate's performance on the Graduate Management Admission Test (GMAT); b) the upper division grade point average prior to admission; and c) a record of appropriate employment at increasing levels of responsibility. When using indicators a) and b) above, candidates showing high promise are defined as those obtaining a total of at least 1,000 points based on the formula: 200 times the GPA in upper division courses attempted plus the GMAT total score.

Supplementary evidence that a satisfacory level of scholastic competence will be maintained will be considered.

Conditionally Classified Standing

Students otherwise eligible for admission to the program but whose undergraduate program did not include the prerequisite course work may be considered for admission in conditionally classified standing, at the discretion of the department graduate coordinator, with approval of the department's Graduate Admissions Committee. Upon completion of the remaining prerequisite courses, such students should submit a petition to the department graduate coordinator for advancement to classified graduate status.

Classified Graduate Standing

Students meeting all of the prerequisites may be admitted initially in classified graduate status. Those students and students later advanced to classified status should complete the Graduate Study Plan, G-1/G-2 in consultation with their graduate committee chair and the department graduate coordinator and file it with the Dean of Graduate Studies. This form is the official record of advancement to candidacy.

Unclassified Postbaccalaureate Standing

Students meeting the requirements for admission to the university but not recommended for admission to the graduate program in Management may be admitted to the university in unclassified postbaccalaureate status. Students admitted in unclassified status may take undergraduate courses for professional development and/or for additional preparation for possible admission to the graduate program. Upon completion of additional preparation students may submit a petition to the department graduate coordinator for consideration of admission to the graduate program.

Master's Degree Directed Research

All students must complete a thesis, a project or a comprehensive examination. A definition of each of these is included below:

A "thesis" is the systematic study of a significant problem. The problem, its major assumptions, its significance, the methods and sources for gathering data, and the conclusions and recommendations are clearly stated.

A "project" may be defined as "The systematic development of a plan for, or the critical evaluation of a significant undertaking." Criteria employed in developing the plan, or in making the evaluation of the task, the details of the plan of evaluation, the methods used, and the supporting data must be clearly stated.

A "comprehensive examination" is a substantial exercise intended to test the student's ability to master the subject matter of a field of specialization, as demonstrated through synthesis, integration, interpretation, and evaluation of the full spectrum of the field involved.

Quality of work accomplished is a major consideration in judging the acceptability of any thesis or project or comprehensive examination. The finished project must evidence originality, appropriate organization, clarity of purpose, critical analysis, and accuracy and completeness of documentation where needed.

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

Prerequisites for M.A. (36 total units)

Course	*Title*	*Units*
Econ 301	Principles in Economics (Intensive Course) (students may substitute E201A and E201B)	4
Mgt 501	Principles of Accounting (students may substitute M230A and M230B)	4
Mgt 315	Statistics for the Social Sciences [1]	4
Mgt 325	Legal Environment of Management	4

	Units
Mgt 340/344 Introduction to Human Resource Mgt. Behavioral Science in Management	4
Mgt 318/350[1] Introduction to the Systems Theory of Management or Management Theory and Organizational Behavior	4
Mgt 360 Marketing Environment	4
Mgt 370 Introduction to Managerial Finance	4
Mgt 416 Production/Operations Management	4
	36

Requirements for M.A. Degree

Choose any four (4) from the following list	Units 16

Course	*Title*	
Management		
516	Advanced Production/Operations Management	
530	Current Issues in Accounting Theory	
540	Strategic Management of Human Resources	
550	Seminar in Mgt. Theory and Org. Behavior	
560	Seminar in Marketing Analysis	
570	Seminar in Managerial Finance	*Units*
591	Policy Analysis	4
ANY TWO ELECTIVES (from above or other)		8
599	Master's Degree Directed Research	2
		30

[1] Approved substitutes will be accepted, e.g., Economics 317, *Applied Statistics in Economics and Business*, and Mathematics 165, *Elementary Statistics*.

Management Courses

217. Introduction to COBOL
(4)

A first course in programming using COBOL. Introductory concepts of computer systems and systems designed as applied to Business Data Processing. Progamming projects, including at least one from the student's field of interest.

219. Introduction to Computer Applications in Management
(4)

Introduction to the basic concepts of computing and data processing with emphasis on the uses of the computer as a management decision tool. Hands-on experience with micro and mainframe computers.

230A. Principles of Accounting
(4)

A foundation course designed to provide a basic understanding of the theory and practice of accounting with emphasis upon basic principles, concepts and controls in relation to external reporting.

230B. Principles of Accounting
(4)

A foundation course designed to provide a basic understanding of the theory and practice of accounting with emphasis upon basic principles, concepts and controls in relation to *internal* reporting.
Prerequisite: Mgt. 230A.

231. Introduction to Computer Accounting Software
(1)

An introduction to computer accounting applications including forecasting, data base Management and financial statement preparation using a spread sheet program. Prerequisite Mgt. 230A and Mgt. 230B.

245. Career Planning
(3)

A course to empower individuals to design a systematic, practical and effective Life/Work Plan that is self-implemented.

250. Introduction to Management Studies
(4)

A survey of the major fields of management studies, designed to introduce students to the range of perspectives available in the discipline. Topics will include: General Management; Accounting; Finance; Health Care Management; Human Resources Management; Industrial Relations, Marketing, Multinational Management, Organizational Behavior, Systems Analysis.

301.* Fundamentals of Investing
(4)

Examination of investment opportunities available to the individual investor. Principal emphasis on corporate and governmental securities. General Survey course. Open to non-majors.

305. Business and Society
(4)

This introductory course deals with a range of issues fundamental to responsible management. Topics include (a) environmental quality; (b) how business can meet community needs; (c) governmental regulation of business; (d) impact of technology; (e) minorities and equal opportunity; (f) quality of work life; (g) business ethics; (h) consumer protection, and (i) issues in multinational operations. The method of instruction is a combination of reading, case method, and class discussions.

315. Statistics for the Social Sciences
(4)

Basic training in statistical analysis techniques. Application of statistical procedures in the social and behavorial sciences. Elementary probability, random variables, probability distributions, measures of central tendency and dispersion, sampling, statistical inference, estimation, hypothesis testing. Correlation, regression, time series analysis, quality control testing, statistical decision theory. Prerequisite: Completion of the Mathematics requirement for General Education.

317. Current Issues in Management Information Systems
(1–4)

The course provides for the teaching of special topics in the field of management information systems. May be repeated once for credit.

318. Introduction to the Systems Approach in Management
(4)

Application of the "systems approach" to problems in work groups and other social structures. The use of systems analysis to understand and improve organizations and communities.

319. Introduction to Information Systems
(4)

Study of characteristics of computer-based information systems in organizations. Includes theory and techniques of analysis, design, and implementation of management information systems. Emphasis on aplications in profit and non-profit organizations. Prerequisite: Mgt. 219.

325. The Legal Environment of Management
(4)

A study of the legal framework within which management decisions are made. The course will consider areas of government regulations of competition, employment, and labor-management relations; and factors in selection of particular forms of business organization.

330A, 330B. Intermediate Accounting
(4–4)

Current theory of accounting is emphasized in both courses.
Prerequisite: Mgt 230A and 230B or equivalent.

330A. Topics include the accounting process, design of financial statements, valuation of cash, receivables, inventories, plant and equipment, intangible assets and current liabilities. Concepts such as present value, LIFO and like kind exchanges are covered.

330B. Topics include the design of the statement of changes in financial position, valuation of capital stock and retained earnings. Other special topics will include earnings per share computation, current cost and constant dollar accounting, liability, leases, pension plans and price level accounting.
Recommended: Mgt 330A.

340. Introduction to Human Resources Management
(4)

Introduction to the practice of human resource management in survey format. Includes consideration of historical development, systems theory applications, manpower planning, position analysis, labor market, recruiting, selection, orientation, career planning training and development, performance appraisal, compensation and benefits, safety and health, ethical problems, future directions in the field.

344. Behavioral Science in Management
(4)

Contributions of the behavioral sciences for understanding the manager's role and the behavior of individuals and groups in organizations.

345. Sex Roles in Management
(4)

Roles, role stress, and what is "expected" of women and men at work. Class members examine experiences and expectations concerning sex role related behavior on the job.

350. Management Theory and Organizational Behavior
(4)

History of management theory, and an overview of contemporary theory related to the managing of organizations in both the public and private sectors with emphasis on the private sector. Examination of theories of organizational structures augmented by studies of theories of organizational behavior.

351. Small Business Management
(4)

Intended for prospective entrepreneurs wishing to start a new business and/or participate in the management of a small ongoing company during its early months. Also appropriate for students interested in consulting, banking or investing in small companies. Emphasis on the preparation of realistic, action-oriented business plans necessary for presentations in organizing and financing.
Prerequisite: Mgt 230A and 230B.

353. Women in Organizations
(4)

An introduction and comprehensive overview of the history, obstacles, and potential for women in organizations. An examination of successful and blocked career paths for women in organizations and equal opportunity legislation. A critical analysis of organizational alternatives which can incorporate women into the managerial process.

360. Principles of Marketing
(4)

Introduction to marketing concepts with emphasis on the product planning, pricing, promotion and distribution of goods and services. A basic survey of the practice of marketing in a changing environment including topics such as marketing management, marketing information systems, consumer behavior, and international and industrial marketing.

361. Promotion
(4)

Examination of the organization's promotional communications with its environment. The analysis of the promotion mix of organizations including advertising, personal selling, publicity and sales promotion.
Prerequisite: Mgt. 360.

362. Wine Marketing
(4)

An in-depth study of marketing from the perspective of the California wine industry. The course emphasizes wine marketing planning including an analysis of wine consumer segments. The wine industry's economic, legal, social and competitive environment, industry trends, major problems and opportunities and strategic alternatives as related to wine varieties and brands, pricing, promotion and distribution.
Prerequisite: Mgt 360.

363. Sales Management
(4)

The study of the planning, organizing, directing, evaluating and controlling of the sales activities of the organization. Includes topics such as establishing sales objectives and strategies, setting up sales territories, and the selection, training, motivation, compensation and supervision of sales personnel.
Prerequisite: Mgt. 360.

364. Channels of Distribution
(4)

Examines the relationships, functions and activities of manufacturers, wholesalers, retailers and agents as members of the channels of distribution of goods and services to the marketplace.
Prerequisite: Mgt. 360.

367. Consumer Behavior
(4)

An analysis of the cultural, social and psychological factors that influence the consumer's decision-making processes. Includes topics such as learning, perception, information search and information processing, personality, lifestyle, motivation, and attitudes as they affect the consumer's behavior.
Prerequisite: Mgt. 360.

368. International Marketing
(4)

Examines the business practices and customs, cultural, social, legal and ethical differences of international markets. Emphasis on developing and adjusting the marketing mix of product, price, promotion and distribution to compete in foreign markets.
Prerequisite: Mgt. 360.

370. Introduction to Managerial Finance
(4)

An introduction to the conceptual and analytical framework guiding financial decision-making within the business firm. Emphasis is placed on financial analysis, the evaluation of investment opportunities available to the firm, working capital management, and the analysis of alternative means of financing the firm.
Prerequisites: Mgt. 230A, 230B, and 315.

371. Real Estate Principles
(4)

This course will provide a broad overview of the fundamental principles of real estate law, regulation, economics, finance, appraisal and investment, with limited attention to physical aspects of real estate and professional practice. It will serve as either a self-contained introduction, or a foundation for further study for real estate consumers, investors, professionals and persons in allied fields.

373. Real Estate Finance
(4)

Quantitative analysis of the mechanics of real estate finance. Procedures and techniques in financing various types of urban and rural real estate including transactions in commercial, apartment, residential, and other real estate. Examination of trends in the supply of, and demand for, real estate financing in relation to economic developments.
Prerequisite: Mgt 230A, 230B and 371.

374. Real Estate Practices
(4)

Survey of real estate from the perspective of the professional practitioner. It will cover the applied aspects of client counseling and financial planning; real estate valuation, investments and management; real estate contracts, transactions and escrows; agents; responsibilities; brokerage management; and licensee regulation; emphasizing ethical professional practice throughout.
Prerequisite: Mgt. 371.

376. Real Estate Appraisal
(4)

Emphasized theoretical concepts of value, techniques and methods which are used to determine value, and those forces which influence changes in value of property.
Prerequisite: Mgt. 371 and 426.

377. Financial Institutions
(4)

Study of the structure and functions of the financial system in the U.S. economy. Topics include: the role of financial intermediaries, including commercial banks; the money market; sources and uses of long-term funds; interest rates and security prices; the role of the Federal Reserve; monetary policy; international capital markets.

381. Management Research Methods and Reports
(2–4)

Techniques of research planning and preparation for management purposes. Sources of data; survey methodology; questionnaire design; report writing and presentation. May be repeated once for credit.

385. Special Topics in Management
(1–4)

This course provides for the teaching of special topics in Management Studies.

392. Social and Economic Foundations of the Enterprise System
(4)

An analysis of the economic and social forces that have brought about the contemporary economic system in the Western World. Thus, the essential economic features of the ancient, scholastic, classical and modern world will be compared to the present. In addition, the problems of the contemporary system will be discussed and analyzed.

393. Introduction to International Business
(4)

A survey of the theoretical and institutional aspects of international trade and investment. The course will address topics of international trade theory, the international money market, balance of payment, the phenomena of multi-national, international finance, and management of international enterprises.
Prerequisite: Econ. 201A and B.

396. Tutorial
(1–2)

Intended for advanced students working as tutors in Management Studies courses under faculty guidance. May not be repeated for more than 2 units. Requires petition specifying nature of the tutorial and must be approved by the responsible faculty supervisor, the student's faculty advisor and the department chair. May be taken CR/NC only.

415. Quantitative Analysis in Management Science
(4)

Deterministic and stochastic models for optimization of management decisions. Includes linear, mathematical and dynamic programming, decision theory, utility, network models, Markov processes, inventories, queues, games, forecasting and simulation techniques.
Prerequisites: Mgt. 315.

416. Production/Operations Management
(4)

Production/Operations Management of manufacturing and service operations. Analysis and decision techniques in the location, design and lay-out of facilities and processes, in work design and work measurement, in line balancing, forecasting and scheduling, in Material Requirements Planning and in quality assurance. Inventory, linear programming, PERT and queuing models and simulations. Computer applications.
Prerequisite: 315. FORMERLY MGT 458

418. Intermediate Systems Theory of Management
(4)

Group discussion and testing of alternative solutions to problems in work groups and other social structures using the systems approach. Course is designed for the non-specialist, as well as the specialist.
Prerequisite: Mgt 318, or equivalent or consent of instructor.

421. Legal Aspects of Real Estate
(4)

Case studies as they apply to fixtures, emblements, methods of ownership, easements, deeds, title examination and recording priorities, with particular attention to California-Code application.
Prerequisites: Mgt 371 and 426, or consent of instructor.

426. Business Law
(4)

An analysis of the legal process emphasizing the nature and function of law, legal reasoning, and the operation of law as it pertains to business transactions. Includes problems arising out of agency, partnership, contracts, corporation, real property, and sales with emphasis on the Uniform Commercial Code.

427. Management and Labor Law
(4)

Analysis of National Labor Relations Board cases from a management perspective to develop an appropriate appreciation of underlying policy issues relative to industrial relations and labor.
Prerequisites: Mgt 347, or 426 or consent of instructor.

430. Advanced Accounting
(4)

Advanced accounting, problems, and theory. Topics include consolidations, business combinations, fund accounting, partnerships, foreign exchange and other current issues.
Prerequisites: Mgt 330A and 330B, or consent of instructor.

433A. Individual Taxation
(4)

Analysis of the Internal Revenue Code pertaining to individual and corporate income taxes. Topics include determination of taxable income, deductions and exemptions, accounting records, returns, computation of taxes, and tax planning. Subject matter to reflect the most recent tax law changes.
Prerequisite: Mgt 230B.

433B. Corporation and Estate Taxation
(4)

Concepts and principles of federal taxation as they apply to business enterprise and fiduciaries, i.e., estates and trusts.
Prerequisite: Mgt 433A.

434. Auditing
(4)

Study of generally accepted auditing standards and procedures followed in the examination of financial statements and operating control reviews. Topics include evaluation and analysis of internal control, nature of and procedures for gathering audit evidence, professional ethics and legal liability, the standards of reporting financial information and statistical sampling applications.
Prerequisites: Mgt 330A and 330B.

435. Cost Accounting for Management
(4)

To introduce applications for the accountant's role in the decision making process. Topics include contribution margin analysis, job order and process costing, standard costing, transfer pricing, profit planning, cost centers, cost volume, profit relationships, inventory control and other current issues.
Prerequisites: Mgt 330A and 330B.

440. Human Resources Development
(4)

A critical consideration of the methods and processes in constructing human resource theory. Application of developed theory to human resource practice with epistemological examination of each model reviewed. Includes such topics as human capital theory, performance appraisal theory, compensation theory, quality control.
Prerequisite: Mgt 340. FORMERLY MGT 349.

442. Seminar in Human Resources
(4)

Selected topics in human resource management, with emphasis on employee motivation and contribution. Topics vary by semester, and include such matters as leadership, organizational culture, group dynamics, and decision making.
Prerequisites: Mgt 340 or Mgt 344, or consent of instructor.

444. Seminar in Task Group Behavior
(4)

Use of the small group as a basis for understanding and developing skill in effective communication and leadership in the organization.

450. Seminar in Advanced Management Theory
(4)

Group discussion of current topics in management theory, including management policy, philosophy, social responsibility, strategic and short range planning, organization theory, decision theory, comparative management, and other issues in management theory.
Prerequisite: Mgt 350.

452. Seminar in The Management of Change
(4)

The manager's role in assessing the consequences of emerging technology, and changes in the organization's resources and markets, as well as in social values and attitudes. Strategies for designing and implementing appropriate changes in the structure and function of the organization.
Prerequisites: Mgt 318 or 350, and Mgt 340 or 344.

453. Small Business Consulting
(4)

This course will focus on decision-making in functional areas of marketing, production and finance. Students, working in teams with faculty and professional supervision will consult with businesses to solve managerial problems.
Prerequisites: Mgt 230A, 230B, and Mgt 360.

455. Management of the Planning Process
(4)

The organizational planning process from the perspective of managers of public and private institutions.
Prerequisites: Mgt 344, and Mgt 318 or 350.

461. Consumer Protection
(4)

Important issues and problems for consumers in areas of consumer finance, installment credit, warranty disclaimers, door-to-door selling, deceptive sales practices, bank credit cards, and advertising. Examination of practice and procedures of small claims court, homesteading, assertion of rights in default, repossession, foreclosure, deficiency, and garnishment, and governmental agencies' public enforcement.
Prerequisite: Mgt 360.

462. Seminar in Marketing Research
(4)

The theory and application of marketing research as a tool for management decision-making. Emphasis is on problem identification and definition, research design, sampling procedure, primary and secondary data collection, statistical analysis, interpretation of data and reporting of research findings.
Prerequisites: Mgt 360 and Mgt 315 or Econ 317.

466. Organizational Communication
(2–4)

Communication theory as applied to management; impact of the organizational environment; strategies for development of effective messages. Oral and written exercises required.

468. Marketing Decision Making
(4)

Data analysis and "what if" marketing decision making, using computer models and computer simulation. Emphasis is on developing computer and analytical marketing skills.
Prerequisites: Mgt. 360, Mgt. 462 and one additional marketing course.

469. Marketing Management
(4)

The comprehensive study of marketing management, strategy and decision making using marketing cases. The course requires the student's integration of previous marketing coursework.
Prerequisites: Mgt. 360, Mgt. 462 and one additional marketing course. Formerly Mgt. 460.

470. Managerial Finance
(4)

Theory of managerial decision making in its financial and economic context. Topics include the decision making environment; financial planning, budgeting, and control; long term investment decisions and capital budgeting techniques; working capital management; the cost of capital, valuation, and rates of return; choosing among alternative sources of funds.
Prerequisite: Mgt 370.

472. Investments
(4)

A study of the characteristics of Securities: valuation, sources, selection strategies, and theory of portfolio management. Stocks, bonds, options, and futures markets will be included. Prerequisite: Mgt. 370.

474. Computer Applications in Finance
(4)

Students will learn to use the financial databases and computer applications programs available on the CSUS Cyber and other systems to do analysis in techniques of managerial finance, securities returns, portfolio management, and other financial areas. Emphasis will be placed on reviewing a broad variety of databases and analytical programs.
Prerequisite: Mgt. 370.

475. Advanced Real Estate Finance and Investment
(4)

Lecture and discussion on various methods of acquiring and evaluating real estate investments including both commercial and agricultural properties.
Prerequisite: Mgt. 373.

491. Seminar in Management Theory and Policy
(4)

Group discussion of current issues in managerial and corporate policy, relating to marketing, investment, personnel, profit and social responsibility, etc.
Prerequisites: Body of Knowledge Sequence.

494. Business Enterprise in America
(4) (Cross-listed with History 464)

495. Special Studies
(1–4)

Student-designed and instructor-guided projects, to be arranged individually. May be repeated for credit. (See limits under "Graduation Requirements.") Independent study credit will be granted only to students who have: (1) attained senior status; (2) minimum GPA in Management Studies of 3.0; (3) substantial background in the field involved in the petitioned study.

499. Internship in Management
(1–4)

Field experience in management and administration. For upper division students in fields of their career or academic interest. Minimum of three hours per week per semester unit. Prior arrangements must be made with Internship Coordinator. Four units maximum toward the management course requirement in the major or minor. CR/NC only.

501. Principles of Accounting
(4)

An intensive study of the theory and practice of accounting in relation to both internal and external reporting. Enrollment restricted post-baccalaureate students.

515. Seminar in Quantitative/Decision Analysis
(4)

Applications of Operations Research/Management Science methods to common business problems. Linear and dynamic programming, network analysis, applied decision theory, inventory theory, queuing theory. Simulation. Advanced, in-depth study with written reports and oral explanations of findings.

516. Advanced Production/Operations Management
(4)

An integration of procedures and techniques in Production/Operations Management for the solution of problems in manufacturing, and service industries. Applications of principles from current literature. Use of relevant computer software. Students will pursue in-depth study of several issues of their choice. Written and oral analyses and reports of findings will be required.
Prerequisite: Classified Graduate Status.

518. Seminar in Systems Approach in Management
(4)

A scholarly evaluation of systems theory, embracing general systems theory, as a contribution to the social sciences.
Prerequisite: Classified Graduate Status.

519. Seminar in Decision Support Systems
(4)

Advanced study of the use of information and decision support systems. Evaluation of the impact of computerization on planning, decision-making and control processes.
Prerequisite: Classified Graduate Status.

530. Current Issues in Accounting Theory
(4)

Advanced analysis and interpretation of the effects of professional, governmental, business, and social forces on the evolution of accounting theory.
Prerequisite: Classified Graduate Status.

540. Seminar in Labor Markets
(4)

A consideration of the problems and methods of human resource planning and development at the strategic or long range planning level in organizations. Review of planning models, human resource management information systems, planning for Total Quality Control, emerging theory with its implications on future human resources development practice.
Prerequisite: Classified Graduate Status.

544. Seminar in Development of Human Systems
(4)

Contributions of system theory and organization development practice for inducing constructive change and self-renewal in groups, organizations, and communities. Emerging theory and advanced practice of process-oriented consultation and management. May be repeated for credit.
Prerequisite: Classified Graduate Status.

550. Seminar in Organization and Management Theory
(4)

A survey of the foundations of management theory (macro-theory) and organization behavior (micro-theory). The subject will be looked at from two perspectives: a study of macro-level variables drawn from organization theory; and an examination of micro-level variables drawn from organization behavior.
Prerequisite: Classified Graduate Status.

551. Project Management Practicum
(4)

Organizational and group processes for effective management of the project development group. Practice and theory of goal-setting, problem-solving, decision-making, planning, evaluation, and control.
Prerequisite: Classified Graduate Status.

553. Comparative Management
(4)

Overview of comparative management focused on comparison between authoritarian and democratic management systems. Managerial systems analyzed both at level of firm and nation, with focus on: planning and economic systems; case studies of management in other countries; problems of management and economic transition; and alternative systems of motivation.
Prerequisite: Classified Graduate Status.

554. Industrial Democracy
(4)

An analysis of the ways in which management can be combined with democratic values and decision-making. Case studies used to analyze measures for worker participation in management and to evaluate practical experiences.
Prerequisite: Classified Graduate Status.

555. Seminar in Current Issues in Planning and Control
(4)

Discussion of current issues such as: participative planning in organizations; M.B.O.; variable budgeting; program budgeting; zero-based budgeting; collective bargaining by objectives; sales forecasting; cash forecasting; quantitative models for planning and control; and other contemporary problems in planning and control.
Prerequisite: Classified Graduate Status.

556. Seminar in Development of Management Theory
(4)

Survey of the current state of management theory.
Prerequisite: Classified Graduate Status.
Formerly Mgt. 592.

557. Seminar in Intuitive Processes in Management
(4)

Study of the use of non-analytical problem solving and intuition by managers. Survey of research and field projects focusing on intuition, judgment, and wisdom in management.
Prerequisite: Classified Graduate Status.

560. Seminar in Marketing Analysis
(4)

Graduate study of market assessment, development of marketing plans, and evaluation of marketing programs. Careful consideration of the conceptual background of marketing. Current trends and emerging developments.

568. Marketing High Technology
(4)

Examines the development of product, pricing, promotion and distribution strategies for the high technology marketplace. Emphasis on topics such as industrial buying behavior, industrial selling techniques and direct channels of distribution for high technology products.
Prerequisite: Classified Graduate Status and Mgt. 560.

570. Seminar in Managerial Finance
(4)

Graduate study in the theory of finance and applied financial analysis.
Prerequisite: Classified Graduate Status.

572. Seminar in Investments
(4)

Advanced study of security characteristics and the theory of portfolio construction and management.
Prerequisite: Classified Graduate Status.

573. Seminar in International Finance
(4)

Study of the international financial system, including the international credit and foreign exchange markets and international economic institutions. Managerial techniques in international business such as exchange rate forecasting, exchange risk management, and investment and financing decision will be covered. International banking, the Euro-currency market, and regulation of multi-national corporations and banks are included.
Prerequisite: Classified Graduate Status.

581. Research Methods for Managers
(4)

Qualitative and quantitative approaches to the design, execution, and interpretation of applied research activities. Development of analytical skills and practical competence with research techniques, including an understanding of the assumptions, limitations, and appropriate uses of various research designs and strategies.
Prerequisite: Classified Graduate Status.

591. Policy Analysis
(4)

The use of strategic planning in developing, testing and evaluating policy alternatives. Consideration of social responsibility as well as organizational effectiveness in assessing the consequences of management strategies, and their impact on the organization, its markets and resources, and the community as a whole.
Prerequisite: Classified Graduate Status.

593. Seminar in International Business
(4)

Comprehensive view of international economic environment as it relates to international business. Topics include the multinational corporation, subcontracting, countertrade, international institutions, e.g., World Bank and GATT.
Prerequisite: Classified Graduate Status.

595. Special Studies in Management
(1–4)

Prerequisite: Graduate standing in classified status and consent of the instructor.

596. Graduate Internship
(1–4)

Field experience for qualified graduate students in Management. Maximum of 4 units may be applied toward the M.A. degree in Management. Students must establish with internship coordinator and the student's M.A. Committee Chair that the work involved is clearly integral to the student's graduate studies. CR/NC grade only.
Prerequisite: Classified Graduate Status.

599. Master's Degree Directed Research
(2)

Open only to fully classified graduate students. Provides units for preparation of thesis, project, or comprehensive examination. An authorized "Thesis Prospectus Approval Form" must be presented in order to enroll in 599.

Mathematics is a rapidly growing discipline whose concepts and applications play an ever-increasing part in modern life. It has always been an essential tool in the physical sciences and has come to be used extensively in such diverse areas as medical and biological research, environmental studies, management science, behavioral and social sciences, and, of course, computer science.

The basic curriculum is designed to prepare students for employment as a professional mathematician in business, industry, government, and teaching as well as providing a sound background for continuation of study toward advanced degrees in mathematics and computer science.

The B.A. Program provides preparation for teaching and general application of mathematics. It is a flexible degree program, with elective courses making up almost half of the total required units.

The B.S. Degree Program offers concentrations in applied mathematics, computer science and statistics. These programs prepare students in a variety of fields, including computer science, statistical work in government and industry, biostatistics, actuarial work and consultative problem solving in modern industry.

A Career Minor in Science and Technical Writing or Information and Research may be useful to some Mathematics majors. For more information on the university's Career Minor programs see p. 69 of this Catalog.

Department Chair:

Jean B. Chan

Faculty:

William Barnier, Donald Duncan, Clement Falbo, Norman Feldman, R. H. Johnson, Rick Luttmann, Thomas Nelson, Charles Phillips, Thomas Volk.

Department Office:

Darwin 128, phone (707) 664-2368



Mathematics

Bachelor of Arts Mathematics

Major

	Units
General Education	48
Major	45
Electives	31
Total	124

Course Requirements

	Units
MATH 161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major)	1
MATH 211—Calculus II with Analytic Geometry	4
MATH 220—Logic and Proof	3
MATH 231—Introduction to Differential Equations	3
MATH 261—Calculus III with Analytic Geometry	4
MATH 320—Modern Algebra	3
MATH 322—Linear Algebra	3
MATH 328—Foundations of Mathematics	3
MATH 340—Real Analysis	3
Electives: All electives must be upper division and may not include MATH 300. All electives must be approved by a mathematics advisor. At least one elective must be chosen from each of groups A, B, and C: Group A: MATH 306, 308, 428; Group B: MATH 345, 406; Group C: MATH 418, 438, 460	18
Total	45

Bachelor of Science in Mathematics

Concentrations in Applied Mathematics, Computer Science and Statistics for the B.S. Degree

Course Requirements

A. Applied Math Concentration

	Units
General Education	48
Major	46
Electives	30
	124
CIS 150—Computer Programming I	4
MATH 161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major)	
MATH 211—Calculus II with Analytic Geometry	4
MATH 220—Logic and Proof	3
OR	
MATH 242—Discrete Structures	
MATH 222—Elementary Applied Linear Algebra	3
MATH 231—Introduction to Differential Equations	3
MATH 261—Calculus III with Analytic Geometry	4
MATH 331—Applied Differential Equations	3
MATH 345—Probability Theory	3
MATH 352—Numerical Analysis	3
Electives: All electives must be upper division and may not include MATH 300. All electives must be approved by a mathematics advisor. At least 12 units of electives must be chosen from MATH 320, 322, 340, 365, 406, 431, 441, 460, 466, 467, 470	15
Total	46

B. Computer Science Concentration

	Units
General Education	48
Major	46
Electives	30
	124
CIS 150—Computer Programming I	4
CIS 151—Computer Programming II	3
MATH 161 Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major)	1
MATH 211—Calculus II with Analytic Geometry	4
MATH 222—Elementary Applied Linear Algebra	3
MATH 231—Introduction to Differential Equations	3
MATH 242—Discrete Structures	3
CIS 250—Assembly Language Programming	3
MATH 261—Calculus III with Analytic Geometry	4
MATH 345—Probability Theory	3
MATH 352—Numerical Analysis	3
CIS 354—Data Structures and Algorithmic Analysis	3
MATH 406—Combinatorics	3
Electives: All electives must be chosen from MATH 306, 320, 322, 331, 340, 428, 431, 441, 454; CIS 375, 440, 450, 452, 465, 480 and must be approved by a mathematics advisor	6
Total	46

C. Statistics Concentration

	Units
General Education	48
Major	44
Electives	32
	124
CIS 150—Computer Programming I	4
or	
CIS 158F—Introduction to FORTRAN	
MATH 161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major)	
MATH 211—Calculus II with Analytic Geometry	4
MATH 220—Logic and Proof	3
MATH 222—Elementary Applied Linear Algebra	
MATH 261—Calculus III with Analytic Geometry	4
MATH 345—Probability Theory	3
MATH 365—Statistical Inference	3
MATH 466—Applied Statistical Methods I	
MATH 467—Applied Statistical Methods II	
Electives selected from a list of courses on file with the undergraduate advisor. That list includes MATH 406, 441, 465, and others	13–15
Total	44

Minor in Mathematics

Approval of the Mathematics Department should be obtained by the junior year at the latest in order to properly plan the minor. The 20 required units must include calculus and a course in statistics. At least 6 units must be upper division, not including MATH 300.

Elementary and Secondary Teaching Credential Preparation

A Major in Mathematics is acceptable preparation for an elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must complete a single subject waiver in mathematics. Mathematics Majors seeking a teaching credential are encouraged to consult with a department advisor, and review the Univerity's special bulletin on *Programs in Teacher Education*. For further information on credentials and professional education requirements, see p. 106 of this Catalog.

Entry-Level Mathematics Exam

The passing of the entry-level Mathematics Examination, if applicable, otherwise MATH 099, is a prerequisite for Mathematics courses numbered 106, 107, 121, 131, 165 and 300. Please consult the class schedule for times and place of exam. The exam will be given in conjunction with the English Placement Test. For additional information, please see page 313.

Grading Policy in the Mathematics Department

Non-majors

All mathematics courses are available in the C/NC grading mode to non-mathematics majors.

All students

MATH 175, 295, 330, 395 and 499 are available only in the C/NC grading mode.

Mathematics Majors

A mathematics Major must take all of his/her mathematics courses in the traditional grading mode with the following exceptions: MATH 175, 295, 330, 395, 499 and any course taken as "credit by challenge examination" (see the catalog section in Regulations and Procedures). However, a maximum of 6 units total credit in MATH 295, 330, 395, and 499 may be applied toward any mathematics degree.

Mathematics Courses

099. Pre-College Mathematics
(2)

Study and review of arithmetic, elementary algebra and computational geometry. Course credit is not applicable toward graduation.

106. Intermediate Algebra
(3)

Topics include an introduction to mathematical symbolism, basic rules of algebra, applications of algebra, graphs and their equations, linear analysis, exponents, logarithms, quadratic formula, and calculator.
Prerequisite: Passage of the Entry Level Mathematics Examination if applicable; otherwise MATH 99.

107. Algebra and Trigonometry
(4)

Covers factoring, equations and inequalities, radicals and fractional exponents, quadratic equations, graphing relations and functions, absolute values, absolute inequalities, systems of equations, exponential and logarithmic functions, trigonometric functions, equations and identities, DeMoivre's and Euler's theorems, and complex numbers.
Prerequisite: Passage of the Entry Level Mathematics Examination if applicable; otherwise, MATH 99.

107T. Trigonometry
(2)

Trigonometric functions, equations and identities. DeMoivre's and Euler's theorems, complex numbers. This course covers the material of the second half of MATH 107.
Prerequisite: MATH 106 or consent of instructor.

121. Introduction to Mathematical Analysis
(3)

A general education course designed to give students an understanding of the significance of mathematics in the history of thought and to develop analytical skills. Issues such as geometry vs. arithmetic and the discrete vs. the continuous will be discussed. Topics include analysis of problems using functions and graphs; Greek mathematics, including the Pythagorean Theorem, Eudoxus' Method and Zeno's Paradox; Fermat's Method for the derivative, solution of optimization problems, graphing, velocity and rates of change, antiderivatives and distance, integrals and area; computer programs for estimating derivatives and integrals. Students with an interest in history, philosophy, natural sciences, and related areas are advised to take MATH 121 to satisfy the General Education requirement for Mathematics.
Prerequisite: Passage of ELM Examination, if applicable; otherwise MATH 99.

131. Introduction to Finite Mathematics
(3)

A general education course designed to give students an understanding of finite mathematics applied in the modern world to computers, economic analysis, statistical analysis and decision-making. Topics include intuitive logic, sets, functions, and Boolean functions, with application to electrical networks and computers; introduction to finite probability and its use in statistical inference; simple linear programming problems with computer programs for their solution. Students with an interest in management, applied social science and related areas are advised to take MATH 131 to satisfy the General Education requirement for Mathematics.
Prerequisite: Passage of ELM Examination, if applicable; otherwise MATH 99.

158B. Introduction to BASIC
(2)

Elementary aspects of the BASIC programming language will be covered with special emphasis placed on programming style. As time permits more advanced aspects will be covered. BASIC is the most widely used interactive programming language. [Crosslisted as CIS 158B.]
Prerequisites: Any one of MATH 106, MATH 121, 131, or consent of instructor.

161. Calculus I with Analytic Geometry
(4)

Calculus I includes limits, continuity, derivatives including trigonometric functions, chain rule, curve sketching, extremum problems, implicit differentiation, related rates, Mean Value Theorem, introduction to integration, Fundamental Theorem, substitution, applications. Satisfies the General Education requirement for Math.
Prerequisites: MATH 107 or consent of instructor.

165. Elementary Statistics
(4)

Elementary descriptive and inferential statistics and their application to the behavioral, natural, and social sciences. Discrete probability theory, sampling, random variables, special distributions, central limit theorem, estimation, test of hypothesis, analysis of variance, linear regression and correlation, and some non-parametric tests. Lecture and laboratory. This course is designed as an elementary introduction to the application of statistics for the non-mathematical student, and those minoring in mathematics.
Prerequisite: Passage of ELM Examination, if applicable; otherwise MATH 99.

175. M*A*T*H Colloquium
(1) (May be repeated for credit a maximum of 4 times)

A student taking this course will need to attend all presentations in the Math Colloquium series during the semester. Additional requirements by the instructor, such as keeping a notebook or writing a paper will be assigned. This course may be taken for C/NC grading only.
Prerequisite: Consent of instructor.

185. Selected Topics in Mathematics
(1–5)

Subject matter to be determined by instructor and may differ from semester to semester. This course may be repeated with different subject matter for up to 12 units. The course title will appear on the student's transcript.
Prerequisite: Consent of instructor.

211. Calculus II and Analytic Geometry
(4)

Calculus II includes the calculus of exponential and logarithmic functions, trigonometric and inverse trigonometric functions, techniques of integration, separable differential equations, Taylor polynomials, L'Hospital's rules, improper integrals, series.
Prerequisites: MATH 161 or consent of instructor.

211-S. Calculus II-S with Analytic Geometry
(2)

Exponential and logarithmic functions, trigonometric and inverse trigonometric functions, techniques of integration, separable differential equations.
Prerequisites: MATH 161 or consent of instructor. Open only to students enrolled in the Geology B.S. program or the Chemistry B.A. program.

217. Topics in Calculus for Management and the Social Sciences
(3)

This calculus course is designed for management, some computer science and social science majors and will emphasize applications. Topics include differentiation, maximum and minimum problems, antiderivatives, the definite integral, exponential and logarithm functions, functions of more than one variable, Lagrange multipliers, partial differentiation, improper integrals. It is recommended that students pursue further applications of these topics by taking Econ 408, Mgt 458, or Mgt 415. Satisfies GE requirement.
Prerequisite: Enrollment in a degree program other than Mathematics or Physical Sciences. MATH 131 or 106 or their equivalencies.

220. Logic and Proof
(3)

Topics will include tautologies, quantifiers, applications of logic to algebra and calculus, counter examples, methods of proofs, basic set theory, functions, relations, mathematical induction. Boolean algebras, applications, including switching circuits, logic networks, graph theory and finite automata. Math majors may use this instead of MATH 242 for CIS courses.
Prerequisites: MATH 211 or equivalent or consent of instructor. Transfer students should take MATH 220 during their first semester here.

222. Elementary Applied Linear Algebra
(3)

A course in vector and matrix algebra applied to science and computing. Topics linclude linear systems, vectors, matrices, Gauss-Jordan elimination, linear programming and transformations.
Prerequisites: One semester of calculus or MATH 107.

231. Introduction to Differential Equations
(3)

Separable, exact and first order linear equations. Linear differential equations and applications. Methods of undetermined coefficients and variation of parameters. Series solutions of linear differential equations.
Prerequisites: MATH 211 or equivalent or consent of instructor.

242. Discrete Structures
(3)

A study of discrete structures which have applications in computer science. Topics will include logic, set theory, graphs, Boolean algebras, grammars and languages. Throughout the course, applications to computer science will be discussed.
Prerequisites: CIS 150, and one semester of calculus. CIS 151 should be taken concurrently.

261. Calculus III with Analytic Geometry
(4)

Calculus includes partial derivatives, multiple integrals, alternative coordinate systems, vector functions and their derivatives, line integrals, Green's Theorem, Stoke's Theorem, Divergence Theorem.
Prerequisites: MATH 211 or equivalent or consent of instructor.

295. Community Involvement Program
(1-4) (May be repeated for credit up to 6 units total)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. No more than 3 units of credit in CIP may be applied toward any mathematics degree. This course may be taken for C/NC grading only.

300. Theory of Arithmetic
(3)

Mathematics essential for mathematics instruction in elementary schools. Theory of the structure of arithmetic and algebra of the real number system. Essentially: Changing number bases, study of sets, laws of arithmetic and computational algorithms. Systems of numeration, geometry, measurement, sets, logic.
Prerequisite: Passage of ELM examination, if applicable, and three units of college mathematics. If exempt from ELM examination, then three units of college mathematics.

306. Number Theory
(3)

Mathematical induction, Euclidean algorithm, congruences, fundamental theorem of arithmetic, perfect numbers, number theoretic functions, prime number theorem.
Prerequisite: MATH 161 or consent of instructor.

308. College Geometry
(3)

The Hilbert postulates. Isometries in the Euclidean Plane. Non-Euclidean geometries; construction of geometries from fields.
Prerequisite: MATH 107 or consent of instructor.

320. Modern Algebra
(3)

Group theory: permutation groups, cyclic groups, homomorphisms, quotient groups. Elementary theory of rings, integral domains, and fields.
Prerequisite: MATH 220 or consent of instructor.

322. Linear Algebra
(3)

Topics will include vector spaces, linear transformations, matrices, linear equations, determinants, and Cayley-Hamilton Theorem.
Prerequisites: MATH 220 or consent of instructor. MATH 222 recommended.

328. Foundations of Mathematics
(3)

Sets, infinite unions and intersections, index sets, functions, partially ordered and totally ordered sets, axiom of choice, and number systems from the natural numbers to the complex numbers.
Prerequisite: MATH 220 or consent of instructor.

330. Techniques of Problem Solving
(2) (May be repeated for credit a maximum of 4 times)

Cultivates by experience and example the mental disciplines for generating creative solutions to challenging problems. The problems to be considered will be taken largely from recent examinations in the William Lowell Putnam Mathematical Competition, sponsored by the Mathematical Association of America. No more than 4 units of credit in this course may be applied toward any mathematics degree. This course may be taken for C/NC grading only.
Prerequisites: MATH 161, or concurrent enrollment therein, or consent of instructor.

331. Applied Differential Equations
(3)

Laplace transform method. Power series method. Equations of hypergeometric type. Orthogonal sets, Fourier series and simple boundary value problems.
Prerequisite: MATH 231 or consent of instructor.

340. Real Analysis
(3)

Topics will include real numbers, topology of real numbers, continuity and derivative, Reimann integral, sequences and series, and sequences and series of functions.
Prerequisites: MATH 220 and MATH 261, or consent of instructor.

345. Probability Theory
(3)

Combinatorial probability, random variables, probability densities, distribution functions, law of large numbers, and central limit theorem.
Prerequisite: MATH 211 and MATH 220 or 242, or consent of instructor.

352. Numerical Analysis
(3)

Selected numerical and iterative processes for solving equations. Topics include computer methods, finite differences, Lagrange interpolations. Introduction to the finite element method and the theory of spline functions.
Prerequisites: CIS 158F and MATH 231 or consent of instructor.

365. Theory of Statistical Inference I
(3)

A course in mathematical statistics, concerned with developing the concepts of statistics by use of the calculus. Topics include: Theory of sampling, problem of estimation, tests of significance, confidence limits, the t, F, and chi-square distributions.
Prerequisite: MATH 345 or consent of instructor.

395. Community Involvement Program
(1–4) (May be repeated for credit up to 6 units total)

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, reading for the blind, etc. Students receive 1 to 4 units depending on the specific tasks performed. No more than 3 units of credit in CIP may be applied toward any mathematics degree. This course is available for C/NC grading only.

406. Combinatorics
(3)

Topics selected from permutations and combinations, generating functions, principle of inclusion and exclusion, Polya's Theory of counting, block designs, path problems, coloring problems, transport networks and matching theory.
Prerequisite: MATH 161 or consent of instructor.

410. History of Mathematics
(3)

Mathematics from ancient times to the present. The student learns how to solve problems of the past using only the tools of the past.
Prerequisite: MATH 161 or consent of instructor.

418. General Topology
(3)

Definition of topology, closed sets, relativizations, base and subbases of topology. Compact topological spaces, separation axioms, normal spaces, regular spaces, metric spaces, continuous mappings, product spaces, function spaces.
Prerequisites: MATH 340 or consent of instructor.

428. Topics in Foundations of Mathematics
(3)

Topics will be selected from axiomatic set theory and mathematical logic, possibly including: a construction of the reals; axiom of choice; completeness theorems; Peano's postulates; consistency.
Prerequisite: MATH 320 or consent of instructor.

431. Partial Differential Equations and Integral Transforms
(4)

A course in partial differential equations and integral transforms. Topics include mathematical models in physics, first and second order partial differential equations, Fourier series, boundary value problems, eigenvalue problems, Laplace and Fourier transforms, other integral transforms, higher order equations.
Prerequisite: MATH 231.

438. Differential Geometry
(3)

Study of geometry in Euclidean space by means of calculus. Curves and surfaces in 3-space, Frenet formula, Gaussian curvature. Euclidean motions. Intrinsic Geometry of curves and surfaces, isometries, geodesics, Gauss-Bonnet Theorem.
Prerequisites: MATH 261 and MATH 322 or consent of instructor.

441. Operations Research
(3)

A course in Operations Research and industrial problem solving. Topics include optimization, simplex algorithm for linear programming, queuing theory, game theory, P.E.R.T. least time path analysis, mathematical modeling of industrial problems.
Prerequisite: MATH 222, 345.

454. Automata, Computability and Formal Languages
(3)

Context sensitive, context free and regular grammars. Deterministic and nondeterministic finite automata, pushdown automata. Turing machines and computability, linear bounded automata. [Crosslisted as CIS 454.]
Prerequisite: MATH 220 or MATH 242 or consent of instructor.

460. Introduction to Complex Variables
(3)

The complex field, functions, limits, continuity, complex differentiation and the Cauchy-Riemann equations, complex integration, residues, conformal mappings.
Prerequisites: MATH 231 and MATH 261 or equivalent or consent of the instructor.

465. Theory of Statistical Inference II
(3)

General Linear Hypothesis, Multivariate Analysis, Stochastic processes.
Prerequisite: MATH 345 or consent of instructor. MATH 365 recommended.

466. Applied Statistical Methods I
(3)

Principles of design of experiments, comparison of design, basic sampling models and methods.
Prerequisite: MATH 165.

467. Applied Statistical Methods II
(3)

Non-parametric methods in two sample location and scale problems, particularly linear rank methods, tests of equality of k independent samples, measures of association, asymptotic relative efficiency, use of non-parametric tests in design of experiments.
Prerequisite: MATH 165.

470. Mathematical Models
(3)

The process of expressing scientific principles, experiments and conjectures in mathematical terms. Topics include: gathering reliable data, exposing underlying assumptions, variables and relationships. Choice of modeling levels. Testing and refining of models. Deterministic vs. stochastic models. Applications to biology, physics, chemistry, geology, social science and environmental sciences.
Prerequisite: One semester of calculus.

495. Special Studies
(1–4)

Prerequisite: A lower division math course and consent of instructor.

496. Pro-Seminar in Mathematics
(1–3)

A mutual exploration of selected current issues in mathematics by members of the mathematics staff and mathematics majors. Non-majors may enroll by permission of the instructors.
Prerequisite: Upper division standing.

499. Internship in Mathematics
(1–3) (May be repeated for credit up to 3 units total)

Field experience in mathematics, computer science or statistics. Enrollment by prior arrangement only. This course may be taken for C/ C only.

Graduate Courses

585. Seminar in..... (Title and number of units to be chosen by instructor)
(1–4)

Subject matter to be determined by instructor and may differ from semester to semester. This course may be repeated with different subject matter for up to 12 units. The course title will appear on the student's transcript.
Prerequisite: Consent of instructor.

595. Special Studies in Mathematics
(1–4)

The Mentor Program is designed to help students who are new to the University, or who are changing careers or educational direction. The program focuses on the individual student's values and goals, and the search for a pattern of life congruent with those goals. The student is encouraged to become an active agent in his or her own learning and to find out how to make effective use of available resources in the University. The student has maximum freedom to explore and learn that which he or she considers to be of most value, to develop these interests as fully as possible, and then to communicate the findings to the academic community. The faculty in the Mentor Program act as guides and facilitators, and provide a model for continuous learning.

Two courses are offered:

UNIV 100—Orientation Seminar

This course helps students develop an academic plan to fit their personal goals and to explore the resources and services of the University to discover how it can work best for them.

UNIV 300—Integrative Seminar

Students will assess their educational commitment and personal values while preparing semester projects relevant to individual academic and career choices. Projects may include research papers as well as personal documentation and creative works.

Coordinator:

Elizabeth Herron

Program Office:

Cluster Schools 64

Telephone:

(707) 664-2832/2904



Mentor Program



Mexican-American Studies

The Mexican-American Studies Major uses an interdisciplinary approach to examine the historical, political, social, educational, economic and cultural developments which affect the Chicano and other Hispanic communities in the United States. Further, the Major allows students to analyze the mainstream U.S. society from the perspective of a linguistic, ethnic and cultural minority. The program encourages students to go beyond their own culture and explore the different ways other cultures have developed and contributed to the national and worldwide arena.

The Mexican American Studies core provides a comprehensive basis for a liberal arts education. The areas of concentration allow students to complete the major by selecting courses in specific areas of study. Demographic trends and an increasing Hispanic population will require trained professionals who are qualified linguistically and culturally to serve the needs of the Spanish-speaking communities both in the United States and abroad. The B.A. in Mexican American Studies provides an excellent background for students preparing for careers in bilingual education, social work, law, business, counseling and community and government service. The Mexican American Studies Department offers academic waiver programs in Mexican-American Studies/Liberal Studies and Mexican-American Studies/Social Science leading to the multiple subject and single subject teaching credentials, respectively.

The Department encourages students to investigate a double major in complimentary traditional disciplines such as: Spanish, English, Sociology, Psychology, and Management in order to maximize career opportunities.

Coordinator:

Manuel Hidalgo

Faculty:

Manuel Hidalgo

Contributing and Part-time Faculty:

Hermenia Menez, Sally Hurtado, Roberto Ramirez, Erlinda Peraza, Daniel Lopez, Raymond Barrio

Department Office:

Nichols Hall 214, phone (707) 664-2369

Bachelor of Arts in Mexican-American Studies

Major

	Units
General Education	48
Major	40
Core Courses	20
Area of Concentration	20
Electives or Supporting Courses ..	36
Total	124

COURSE REQUIREMENTS

A. Core

	Units
MAMS 225—Spanish for Chicanos and Latinos (4) *or*	
MAMS 326—Bilingualism in the Chicano Community	4
MAMS 445 Chicano History	4
MAMS 451—Chicano Humanities	4
MAMS Core Elective, select eight units from the following courses:.....	8
MAMS 219—Mexican-American Culture	
MAMS 220—Mexican-American Arts and Literature	
MAMS 225—Spanish for Chicanos and Latinos	
MAMS 310—Mexican-American Folk Arts and Crafts	
MAMS 340—Mexican-American Folklore	
MAMS 344—Chicano Perspectives on Mexican History	
MAMS 351—Chicano Thought	
MAMS 354—Politics and the Chicano	
MAMS 365—Chicano Theatre	
MAMS 374—Chicano Literature	
MAMS 400—Selected Topics in Chicano Studies	
MAMS 405—Mexican American Family	
MAMS 406—La Chicana	
MAMS 447—La Frontera: Border Studies	
MAMS 456—Bilingual/Cross-Cultural Education	
MAMS 479—Chicano Art History	
MAMS 490—Chicano Children's Literature	
Total Units Core Courses.....	20

B. Areas of Concentration

In order to provide students an opportunity to study in areas of their interest, the department has the following areas of concentration: Social Science, Humanities, Community Studies, Education.
One course must be a comparative ethnic studies class.

Total Units: Area of Concentration (Required)	Units 20
Total for the Major	40

C. Spanish Language Requirement

The department is committed to the principle that students need to develop their Spanish language competencies and requires that all majors take the necessary courses and/or field experiences to develop their Spanish language skills. These competencies are a crucial tool for students who plan to become teachers, work in community services, go to graduate school, or do Chicano Studies related research. Majors need to consult with the Department Language Advisor on the various options which satisfy the language competency requirement.

D. Minor in Mexican-American Studies

The minor provides students with necessary general studies about the Chicano experience. The minor is especially suited for those persons seeking teaching or public service careers in the Spanish-speaking communities. The minimum requirements for the minor are the 20 unit core for the major.

TEACHING CREDENTIALS

See p. 106 of this Catalog for information on professional education programs. For further information review the University's special bulletin on *Programs in Teacher Education.*

A. Mexican-American Studies/Social Science Single Subject Waiver Program

This waiver program was developed to meet the Single Subject waiver requirement leading to the Single Subject (Secondary) Teaching Credential.

At the beginning of the junior year the students must consult with their advisor before enrolling in one of the following tracks with the Mexican-American Studies/Social Science waiver option.

a. Mexican-American Studies/Social Science (Bilingual Track)
b. Mexican-American Studies/Social Science (Non-Bilingual Track)

B. Mexican-American Studies/Liberal Studies Multiple Subjects Waiver Program

This waiver program meets the Multiple Subjects waiver requirements leading to the Multiple Subjects (elementary) teaching credential. It is specifically designed to provide the academic background for those students interested in entering the Multiple Subject/Bilingual Emphasis Credential Program.

At the beginning of the junior year the students must consult with advisors from Mexican-American Studies before enrolling in the Mexican-American Studies/Liberal Studies program.

a. Core Courses:

	Units
MAMS 225—(Spanish for Chicanos) or	
MAMS 326—(Bilingualism in the Chicano Community)	4
MAMS 445—Chicano History ..	4
MAMS 451—Chicano Humanities	4
MAMS 456—Bilingual/Cross-Cultural Education.....	4
MAMS 459—Bilingual General Science	2
MAMS 460—Bilingual Fundamentals of Mathematics	2
MAMS 374—Chicano Literature	4
AMCS 360—Ethnic Literature	4
or	
AMCS 471—Children's Literature	4
or	
MAMS 490—Chicano Children's Literature	4
Total Units Core Courses ..	28

	Units
b. Supporting Courses:..... From: MAMS, Latin American Studies, Spanish, AMCS/NAMS, based on consultation with advisor, transcript evaluation, and review of the Language and Culture Assessment	12
Total Units for Major.....	40
c. Liberal Studies Core Based on consultation with advisor, students must select one Liberal Studies Core class in each of the following areas: English, Humanities, Social Science, and Math and Science.	

C. Language and Culture Assessment

All students who wish to obtain a bilingual credential must successfully complete a Language and Culture Assessment. This should be done at the time the student applies for admission to the credential program. For further information, contact the Bilingual Program Coordinator in the Department of Education.

D. Minors for Prospective Teachers

For information on minors that are especially suitable for MAMS majors pursuing an elementary teaching credential see p. 44 for a description of the Applied Arts minor and the University's special bulletin on *Programs in Teacher Education.*

Mexican-American Studies Courses

102. College Survival Skills
(2) Department Faculty

A study-skill development approach with emphasis upon the mechanics of study, i.e., reading, note taking, term papers, vocabulary, test taking, and others. Course offered only for Credit/No Credit. Should be taken in conjunction with a complementary Mexican-American Studies subject matter course or with one of the University's required General Education courses.

105. Innovations in English
(3) Department Faculty

A course for students who need particular attention in developing their basic English skills, utilizing the techniques of individualized instruction, within a peer group setting. Course will substitute English 101, upon students completion of WEPT test. Should be taken in conjunction with a complementary Mexican-American Studies subject matter course or with one of the University's required General Education courses.

219. Mexican-American Culture
(3) Hidalgo

An overview of the historical, political, social, economic, and cultural roots of the Mexican-American heritage. Using an interdisciplinary approach, students will analyze the contributions to and examine the current status of Chicanos in contemporary U.S. society. Includes field trips and guest lecturers. (A General Education course which meets the Ethnic Studies requirements in Social Science.)

220. Mexican-American Arts and Literature
(3) Hidalgo

A survey of the humanities (arts and letters) found in Mexican-American Culture. The course will focus on the traditional and contemporary literature, drama, art, music, and dance forms found in the Spanish speaking communities of the Southwestern United States and in Mexico. (A General Education course which meets the Ethnic Studies requirements in Humanities.)

225. Spanish for Chicanos
(3–4) Department Faculty

A systematic survey of Spanish as found within Chicano communities. The grammar and structure of dialectal forms will be compared with standard Spanish. Using a variety of language acquisition techniques, students will develop the proficiency to enable them to enter upper division classes in Spanish.
Prerequisite: Functional Spanish Language Skills. (Students enrolling in the class for 4 units will be required to do 1 unit of work in the Language Lab or field work in a Community setting as advised by the instructor.)

301. Experimental and Special Topics Courses
(1–5)

Experimental and Special Topics courses will be offered as student interest and faculty expertise allow.

310. Mexican-American Folk Arts and Crafts
(1–3) Department Faculty

Analysis of and workshop on Mexican and Mexican-American arts and crafts. To include village and folk arts with particular emphasis towards adapting these arts to the public school curriculum. Course only offered for Credit/No Credit.

326. Bilingualism in the Chicano Community
(4)

An examination of the development and maintenance of bilingualism within the Chicano community. Will include a history of the development of the Spanish language, and an overview of the various factors that affect bilingualism, including psychological and sociological factors. The course will focus on a linguistic analysis of Spanish and English and the effects of speaking both on bilingual persons in the Southwest.

340. Mexican American Folklore
(3) Menez

A description and analysis of traditional cultural expressions of the Mexican and Mexican American through folk narratives; folk poetry; drama; the arts; religion and folk beliefs.

344. Chicano Perspectives on Mexican History
(4) Hidalgo, White

A Chicano analysis of the historical forces which helped shape the Mexican people from the pre-columbian era to the present with particular attention to the Mexican Revolution. To include the settlement of the Southwest and analysis of diplomatic history between Mexico and the U.S. as it related to Chicano communities.

354. Politics and the Chicano
(4) Hidalgo

An examination of the political history and current political thought of the Chicano community. Includes a survey of social, cultural, and political organizations in the Southwest and in the local community. Field trips.

356. Economics of the Chicano
(4) Department Faculty

Economics of the Chicano community and its relationship to wider economic systems. The roles of credit, poverty, land tenure, consumer behavior, and occupational patterns in the Chicano community. An analysis of the changing role of Chicanos as workers, consumers, investors, and entrepreneurs in local, regional, and national levels of the economy.

365. Chicano Theatre
(1–2) Department Faculty

The review of the development of drama in the Chicano culture from a variety of sources; anthropological, sociological and historical as well as the contemporary developments. Course includes a workshop leading to the performance of a term play; along the lines of the Teatro Campesino. Course only offered for Credit/No Credit.

366. Mexican American Music and Dance
(1–2) Department Faculty

A survey of traditional and contemporary music and dance of Mexican and Mexican-American society. The course is an introduction to historical content of regional dance from pre-hispanic time to the present. Basic steps and three-to-five dances will be taught, such as Jarabes de Jalisco, Jarochos de Veracruz, and one or more indigenous dances. Course offered only for Credit/No Credit. (May be repeated for credit)

374. Chicano Literature
(4) Hildalgo

A course designed to identify, analyze and appreciate current literary themes within the Chicano experience, including their literary antecedents, through novels, short stories, poetry and plays.

MAMS 395. Community Involvement Program
(1–4) Department Faculty

This course is intended to provide students with practical experience in various ethnic community organizations and health and social service agencies, including recreation programs, day care centers, senior citizen centers, etc.

399. MECHA
(2)

The course will involve students in experimental projects that will orient them to problems faced by the Chicano student community and the greater Chicano community in the campus service area. This course is offered Credit/No Credit.

400. Selected Topics in Chicano Studies
(1–4) Department Faculty

Selected topics in Chicano Studies with course content to be determined.

405. The Mexican-American Family
(3–4) Hidalgo

A study of the historical, cultural and social forces affecting the Mexican-American family. To include an analysis of both traditional and changing relationships in such areas as: courtship, marriage, child-rearing practices, changing sex roles, health, and education. The course will also examine how the major institutions in American society affect the Mexican American family. (Students enrolled for 4 units must participate in a field-work assignment.)

432. Chicano Community Development
(4) Hidalgo

An examination of those political, economic, and institutional forces which affect the development of the Chicano community. To include an overview of Chicano community organizations and their underlying organizational constructs within the context of current theories on underdevelopment. Field work project required.

445. Chicano History
(4) Hidalgo

An analysis of Chicano history from the exploration and settlement of the Southwest to the present. To include an examination of such themes and topics as: the Chicano heritage, the Mexican War and Treaty of Guadalupe Hidalgo, the land question, social banditry and other forms of resistance and the Chicano in the twentieth century.

447. La Frontera: Border Studies
(4) Hidalgo

A study of U.S./Mexican Border issues and how they affect the Mexican American. To include an analysis of historical border disputes as well as contemporary issues and topics such as: immigration (legal and illegal), employment, the border patrol, water rights, roles of agribusiness and multi-national corporations, drugs, prostitution, folklore, and border music. Prerequisite: MAMS 445 or consent of instructor.

451. Chicano Humanitites
(4) Hidalgo

An analysis of the literature, philosophy, religion, art and the performing arts as they have developed in the Mexican-American society.

456. Bilingual/Cross-cultural Education
(4) Department Faculty

A historical analysis of bilingual/cross-cultural education in the United States. The course covers bilingual/cross-cultural education concepts and the assessment of existing programs and their impact on Chicano and other Spanish speaking students.

459. Bilingual General Science
(2) Ramirez

A general science course taught bilingually (Spanish/English) and designed to give cultural depth in the basic science areas required for a liberal education. To include areas of study in the biological and physical sciences.
Prerequisite: Functional target language skills and completion of general education science requirements.

460. Bilingual Fundamentals of Mathematics
(2) Ramirez

A general math course taught bilingually (Spanish/English) and designed to give cultural depth in the mathematics required for a liberal education.
Prerequisite: Functional target language skills and completion of general education mathematics requirements.

477. Mexican-American Art Workshop
(1–4) Department Faculty

A workshop on social-context art; including the technical and conceptual forms stemming from the art history of the Mexican American. Includes lectures and studio practices and the designs of mur painting. (Unit value of lecture and practicum to be announced.)

479. Chicano Art History
(4) Department Faculty

An analysis of art as expressed in the historical culture of the Chicano, from ancient times to the present. A cultural art history approach. Field trips.

490. Chicano Children's Literature
(4) Department Faculty

An analysis of children's literature written about and for Chicano children. Students will review and analyze the literature for style and content. Students will study non traditional literature collections from the Chicano community.

495. Special Studies
(1-4)

A core upper division course: approval of supervising faculty member and approval of Department Chair.



Music

The Music Department offers a four-year program designed to give students comprehensive preparation in theory, history and performance. The Program emphasizes extensive ear-training, the development of skills in perceptive listening, familiarity with a broad range of Western and non-Western musical styles, fluency in handling the materials of both contemporary and traditional music theory, and continuous and varied experiences in performance. Free private instruction is provided to qualified students on all standard musical instruments and in voice.

Within the music major special concentrations are available in performance, music education (teacher training), and jazz and commercial music. The department also offers two minor programs: a liberal arts music minor and a jazz and commercial music minor. The music curriculum includes many elective courses suitable for non-majors as well as courses designed to meet general education requirements.

Department Coordinator:

E. Gardner Rust

Faculty:

Ellen Amsterdam, Margaret Donovan-Jeffry, Joann Feldman, Arthur Hills, William Johnson, David Sloss, Larry Snyder.

Part-Time Faculty:

Terrie Baune, Warren Dennis, Jon English, Monica Evju, Jerry Frohmader, Mel Graves, J. Karla Lemon, Carolyn Lewis, George Marsh, Mel Martin, Ron Pellegrino, Si Perkoff, Kathleen Reynolds, Phillip Rosheger, Daniel Schmidt, Brenda Schuman-Post, Marilyn Thompson, Randy Vincent, Robert Worth.

Department Office:

Ives 206, phone (707) 664-2324

Minors For Music Majors

Students majoring in music are encouraged to complete a minor to increase opportunities for post-graduate work or employment. If a student is planning to do graduate work in music, he or she should consider a minor in a foreign language. Students planning careers in business or in media should consider minors in Arts Management (see p. 69), Recording Technology (see p. 70), or Communications Studies. These and other possibilities should be worked out in detail with a faculty advisor.

Beyond the Degree

A major in music prepares students for careers in a variety of fields directly related to music or adjunct to it. Many graduates of Sonoma State University's Music Department have pursued public teaching careers or have chosen to teach privately. Some music graduates are employed as performers in orchestras, bands, chamber ensembles, opera or theater, or as musicians in clubs and restaurants. Other fields for which the major prepares the student are music arranging, composing and conducting.

Adjunct areas that music majors have pursued as careers include recording; instrument building, tuning and repair; music sales work; and music copying.

The B.A. in Music also leads directly into graduate programs in music history, composition, theory, performance, music education, music therapy, and music librarianship.

Facilities

The Music Department houses large collections of both standard and Asian instruments as well as a growing collection of medieval and Renaissance instruments. Facilities include a large library with modern listening stations, electronic music and recording studios, concert and recital halls, and twenty practice rooms.

Accreditation

The Music Department is a fully accredited member of the National Association of Schools of Music.

Bachelor of Arts in Music

Major

	Units
General Education	48
Major	43–52
Electives	24–32
Total	124

Music Majors are strongly advised to take at least half of their elective units in fields other than music, and to include among those electives some in foreign languages.

The total number of units required for the major ranges from 43 to 52, depending upon the emphasis chosen. Students should consult their advisors early to determine the program most appropriate to their skills and needs.

Students planning to do graduate work in music are urged to take fourteen units in French or German.

Proficiency Expectations for Entering and Transfer Students

Basic keyboard skills and the ability to read standard musical notation are prerequisite to the music major curriculum. All entering and transfer students will be given placement examinations in piano, music theory, and aural skills (sight singing and dictation) during their first week of instruction at Sonoma State University. Students with no background in these areas will be expected to take basic piano (Music 101) and theory fundamentals (Music 105) at once.

All music Majors, whether continuing or transfer students, must complete or successfully challenge Music 305 (Aural Skills Workshop) and Music 306 (Keyboard Skills Workshop) at Sonoma State University before graduating. Accomplished performers on a chordal fretted instrument may petition the faculty, in writing, to substitute Music 304 (Fretboard Skills Workshop) for Music 306.

It should be noted that graduated levels of keyboard proficiency are prerequisite to enrollment in Theory II, III, IV and V; and that Music 305 and 306 (or 304) are prerequisite to enrollment in certain upper division music courses and to admission into the single subject teacher credential program in music.

Lower Division Program

The core of the lower division program for music majors is a sequence of courses in musicianship and music literature. This sequence is a comprehensive approach to ear-training in its broadest sense. It includes, but is not limited to, sight-singing, dictation, counterpoint, harmony, and historic and stylistic considerations as they relate to the development of aural and written skills. Materials and solfège techniques from a variety of musical styles are used.

Upper Division Program

The upper division program is designed to integrate the traditional studies of theory, musicianship, keyboard and aural skills, music history, and analysis. Students who wish to specialize in jazz, music education or performance will be required to take classes which develop skills specific to these areas.

Every music major will be required to complete a Senior Project or recital of one or two units. The Senior Project (Music 490) may take the form of directed research leading to a lecture-demonstration, a recital, an extended composition, or the preparation of a performing edition, etc. Students enrolled in the Performance Concentration must present a Senior Recital (Music 491).

The Performance Requirement

Music Department ensembles include Orchestra, Chorus, University Singers, Chamber Music, Symphonic Band, Experimental Music Group, Opera Theatre, Concert Jazz Ensemble, Contemporary Jazz Ensemble, Piano Ensemble, and Javanese Gamelan.

Music Majors must participate in ensembles during a minimum of six semesters of undergraduate study. At least two semesters of this requirement must be met in vocal ensembles, and at least two semesters must be completed at SSU. Students enrolled in the Music Education Concentration must, furthermore, include one non-Western music ensemble in this requirement. (Students

enrolled in the Performance Concentration must complete the additional performance requirements specified in that program.)

Students enrolled in private instruction must agree to perform in ensembles designated as appropriate by the music faculty, unless excused by their private instructor.

A fee of $10.00 per semester is charged for use of Music Department instruments and equipment.

Concert Attendance

Music in Performance (Music 299, 1 unit, CR/NC) is required of all music majors. To complete this requirement, majors must attend 10 concerts sponsored by the Music Department or Center for Performing Arts each semester in residence at SSU. Students who are enrolled part-time (1–6 units) may be exempted from this requirement by the department coordinator.

Advising

Each student must consult an advisor in the Music Department before beginning work as a music major and at the beginning of each semester thereafter. The advisor's signature will constitute Departmental approval of the student's schedule each semester.

Standard Music Major

The courses listed below constitute the standard major in Music. A student satisfactorily completing these courses, along with other university requirements, will earn a B.A. with a major in music. However, students with highly developed interests in such areas as jazz, world music (western and non-western), performance, composition, music history and music education are encouraged to consult an advisor about the possibility of arranging individually tailored programs of study or pursuing the Music Education, Jazz and Commercial Music or Performance Concentrations. Courses preparatory to a specialization in music therapy are also available. In most cases these programs will consist of the theory and masterworks requirements, plus a group of upper division courses appropriate to the student's field of study.

In all cases the student's course work will culminate in the Senior Project, in which the student demonstrates competence in one area of specialization by means of a performance, composition, research paper, etc.

Course Requirements

	Units
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Counterpoint and Harmony	3
Music 121 Theory III Laboratory: Ear Training	2
Music 210 Theory and Analysis IV: Chromatic Harmony	3
*Music 220 Theory IV Laboratory: Ear Training	2
Music 310 Theory and Analysis V: Twentieth Century	3
Music 320 Theory V Laboratory: Ear Training	2
Music 250 Introduction to Masterworks	3
Music 252 Introduction to Masterworks	3
Music 305 Aural Skills Workshop	
Music 306 Keyboard Skills Workshop	1
Music 350 Musics of the World	3
One of the following two courses:	3
Music 351 History-Early Western Music (3)	
Music 352 History-Common Practice Period (3)	
One of the following two courses:	3
Music 353 History-Debussy to the Present (3)	
Music 354 History-Musical Styles in the USA (3)	
Music 490 Senior Project	1–2
Additional Upper Division Music Courses	4–5
Total Units Required	43

Concentrations Within the Music Major

Music Education Concentration and Single Subject Waiver Program in Music

The Music Education Concentration is a B.A. program designed to provide the skills necessary for teaching music in the California public school system or in private schools. It is recommended for anyone planning a teaching career in music.

Students are admitted to the Music Education concentration by special application to the Music Department. Those wishing to complete the music major with this concentration should notify a music faculty advisor as soon as possible in order to be guided through the prerequisites for it at an early stage of their studies.

The program consists of the core requirements for the music major and, additionally, music and music education courses for prospective teachers of vocal, instrumental and general music classes in elementary, junior high and senior high schools.

Course Requirements

	Units
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Counterpoint and Harmony	3
Music 121 Theory III Laboratory: Ear Training	2
Music 210 Theory and Analysis IV: Chromatic Harmony	3
Music 220 Theory IV Laboratory: Ear Training	2
Music 310 Theory and Analysis V: Twentieth Century	3
Music 320 Theory V Laboratory: Ear Training	2
Music 250 Introduction to Masterworks	3
Music 252 Introduction to Masterworks	3
Music 305 Aural Skills Workshop	
Music 306 Keyboard Skills Workshop	
* Music 314 Orchestration and Choral Arranging	3

* Students not yet admitted to this concentration may enroll in these courses only by consent of the instructors, and only on a space-available basis.

Music 350 Musics of the World.... 3
One of the following two courses:.... 3
Music 351 History-Early Western Music (3)
Music 352 History-Common Practice Period (3)
One of the following two courses:. 3
Music 353 History-Debussy to the Present (3)
Music 354 History-Musical Styles in the USA (3)
Music 400 Theory of the Elementary School..... 3
Music 415 Beginning Voice Class
*Music 122, 422, 133 or 433 Instruction in Strings ...
*Music 123, 423, 134 or 434 Instruction in Woodwinds .....
*Music 124, 424,. 137 or 437 Instruction in Brass .....
*Music 129, 429, 138 or 438 Instruction in Percussion
*Music 430 or 446 Conducting 2
*Music 440 Instrumental Proficiency Jury .....
Music 490 Senior Project .....
Total Units Required..... 52

In addition to the courses prescribed for the Music Education Concentration, Music 401, 402, 403 and 431 are strongly recommended. The student is also encouraged to select, in consultation with his or her advisor, MAMS 366 or AMCS 315. As a general elective:

The Single Subject Waiver Program in Music is the coursework that satisfies the music portion of the California requirement for the Single Subject Credential in Music. It is not in itself a B.A. major program. It consists of most of the coursework described in the Music Education concentration plus nine additional units in Music and related subjects.

Admission requirements for the Single Subject Waiver Program in Music are the same as those for the Music Education concentration (see above).

The Single Subject Waiver Program in Music consists of:

1. all of the Course Requirements in the Music Education concentration listed below:

	Units
Music 111 Theory III: Counterpoint and Harmony....	3
Music 210 Theory and Analysis IV: Chromatic Harmony	3
or	
Music 316 Stage Band Composition and Orchestration.....	2
and	
Music 389A, B or C Jazz Improvisation I or II	1–2
Music 250 Introduction to Masterworks.....	3
Music 252 Introduction to Masterworks.....	3
Music 305 Aural Skills Workshop.....	
Music 306 Keyboard Skills Workshop.....	
*Music 314 Orchestration and Choral Arranging.....	3
Music 350 Musics of the World	3
One of the following two courses	3
Music 351 History-Early Western Music (3)	
Music 352 History-Common Practice Period (3)	
One of the following two courses	3
Music 353 History-Debussy to the Present (3)	
Music 354 History-Musical Styles in the USA (3)	
Music 400 Theory of the Elementary School.....	3
Music 115, 415, 141 or 441 Instruction in Voice.....	
* Music 122, 422, 133 or 433 Intstruction in Strings	
* Music 123, 423, 134 or 434 Instruction in Woodwinds ...	
* Music 124, 424, 137 or 437 Instruction in Brass	
* Music 129, 429, 138 or 438 Instruction in Percussion	
* Music 430 or 446 Conducting	2
* Music 440 Instrumental Proficiency Jury	

2. Additional Music Courses
One of the following two courses
Music 324 University Singers (1–2)
Music 325 Chorus (1)
One of the following four courses
Music 327 Symphonic Band (1)
Music 328 Chamber Orchestra (1)
Music 379 Contemporary Jazz Ensemble (1)
Music 391 Concert Jazz Ensemble (1)
One of the following two courses
* Music 431 Instrumental Conducting (2)
* Music 446 Private Instruction-Conducting (2)
Music 450 Workshop in Non-western Music

3. 7 units to be chosen, in consultation with the advisor, from the following courses:
AMCS 255. Ethnicity in the Humanities (4)
Art 200. Crafts (for elem. and secondary ed. (1-4)
Art 210. Introduction to Art History (3-4)
Art 211. Introduction to Art History (3-4)
Art/Mus/Thar 312. Principles of Arts Management (3)
Eng 454. Studies in Folklore (3)
Geog 338. Social Geography (3-4)
Math/CIS 150. Computer Programming I (4)
Math 158B. Introduction to BASIC (2)
CIS 158L. Introduction to LISP (3)
MAMS 200. Mexican American Arts and Literature (4)
Electronic Music course(s) (2-4) (Music Dept.)
Studio Recording course(s) (2-4) (Music Dept.)
Phys 300. Physics of Music (3)
NAMS 205. Intro. to Native American Arts (4)
Psych 302. Development of the Person (3-4)
Spanish Lanuage course(s) (3–6)
THAR 115. Dance Styles (1)
THAR 135. Stagecrafts (2)
THAR 300. Theatre in Action: Performance Analysis and Criticism (3)

* Students not yet admitted to either the Music Education concentration or the Single Subject Waiver program may enroll in these courses only by consent of the instructors, and only on a space-available basis.

M.A. IN EDUCATION WITH CONCENTRATION IN MUSIC

Students interested in pursuing a M.A. in Education with a concentration in Music should consult with advisors in the departments of Music and Education.

Performance Concentration

The Performance Concentration is intended for advanced performers who want to pursue concentrated study on an instrument or voice. It is expected that a student graduating in performance will have reached a level of at least semi-professional competence as a performer.

Admission to the Performance Concentration is by audition. Students admitted to the concentration will be required to pass an annual jury exam and to fulfill repertory standards specified for each instrument. Exceptions to the program outlined below will be approved only in those instances where entering students demonstrate performing ability sufficient to justify their placement at a higher level in the sequence. Students failing to meet the yearly performance requirements either will be transferred to another concentration within the major or may be allowed one additional semester to make up any deficiencies.

Course Requirements

	Units
2 semesters private instruction** (1, 1) and completion of Music 197, first year jury exam (1)	3
2 semesters private instruction (1, 1) and completion of Music 297, second year jury exam (1)	3
2 semesters upper division private instruction (1, 1) and completion of Music 397, third year jury exam (1)	3
2 semesters upper division private instruction (1, 1) plus Music 491, Senior Recital (1)	3
Performing Ensembles: Students are required to participate in at least one appropriate ensemble each semester they are enrolled in the major. At least one vocal ensemble is required.	8
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Counterpoint and Harmony	3
Music 121 Theory III Laboratory: Ear Training	2
Music 210 Theory and Analysis IV: Chromatic Harmony	3
Music 220 Theory IV Laboratory: Ear Training	2
Music 310 Theory and Analysis V: Twentieth Century	3
Music 320 Theory V Laboratory: Ear Training	2
Music 250 Introduction to Masterworks	3
Music 252 Introduction to Masterworks	3
Music 305 Aural Skills Workshop	
Music 306 Keyboard Skills Workshop	
One history course to be selected from the following with the approval of the Performance Concentration coordinator	3
Music 351 History-Early Western Music (3)	
Music 352 History-Common Practice Period (3)	
Music 353 History-Debussy to the Present (3)	
† Music 354 History-Musical Styles in the USA (3)	
Total Units Required	51

** Private instruction courses: Music 133/433, 134/434, 137/437, 138/438, 139/439, 141/441, 143/443 for vocal and instrumental instruction; Music 430, 431 and 446 acceptable for conducting.

† Acceptable for jazz performance students only.

Jazz and Commercial Music Concentration

The Jazz and Commercial Music Concentration is designed to furnish training and background needed for students seeking to work as performers, arrangers, composers or teachers of jazz and/or commercial music.

Students planning to pursue careers as performers should plan to take private instruction in their major instrument or voice as a part of their program in the department. These students should enroll each semester in at least one Music Department ensemble appropriate to their own area of interests. They should also seek off-campus opportunities for performance in a wide variety of performing environments; the Music Department will endeavor to assist students in finding suitable performance opportunities.

Course Requirements

	Units
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Counterpoint and Harmony	3
Music 121 Theory III Laboratory: Ear Training	2
Music 210 Theory and Analysis IV: Chromatic Harmony	3
Music 220 Theory IV Laboratory: Ear Training	2
Music 250 Introduction to Masterworks	3
Music 252 Introduction to Masterworks	3
Music 305 Aural Skills Workshop	
Music 306 Keyboard Skills Workshop	
Music 354 History-Musical Styles in the USA	3
Music 262AB Recording I and II	2,2
Music 389C Jazz Improvisation	2
Music 392 Jazz Piano	
Six units selected from the following courses:	6
Music 316 Stage Band Composition and Orchestration (2)	
Music 317 Vocal/Small Band Arranging (2)	
Music 331 Songwriting (2)	
Music 425 Composition (2)	
Music 461 Electronic Music Composition (2)	
Performing Ensembles	6
Music 490 Senior Project	
Total Units Required	46

Music 425 Composition (2)	
Music 461 Electronic Music Composition (2)	
Performing Ensembles	6
Music 490 Senior Project	
Total Units Required	46

Minors in Music

The Music Department offers two minors. Students may elect either the Liberal Arts Music Minor, which allows great flexibility in the choice of courses within a broad framework, or a more structured Jazz and Commercial Music Minor which concentrates on the development of specific skills useful to the performer in a commercial setting. (Students with an interest in recording or arts management should also consult page 69ff for a description of the career minors in Recording Technology and in Arts Management.) At least six units of the minor must be completed at Sonoma State University.

Minor in Music (Liberal Arts)

To complete this minor, a student must take Music 250 or 252 (Introduction to Masterworks), Music 350 (Musics of the World) and 14 additional units, 3 of them upper division, in consultation with a Music Department advisor. An appropriate program should include some study in music history and in music theory. In addition, Liberal Arts music minors are expected to be in at least one performing ensemble for a minimum of two semesters of residence at Sonoma State University.

Minor in Music (Jazz and Commercial)

CORE Courses:

	Units
Music 110 Theory II: Classical and Popular	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Counterpoint and Harmony	3
Music 121 Theory III Laboratory: Ear Training	2
Music 354 History-Musical Styles in the USA	3
Music 389AB Jazz Improvisation I and II	1,1
Music 392 Jazz Piano	1
One of the following three courses:	2
Music 316 Stage Band Composition and Orchestration (2)	
Music 317 Vocal/Small Band Arranging (2)	
Music 331 Songwriting (2)	
Performing Ensembles	2
Total Units Required	20

Students contemplating a Minor in Music should consult the Music Department early in their academic career for advising.

Music Courses

101. Basic Piano I
(1) Department Faculty

A beginning course in the development of fundamental keyboard skills.

102. Basic Piano II
(1) Department Faculty

Prerequisite: Music 101 or consent of instructor.

103. Basic Piano III
(1) Department Faculty

Prerequisite: Music 102 or consent of instructor.

104. Basic Piano IV
(1) Department Faculty

Prerequisite: Music 103 or consent of instructor.

105. Theory I: Fundamentals
(3) Department Faculty

A basic course in reading and writing notes, ear-training and sight singing. For pre-majors, minors and non-majors who have little or no previous background. Prospective music majors must enroll concurrently in Music 101 unless they can demonstrate equivalent competency.

110. Theory II: Popular and Classical
(3) Department Faculty

Applications of triads and seventh chords in classical, popular and jazz idioms. Music majors must enroll concurrently in Music 120 or demonstrate equivalent competency. Prerequisites: Music 101 and 105 or equivalents, and placement test.

111. Theory III: Counterpoint and Harmony
(3) Department Faculty

Diatonic counterpoint and harmony in traditional and contemporary styles. Music majors must enroll concurrently in Music 121 or demonstrate equivalent competency. Prerequisites: Music 102, 110 and 120 or equivalents, and placement test.

115. Beginning Voice Class
(1) Rust, Lewis

Group work in the fundamental techniques of singing. Problems of tone production, breath control, diction, repertoire and interpretation. May be repeated for credit with consent of instructor. Also offered for upper division credit as Music 415.
Prerequisite: Consent of instructor.

120. Theory II Laboratory: Ear Training
(2) Department Faculty

Development of sightsinging, keyboard harmony and dictation skills using diatonic melodic and harmonic materials drawn from traditional and contemporary sources. Classroom drills may be supplemented by specially designed tapes and computer assisted instruction modules.
Prerequisite: Music 101 and 105 or equivalents, and placement test.

121. Theory III Laboratory: Ear Training
(2) Department Faculty

Continuation of Theory II Laboratory.
Prerequisites: Music 102 and 120 or equivalents, and placement test.

122. Class Instruction in Strings
(1) Sloss, Amsterdam

Basic performing techniques on orchestral string instruments. Also offered for upper division credit as Music 422. May be repeated for credit with consent of instructor. Prerequisite: Consent of instructor.

123. Class Instruction in Woodwinds
(1) Department Faculty

Basic performing techniques on band and orchestral woodwind instruments. Also offered for upper division credit as Music 423. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

124. Class Instruction in Brass
(1) Department Faculty

Basic performing techniques on standard brass instruments. Also offered for upper division credit as Music 424. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

128. Intermediate Voice Class
(1) Rust

Continuation of Music 115. Also offered for upper division credit as Music 428. May be repeated for credit with consent of instructor.
Prerequisite: Music 115 or consent of instructor.

129. Class Instruction in Percussion
(1) Department Faculty

Basic performing techniques on standard percussion instruments. Also offered for upper division credit as Music 429. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

133. Private Instruction—Strings
(1) Sloss, Graves, Amsterdam

Private instruction on one instrument for advanced students. May be repeated for credit.
Prerequisite: Audition.

134. Private Instruction—Woodwinds
(1) Department Faculty

Private instruction on one instrument for advanced students. May be repeated for credit.
Prerequisite: Audition.

137. Private Instruction—Brass
(1) English

Private instruction on one instrument for advanced students. May be repeated for credit.
Prerequisite: Audition.

138. Private Instruction—Percussion
(1) Marsh

Private instruction on percussion instruments for advanced students. May be repeated for credit.
Prerequisite: Audition.

139. Private Instruction—Keyboard
(1) Thompson, Donovan-Jeffry, Snyder, Hills

Private instruction on one keyboard instrument for advanced students. May be repeated for credit.
Prerequisite: Audition.

141. Private Instruction—Voice
(1) Lewis, Rust

Private voice instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

143. Private Instruction—Guitar
(1) Rosheger, Vincent

Private guitar instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

151. Repertory Class-Pvt. Inst
(1) Department Faculty

This class provides an opportunity for students to perform their repertory in a group setting. Private instruction faculty coach students in technique, interpretation and presentation. Classes are normally offered for voice, piano and percussion. Also offered for upper division credit as Music 451. May be repeated for credit.

197. Freshman Jury
(1) Department Faculty

Performance with critiques by members of the music faculty. Prerequisite: Freshman standing as a major in the Performance Concentration.

199. Student Instructed Course
(1–3)

Topic will differ each semester.

210. Theory and Analysis IV: Chromatic Harmony
(3) Department Faculty

Chromatic harmony and contrapuntal techniques with structural analysis. Students must enroll concurrently in Music 220 or demonstrate equivalent competency. Prerequisites: Music 103, 111 and Music 121 or equivalents, and placement test.

220. Theory IV Laboratory: Ear-Training
(2) Department Faculty

Development of sightsinging, keyboard harmony and dictation skills using chromatic melodic and harmonic materials drawn from traditional and contemporary sources. Prerequisites: Music 103 and 121 or equivalents, and placement test.

250. Introduction to Masterworks
(3) Department Faculty

An introductory course with lectures and demonstrations dealing with classical music in Western civilization. Medieval, Renaissance and baroque music. Acceptable as three units of the Humanities Fine Arts General Education requirement.

252. Introduction to Masterworks
(3) Department Faculty

An introductory course with lectures and demonstrations dealing with classical music in Western civilization. Classical, romantic and contemporary music. Acceptable as three units of the Humanities Fine Arts General Education requirement.

260. Introduction to Electronic Arts
(2) Pellegrino, Johnson

A history and literature course; emphasis on listening, viewing and analysis, with an introduction to the use of computers and synthesizers in creating music, video, film, and laser graphics.

261. Introduction to Electronic Music
(2) Johnson, Pellegrino

Survey of approaches to electronic music from 1945 to the present. Examination of characteristic examples of *musique concrête, electronishe Musik,* synthesizer- and computer-generated and controlled sound worlds; discussion of technical and aesthetic foundations of electronic music. Introduction to analog and digital synthesis and control of sound.

262AB. Recording I and II
(2,2) Dennis

Fundamentals of recording in a studio environment. Discussion and demonstrations of major types of equipment used in the recording chain. Students will develop skills in all phases of studio operation and will complete a number of individual projects. Prerequisites: for 262A, consent of instructor; for 262B, completion of 262A or consent of instructor.

295. Community Involvement Program
(1-4) Department Faculty

C.I.P. involves students in basic community problems, performing such tasks as tutoring, coaching, performing for hospitals and schools, etc. Students receive 1 to 4 units depending on the specific tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Students taking C.I.P. through the Music Department must arrange for supervision by a Music Department advisor.

297. Sophomore Jury
(1) Department Faculty

Performance with critiques by members of the music faculty.
Prerequisite: Sophomore standing as a major in the Performance Concentration.

299. Music in Performance
(1) Department Faculty

This course consists of 10 concerts per semester presented by the Music Department or CPA. Attendance is required of all Music Majors.

304. Fretboard Skills Workshop
(1) Department Faculty

The study of figured bass, transposition and sight-reading on fretted instruments such as guitar, lute, etc. Accomplished performers on a chordal fretted instrument may petition the faculty, in writing, for permission to substitute this course for Music 306.

305. Aural Skills Workshop
(1) Department Faculty

Advanced sight-singing and dictation using diatonic and chromatic melodic and harmonic materials.
Prerequisite: Music 220 or the equivalent, or consent of instructor.

306. Keyboard Skills Workshop
(1) Department Faculty

The study of figured bass, transposition, sight-reading, and the interpretation of keyboard literature.
Prerequisite: Fluency in performing all scales and arpeggii, and in performing literature at the level of the easier Chopin Préludes.

310. Theory and Analysis V: Twentieth Century
(3) Department Faculty

Continuation of Theory and Analysis IV, with an emphasis on twentieth century music. Students must enroll concurrently in Music 320, or demonstrate equivalent competency.
Prerequisites: Music 104, 210 and 220 or equivalents, and placement test.

312. Principles of Arts Management
(3) Department Faculty

A survey of the social, historical, legal and economic aspects of the arts in the U.S., including evolution of U.S. and California cultural policy, rights and responsibilities of administrators and artists, non-profit law and taxation, agreements and contracts, current legal issues, fundraising and grantsmanship, and marketing. Cross-listed with Art 312 and Theatre Arts 312.

314. Orchestration and Choral Arranging
(3) Department Faculty

Techniques of orchestration and choral arranging, including arranging for typical school instrumental and choral ensembles. Prerequisite: Music 305 or consent of instructor.

316. Stage Band Composition and Orchestration
(2) Graves

Composition and arranging for stage band in traditional and contemporary jazz styles. Review of jazz theory fundamentals; projects in scoring for various instrumental groups and for the Concert Jazz Ensemble. May be repeated for credit.
Prerequisite: Music 111 or consent of instructor.

317. Vocal/Small Band Arranging
(2) Graves

Arranging for small ensembles in popular and jazz styles. Emphasis is placed on ways of combining vocal and instrumental resources characteristic of contemporary jazz and commercial small ensembles; particular attention is paid to uses of modern electronic instruments. May be repeated for credit.
Prerequisites: Music 111 or consent of instructor.

320. Theory V Laboratory: Ear-Training
(2) Department Faculty

Continuation of Theory IV Laboratory, with an emphasis on twentieth century music. Prerequisites: Music 104, and Music 220 or 305, or equivalents, and placement test.

323. Chamber Singers
(1–2) Worth

Study and performance of chamber choral literature. May be repeated for credit. Prerequisite: Audition.

324. University Singers
(1–2) Worth

Study and performance of standard and unusual works for chorus, with emphasis on *a cappella* literature. This class is designed for singers with previous choral experience. Frequent public performances. Admission to the class is by audition. May be repeated for credit.

325. Chorus
(1) Worth

Study and performance of music for large chorus, especially choral/orchestral works. Admission to the class is by audition. May be repeated for credit.

327. Symphonic Band
(1) Department Faculty

The study and presentation of wind ensemble music from all periods of musical literature. May be repeated for credit. Prerequisite: Consent of instructor.

328. Chamber Orchestra
(1–2) Lemon

Admission to the Chamber Orchestra is by audition. May be repeated for credit.

329. Chamber Music Workshop
(1–2) Department Faculty

Instruction and coaching in the performance of chamber music. May be repeated for credit.
Prerequisite: Consent of instructor.

330. Opera Theatre
(1–3) Donovan-Jeffry

A course primarily devoted to the study and performance of operatic literature. Designed for singers, coaches and others interested in lyric theatre, the course emphasizes all aspects of music theatre. May be repeated for credit. Prerequisite: Consent of instructor.

331. Songwriting
(2) Dennis

This class will provide information concerning all aspects of songwriting both as a commercial craft and as a musical art form. Music theory, form, lyrics, demo production and the music business will be discussed in detail. Participants will have numerous opportunities to have material evaluated and critiqued.

333. Early Music Workshop
(1) Hills

Study and performance of Western music written before 1650. May be repeated for credit. Prerequisite: Consent of instructor.

340. Acting and Directing for the Lyric Theatre
(1–3) Donovan-Jeffry

A course designed primarily for singers, actors and stage directors in which emphasis is placed on the study of the interdependence of music and drama in relation to the lyric stage. May be repeated for credit.
Prerequisite: Consent of instructor.

341. Studies in Counterpoint
(1–3) Department Faculty

Study of a particular contrapuntal style. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

342. Studies in Music History
(1–3) Department Faculty

Detailed consideration of a particular historical period, region or style. May be repeated for credit with consent of instructor. Prerequisite: Consent of instructor.

343. Studies in Musical Genres
(1–3) Department Faculty

In-depth study of a particular type of music. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

344. Studies in Specific Composers
(1–3) Department Faculty

Study of life and works of a specific composer. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

345. Studies in Orchestration
(2) Amsterdam, Sloss, Feldman, Johnson

The development and practice of orchestral writing in relation to specific composers and historical periods.
Prerequisite: Music 305 or consent of instructor.

350. Musics of the World
(3) Rust

A survey of the folk, court and religious music from cultures around the world. Acceptable as three units of the General Education Humanities requirement.

351. History of Early Western Music
(3) Hills

The study of European music in its historical context from plainchant through the late Renaissance (900–1600).
Prerequisites: Music 250 or equivalent, and consent of instructor.

352. History of Music in the Common Practice Period
(3) Hills, Amsterdam, Rust, Johnson

The history of Western music from the early baroque through the late romantic periods (1600–1900).
Prerequisites: Music 252 or equivalent; also Music 210 and 220 or consent of instructor.

353. History of Music from Debussy to the Present
(3) Feldman, Johnson

A study of major composers, significant works and trends in twentieth century music history.
Prerequisites: Music 252 or equivalent; also Music 310 and 320 or consent of instructor.

354. History of Musical Styles in the U.S.A. Since 1850
(3) Hills

The history of music in the United States from the period of the Civil War. The course emphasizes the jazz, classical, popular, and commercial music traditions.
Prerequisites: Music 250, 252, 111; or consent of instructor.

360. Recording Studio: Performance and Production
(1–2) Dennis

The class will focus on the development of listening skills with a study of established production styles and the perfection of individual musicianship in performance. It will include microphone technique, studio terminology, use of special effects in performance, and artistic creation through multi-track production.

363. Sound Synthesis: Computer
(3) Pellegrino, Johnson

The study of techniques of electronic sound generation and modification, utilizing analog and digital sound synthesis equipment available in the SSU Electronic Music Studio. A hands-on course requiring projects demonstrating various techniques of electronic sound synthesis and control.
Prerequisites: Music 260 or 261 or 261A or consent of instructor.

364. Sound Synthesis: Synthesizer
(3) Pellegrino, Johnson

Continuation of Music 363, with emphasis on using a variety of sound generation and control techniques in different performance settings.
Prerequisites: Music 363 or equivalent or consent of instructor.

370. Music of the World's Religions
(3) Rust

A course on the music of world, tribal and national religions. Emphasis will be on the functions of music in various religious contexts and the different styles of music favored by particular types of religious practice. Acceptable as three units of the General Education Humanities requirement.
Prerequisite: Upper division standing.
Experience in writing research papers and giving class presentations.

371. Music and Technology
(3) Johnson

An exploration of the interconnections between the performance, preservation and dissemination of music and the technologies which support those activities. An historical overview, with emphasis on connections between past and present technologies. Acceptable as three units of the General Education Humanities requirement.
Prerequisite: Upper division standing.
Recommended: WEPT test or equivalent.

372. A Social History of Music
(3) Johnson

A study of the relationship between the operation of societies, the activities of musicians and the nature of music produced during different periods of western Music history. Acceptable as three units of the General Education Humanities requirement.
Prerequisite: Upper division standing;
Recommended: WEPT test or equivalent completion of one lower-division social science general education course.

379. Contemporary Jazz Ensemble
(1) Graves

Rehearsal and performance of literature from post-bebop through fusions with different ethnic music, classical music, rock and free improvisation. May be repeated for credit.
Prerequisite: Consent of instructor.

389ABC Jazz Improvisation
(1,1,2) Graves

Exploration of the techniques of melodic composition and improvisation based on the scales and chords used in jazz. In 389C, particular emphasis is placed on composition projects. May be repeated for credit.
Prerequisite: For 389A, Music 110 or consent of instructor; for 389B, completion of 389A or consent of instructor; for 389C, completion of 389B or consent of instructor.

391. Concert Jazz Ensemble
(1) Graves

Rehearsal and performance of literature in traditional and contemporary jazz idioms. Repertory includes original arrangements especially designed for the ensemble by music faculty and students. May be repeated for credit.
Prerequisite: Consent of instructor.

392. Jazz Piano
(1) Perkoff

An introduction to jazz improvisation at the keyboard. Emphasis is placed on developing skill in reading lead sheets, in chord substitution and voicing at the keyboard, and in creating an improvised "piano trio" texture.
Prerequisite: Consent of instructor.

393. Concert Jazz Workshop
(1) Graves

Rehearsal and performance of historically significant jazz literature. Focuses on specific periods or composers, and the performance of student material will be featured. May be repeated for credit.

394. Vocal Jazz Ensemble
(1–2) Young

Rehearsal and performance of literature arranged for choral jazz performance; development of basic skills in jazz singing, including skat singing. May be repeated for credit.
Prerequisite: Consent of instructor.

395. Community Involvement Program
(1–4) Department Faculty

See Music 295.

397. Junior Jury
(1) Department Faculty

Performance with critiques by members of the music faculty.
Prerequisite: Junior standing as a major in the Performance Concentration.

399. Student Instructed
(1–3) Topic will differ each semester.

400. Theory of the Elementary School (Music)
(3) Amsterdam, Donovan-Jeffry

Philosophy, concepts and materials for music topics in the elementary schools. The structure, nature and function of music in young children's lives.

402. Choral Literature and Methodology
(1) Department Faculty

A study of choral literature with special reference to repertory suitable for the secondary school. Problems of performance, editorial techniques, aims, methods, and organization of vocal music programs for children's voices, adolescent voices, men's and women's glee, and mixed chorus. Students will conduct the works studied. Open to upper division music majors and graduate students only.

403. Topics in Music Education
(1) Amsterdam

Projects, discussions, demonstrations and lectures in specific areas of music education such as Kodaly and Orff methods, ensemble building, public relations, pre-service and in-service professional development, etc. Primarily for members of the Music Educators National Conference. May be repeated for credit.

415. Beginning Voice Class
(1) Lewis, Rust

Group work in the fundamental techniques of singing. Problems of tone production, breath control, diction, repertoire and interpretation. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

422. Class Instruction in Strings
(1) Sloss, Amsterdam

Basic performing techniques on orchestral string instruments. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

423. Class Instruction in Woodwinds
(1) Department Faculty

Basic performing techniques on band and orchestral woodwind instruments. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

424. Class Instruction in Brass
(1) Department Faculty

Basic performing techniques on standard brass instruments. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

425. Composition
(1–3) Feldman, Johnson

Individual projects in creative work. May be repeated for credit.
Prerequisite: Consent of instructor.

426. Composition for the Theatre
(2–3) Department Faculty

Individual projects in composition for designated drama and dance productions. May be repeated for credit.
Prerequisite: Consent of instructor.

428. Intermediate Voice Class
(1) Rust

Continuation of Music 115 or 415. May be repeated for credit with consent of instructor.
Prerequisite: Music 115, 415 or consent of instructor.

429. Class Instruction in Percussion
(1) Department Faculty

Basic performing techniques on standard percussion instruments. May be repeated for credit with consent of instructor.
Prerequisite: Consent of instructor.

430. Choral Conducting
(2–3) Department Faculty

Basic conducting techniques, and techniques of choral rehearsal and performance. Prerequisites: Music 305, 306, and either 352 or 353, or consent of instructor.

433. Private Instruction—Strings
(1) Sloss, Graves, Gottlieb, Amsterdam

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

434. Private Instruction—Woodwinds
(1) Williams, Young

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

437. Private Instruction—Brass
(1) Department Faculty

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

438. Private Instruction—Percussion
(1) Marsh

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

439. Private Instruction—Keyboard
(1) Donovan-Jeffry, Hills, Snyder, Thompson

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

440. Instrumental Proficiency Jury
(1) Department Faculty

Consolidation of instrumental performance skills, culminating in a performance illustrating a knowledge of the technical apparatus and tone production on string, woodwind, brass and percussion instruments. For students in the Music Education Concentration.
Prerequisites: Music 422 or 433, 423 or 434, 424 or 437, and 429 or 438; or the equivalents.

441. Private Instruction—Voice
(1) Lewis, Rust

Private instruction for advanced students. May be repeated for credit.
Prerequisites: Audition.

443. Private Instruction—Guitar
(1) Rosheger, Vincent

Private instruction for advanced students. May be repeated for credit.
Prerequisite: Audition.

445. Private Instruction—Composition
(1–2) Feldman, Johnson

Private instruction in composition for advanced students. May be repeated for credit.
Prerequisite: Music 425 or consent of instructor.

446. Private Instruction—Conducting
(1–2) Worth, Lemon, Sloss

Private instruction in conducting for advanced students. May be repeated for credit.
Prerequisite: Audition.

449. Studies in Non-Western Music
(2–3) Rust

Detailed study of the music of a particular country or area outside the Western European musical tradition. May be repeated for credit.

450. Workshop in Non-Western Music
(1–2) Department Faculty

Theory and performance of the music of Africa, India, Java or other area outside the European musical tradition. May be repeated for credit.

451. Repertory Class-Pvt. Inst
(1) Department Faculty

This class provides an opportunity for students to perform their repertory in a group setting. Private instruction faculty coach students in technique, interpretation and presentation. Classes are normally offered for voice, piano and percussion.

460. Teaching Assistant in Music
(1–4) Department Faculty

Open only to advanced music majors or music majors with special skills. Intended to give students experience in assisting the instructor in a music course or, under the supervision of a faculty member, in tutoring other students.

462. Recording III
(2) Dennis

Continuation of Recording II. Exploration of different microphone and instrument configurations required to obtain specific types of recorded sound. Extensive individual work in the studio on specific projects designed to develop student capacity to plan and engineer a demonstration tape.
Prerequisite: Recording II or consent of instructor.

463. Music Business
(3) Department Faculty

The study of the various aspects of music in the marketplace including songwriting, publishing, copyright; music licensing, unions and guilds; artist management and concert promotion; the record industry and musical aspects in broadcasting and film. Attention given also to career options and career planning.

480. Special Topics
(1–4) Department Faculty

Topic will vary from semester to semester. Consult class schedule for current offering.

481. Special Topics Workshop
(1–3) Department Faculty

Activity will vary from semester to semester. Consult class schedule for current offering.

490. Senior Project
(1–2) Department Faculty

A course designed to culminate the work of the music major. Group or individual projects in research, analysis, theory, or performance, bringing together all the skills and proficiencies that have been developed. A student may accumulate a maximum of two units in Senior Project.
Prerequisites: Music 210; Music 305; at least one of the following: Music 351, 352, 353 or 354; and consent of instructor.

491. Private Instruction—Senior Recital
(1–2) Department Faculty

Prepartion for and presentation of a senior recital as a culmination of the music major for performers. Limited to students enrolled in the Performance Concentration.
Prerequisites: Music 305, all juries and all other private instruction required for the Performance Concentration, and consent of instructor.

495. Special Studies
(1–4) Department Faculty

Individualized studies in topics beyond the scope of the regular curriculum. Contract with instructor specifying work to be completed. A regular schedule of contact hours necessary.
Prerequisite: Consent of instructor.

499. Internship: Arts Management
(4) Department Faculty

Work experience in selected music organizations for students interested in preparing for work in the arts management field.
Prerequisite: Completion of other courses in the Arts Management Career Minor or consent of instructor.

500. Introduction to Graduate Study
(3) Department Faculty

A course in the methods and materials for research in music. Proficiency in an imaginative use of the resources for accessing musical data will be developed through projects in bibliography.

595. Special Studies
(1–4) Department Faculty

Individualized studies in topics beyond the scope of the regular curriculum. Contract with instructor specifying work to be completed. A regular schedule of contact hours necessary.
Prerequisite: Consent of instructor.



Native American Studies

The Native American Studies Program is designed to prepare students to be knowledgeable about and effective within the American Indian community. In order to accomplish this, the Program is designed to 1) acquaint students with past and present Indian history, philosophy, and culture; 2) train students to apply the results of past experiences or research towards solutions of contemporary issues or problems; and 3) prepare students to work with Indian people as community service personnel teachers, tribal administrators, business managers, etc. While offering classes dealing with the traditional and contemporary cultures of tribes throughout the United States and Canada, the program particularly emphasizes the cultures of California Tribes. A growing number of these classes are taught as field study classes. Classes in Native American art, both traditional and contemporary, are offered with a growing emphasis and interest in studio classes teaching a variety of native crafts.

Coordinator:

William V. Smith

Contributing Faculty:

David W. Peri, Herminia Menez, Shirley Silver, Albert Wahrhaftig

Department Office:

Nichols Hall 214, phone (707) 664-2458

The program presently offers a Minor in Native American Studies. The suggested program for completing a minor in Native American Studies is as follows:

Minor in Native American Studies

CORE Courses

	Units
Total Units Required	20
NAMS 200—Introduction to Native Americans	4
NAMS 205—Introduction to Native American Arts	4
NAMS 301—Native California History & Culture	4
NAMS 340—The Contemporary Native American	4
Supporting Courses (selected from the following NAMS course offerings)	4

Human Services

- NAMS 330—Regional Historical Studies—4 units
- NAMS 341—Fundamentals of Native American Education—4 units
- NAMS 342—Contemporary Affairs of Native Americans of California—4 units
- NAMS 347—Introduction to Tribal Government—4 units

Cultural Studies

- NAMS 336—Native Americans of the Northwest Coast—4 units
- NAMS 337—Native American Cultures of the Southwest—4 units
- NAMS 346—Philosophic Systems & Sacred Movements in Native North America—4 units
- NAMS 354—Native American Literature—4 units
- NAMES 355—Analysis of North American Indian Myths—4 units.

Although the Program does not currently offer a major, special majors can be worked out by closely following the guidelines for Special Majors on Page 181ff of this Catalog.

Native American Studies Courses

200. Introduction to Native Americans
(4)

A survey of the various geographical environments of tribes living in North America. The emphasis will be upon pre-contact cultures, but will include cultural and historical changes to tribes during the settling of this country by Europeans.

205. Introduction to Native American Arts
(4)

A General introduction of the traditional American Indian arts in the United States and Canada. The course will include information of the culture that produced the art forms. Craft projects by the student will be a part of the class requirements.

206. Native American Arts & Crafts Workshop
(3)

A continuing workshop concentrating on the practical application of traditional American Indian art forms, designs and techniques through the use of traditional materials. This course attempts to advance the student's utilization of, and appreciation for, the various methods and skills of Native American arts and crafts, while promoting individual creativity.

300. Experimental Courses
(1–5)

The majority of these courses are designed as short term field excursions into various areas of the country where American Indians lived, or are living.

301. Native California History & Culture
(4)

A survey of the cultures and histories of Native California Indians.

320. The World Renewal System of Northwestern California
(2)

Examines the World Renewal Systems of the Karuk, Yoruk, and the Hupa. The course will study the symbolism and the spiritual functions of the annual and bi-annual ceremonies which comprise the World Renewal system for the original inhabitants of Northwestern California.

330. Regional Historical Studies
(4)

A comprehensive discussion of the cultural history of Native Americans in a particular regional or cultural area from the time of contact to the present.

331. Cultures of Eastern North America
(4)

Native American cultures east of the Mississippi River; social and political responses to European culture and the destruction of native societies.

332. Native American Cultures of the Plains
(4)

An in-depth focus on the indigenous cultures of the plains and their changes and disruptions.

336. Native Americans of the Northwest Coast
(4)

An examination of the pre-history, settlement patterns, social organization, religious systems, material culture, myths, languages, and current status of such tribal peoples as the Tlingit, Haida, Tsimashian, Bella Coola, Kwakiutl, Coast Salish, and Chinook. Special emphasis is placed on the art and economic systems of these peoples.

337. Native American Cultures of the American Southwest
(4)

An examination of the pre-history, ecology, settlement patterns, social organization, cosmological and ritual systems, material culture, mythology, language, and current status of Southwestern Native Americans.

340. The Contemporary Native American
(4)

A survey of the status of Native Americans in modern American society, including economic, political, and legal aspects; the role of the Federal government; and the emergence of Pan-Indianism and political activism.

341. Fundamentals of Native American Education
(4)

An introduction to the problems apparent in the education of California Indian youth and the socio-cultural experiences which have led to those problems, including a survey of the history of Indian education.

342. Contemporary Affairs of Native Americans of California
(4)

An intensive study of the contemporary problems, issues, and developments involving American Indians in California.

346. Philosophic Systems & Sacred Movements in Native North American
(4)

Only by common participation in religious cults and philosophic systems have the separate Indian tribes of North America ever united. This proposition will be critically examined by analysis of pre-historic, and contemporary American Indian religious movements and philosophic systems. The spread of Meso-American cults into the American Southwest and Southeast, the League of the Iroquois, the Code of Handsome Lake, and the Ghost Dance will be considered in detail.

347. Introduction to Tribal Government
(4)

A concept of tribal operation and sovereignty, involving the relationship of tribal governments to state and federal bureaucracies, will be examined through the historical development of federal and tribal laws and treaties. The function of tribal government will be studied, including problems of jurisdiction, taxation, and civil rights.

351. Native American Community Development
(4)

Theories and skills of community development will be analyzed in depth. The feasibility of their application to rural and reservation Indian communities will be explored. Special emphasis will be on California Indian communities.

352. Native American Legal and Political Systems
(4)

Contrasting methods of legal and social control, leadership and decision-making, and the growth of the supertribal states.

354. Native American Literatures
(4)

A discussion of traditional myths and songs as well as contemporary, literary works of Native Americans.

355. Analysis of North American Indian Myths
(4)

Sample literary, psychological and anthropological studies of North American Indian myths and tales.

410. Seminar in an Individual Native American Culture
(4)

An in-depth focus on the cultural experience of an individual Native American people.

420. Seminar in Contemporary Native American Studies
(4)

Special attention to modern cultural and political movements, and urban and rural socio-economic problems.

493. Special Seminar in Native American Studies
(1–4)

Intensive investigation and analysis of selected areas of American Indian culture.

495. Special Studies
(1–4)

A core upper division course; approval of supervising faculty member and approval of Department Chair.

497. Special Topics

Special topics related to a broader understanding of Native Americans (past and present) will be offered as student interest and faculty expertise allow. Topics may include: Native American Culture of the Great Basin and Plateau; the Role of Women in Native American Cultures; the World Renewal System of the Northwest California Tribes, and others.



Nursing

The Department of Nursing offers a Bachelor of Science and a Master of Science in Nursing. The Bachelor of Science program is designed specifically for registered nurses. The purpose of the BSN program is to provide upper-division education for registered nurses, leading to the baccalaureate degree. The program enables nurses to expand their practice and function with greater independence in a variety of settings.

The Master of Science program provides advanced professional education for Registered Nurses with a BSN degree. The program includes a core of instruction with an emphasis on theoretical and conceptual foundations of nursing practice, research, professional leadership, issues and communication processes. One concentration offers specialization as a Family Nurse Practitioner, with emphasis on advanced clinical practice, including the diagnosis and treatment of common illnesses, counseling, and preventive services for the family. A second concentration in Nursing Administration is planned to prepare nurses for executive leadership functions and responsibilities in current and emerging health care systems. The goal of the graduate program is to provide advanced professional education with a sound foundation in the liberal arts and sciences.

Philosophy

The faculty of the Department of Nursing believe that people are ecological systems, open and active, ever changing, and interacting as a whole with the environment. People seek integrity, are social beings, and interact with other people in a heterogenous, dynamic society. Society is characterized by a variety of cultures and subcultures, each with its own value system. Individual values generally reflect those of the culture. Values shape and direct behavior, may be conscious or unconscious, and may change in relative importance.

Health is defined by the faculty as a positive level of wellness which varies according to the individual's ability for optimal coping. Wellness is a dynamic process of direction toward a maximal potential. Health is maintained through adaptations within the person or alterations in the environment. The ecosystem in which the person functions is characterized by dynamic exchange, fluidity, balance of interactions and continuous energy exchange.

Professional nursing is a process that supports and facilitates movement toward wellness and the goal of human integrity. Nursing practice occurs within the framework of culture, values and professional goals. Nurses develop partnerships with clients to enhance those behaviors and resources which promote optimum functioning through the cycle of wellness, illness and death. The nursing process is the organizing professional framework for nursing practice. The techniques used in the nursing process include communicating, caring, negotiating, teaching/learning, managing/changing, and researching. The professional nurse provides, coordinates, and assists in continuous care to individuals and families in various types

of health care settings. Collaborative relationships with other health professionals may be developed to facilitate a wide range of client services.

The faculty believe that nursing education belongs within the framework of collegiate general education. Professional preparation extends the knowledge base and scope of nursing practice through liberal arts and sciences courses that develop critical thinking; enlarge social, cultural and political contexts; and integrate arts and humanities into a fuller appreciation of the person. Professionals augment their abilities to remedy problems of increasing complexity through this broad foundation.

Baccalaureate education in nursing builds on prior education and enables nurses to extend their practice, knowledge, and competencies. It provides opportunities for nurses to function with increased responsibility in a variety of health care settings and perform with greater independence in those settings. Undergraduate study prepares nurses with a foundation for continued growth in their ability to meet the present and future needs of society for health promotion and restoration, and care during illness.

The baccalaureate program prepares students to meet society's needs for professional nurses who think critically and exercise leadership in planning, implementing, and evaluating nursing care to individuals, families, and communities. Undergraduate education focuses on the utilization of the nursing process in the delivery of health care, within an environment which affirms the values of clients from varying cultural, social, and ethnic backgrounds. Graduates serve as providers, teachers, and planners/coordinators of client care. The undergraduate educational experience enables nurses to participate in the improvement of the quality of nursing and health care services.

Graduate education in nursing is founded upon a knowledge base from the natural, social, behavioral and nursing sciences. It builds on baccalaureate education and leads to expansion of the nursing role, while providing the student an opportunity to acquire advanced knowledge and skill in an area of specialization. Graduate study enhances the ability to think critically, provides opportunities to share knowledge in scholarly exchange with faculty and other students, and further develops the skills for assuming effective and responsible leadership roles in society.

The graduate program in nursing is designed to respond to society's needs for professional nurses who influence the structure of emerging patterns of health care practice and delivery. Specialization in an area of nursing practice or function enables graduates of the program to contribute effectively to current and future societal health needs. Graduates assist in the development and refinement of nursing science by assuming leadership roles within the profession and by participating in research and other scholarly activities.

Department Chair:

Leonide Martin

Faculty:

Dorothy Blake, Sandra DeBella, Laurel Freed, Janice Hitchcock, Carol Landis, Vivian Malmstrom, Marylou McAthie, Rose Murray, Thomas Nolan, Kathleen Puntillo, Mary Searight, Sue Thomas, Virginia Young

Department Office:

Nichols Hall 262, phone (707) 664-2465

Bachelor of Science in Nursing

The Bachelor of Science in Nursing program offers the Registered Nurse an opportunity to continue nursing and general education studies. Fully accredited by the National League for Nursing, Sonoma's baccalaureate program is a two year upper division major designed to articulate with two year community college nursing programs.

The goal of the nursing major is to prepare a liberally educated professional, qualified for certification as a public health nurse, and with a sound foundation for pursuing graduate education in nursing. Graduates will be prepared to plan and implement patient care, to teach patients, families and staff, and to provide leadership in the provision of health care to clients.

Curriculum

The first year of the nursing program focuses upon nursing in the community setting. Senior students have the opportunity to develop an area of concentration through preceptorship study.

Emphasis throughout is on wellness and prevention of illness in individuals, families, and communities. The curriculum focuses on development of skills in health assessment, research, communication, decision making, leadership, self awareness, and understanding of the process of change.

Prerequisites

Current California licensure as a Registered Nurse.

Applicants who have not received California RN licensure but who otherwise meet program prerequisites will be accepted on a conditional basis pending State Board results. Failure to pass State Boards would disqualify the student from the major (but not from the University) until such time as a passing score is obtained.

60 semester units of college transferable credit.

30 units should meet California State University general education requirements.
30 units must be credit for lower division nursing.

Minimum of 3 semester units of college transferable credit in general Chemistry with a grade of "C" or above.

Minimum of 3 semester units of college transferable credit in Human Anatomy and Physiology with a grade of "C" or above.

Proficiency in English composition, demonstrated by:

(a) college transferable course in English composition with a grade of "C" or above; or
(b) score of 3, 4, or 5 on CEEB Advanced Placement Examination in English; or
(c) score of 550 on CEEB English Composition Achievement Examination (62nd percentile); or
(d) passing CSU English Equivalency Examination.

Advisory Plans

RNs with an associate degree in most cases will have completed all prerequisites for the Sonoma State University baccalaureate program.

RNs who have attended a hospital (diploma) program should contact a local community college to obtain equivalent credit for their diploma program (30 ungraded lower division nursing units) and to complete general education requirements of the community college for an A.A. degree.

Eligible applicants who are currently enrolled in the University, or who plan to enroll prior to entering the nursing major, should contact the Nursing Department.

Persons who are not nurses but who seek a B.S. degree in nursing may (1) enroll at SSU for science and general education courses prerequisite for admission to a college or university nursing program which prepares students for RN licensure; or (2) enroll in a community college nursing program and, after obtaining an A.A. degree and RN licensure, transfer to SSU for a B.S. degree in nursing.

Application

Students are admitted to the nursing major in both Fall and Spring semesters. The standard California State University application is used, and is available at state and community colleges and high schools throughout the state, as well as from the Office of Admissions, Sonoma State University, Rohnert Park, CA 94928. Eligible applicants who are enrolled at the University as undeclared majors may apply to the nursing major using a "Change of Major" petition.

Progression, Retention, and Dismissal

Progression:

The nursing curriculum is planned so that nursing major courses may be completed in four semesters. Alternatively, a student may choose a "convenient workload," spreading the coursework over five to eight semesters. A student who has received 70 units of transferable community college credit can complete nursing, general education, statutory, and total unit requirements for University graduation in four semesters of "full time" study, 12–15 units per semester.

Early in the program, each student meets with an academic advisor to discuss the program, the student's previous academic and work experience, and goals. A plan for student progression through the program is developed.

Change of Course Progression and Leave of Absence from the Major:

Students who wish to alter their planned progression through the program must notify the Nursing Department in writing, using the acceptable Department notification form. The University has established criteria and deadlines for change of official enrollment and continuing student status, described in the University Catalog and Schedule of Classes. Within those guidelines, students must notify the Nursing Department regarding:

—Changes in their planned progression
—Leave of absence from the major (available after successful completion of a full semester).

Retention and Dismissal:

Grading: Only letter grades will be given for courses constituting the nursing major, with the exception of those courses for which a CR/NC grade is specifically indicated. Supporting courses must be taken for letter grades. Students must maintain a minimum grade of "C" (2.0) in each course constituting the nursing major to continue in the nursing program.

By special petition to the Nursing Department, and after faculty approval, a student may repeat a nursing course, at such time as the course is offered. If class enrollment is limited, priority will be given to those students in regular progression in the program. If a student is allowed to repeat a course in nursing, a grade of "C" or better must be earned in order to remain in the nursing program. The amount of time that can be missed in any nursing course, for any reason, will be determined by the faculty teaching the course.

Clinical Nursing Courses: If during enrollment in a clinical nursing course, the student's performance presents a potential harm to the welfare of clients, the faculty will determine, on the basis of documentation, whether the student will be permitted to continue in the major.

REQUIREMENTS FOR THE B.S. DEGREE IN NURSING

Nursing Major Requirements

	Units
Prelicensure Nursing (Community college credit)	30
Upper Division Nursing (Sonoma State University)	36*
Upper Division Supporting Course (Sonoma State University)	3*
General Education (Community college and/or college or university)	48**
Electives (Community college and/or college or university)	7
	124

* 36 units of upper division nursing major requirements and 3 units of required major supporting courses constitute the 39 units of the baccalaureate nursing curriculum

** University general education requirements subject to change.

ote: A maximum of 70 units of transferable community college units, including the 30 pre-licensure nursing units, may be applied toward the 124 units required for the B.S. degree in nursing.

Nursing Major Curriculum

		Units
300	Introduction to Baccalaureate Nursing	3
302	Microteaching for Nurses	
310AB	Concepts of Nursing in the Community	5
311	Nursing Practicum in the Community	4
315	Science Principles Applied to Human Phenomena	4
316	Health Assessment	2
367	Interaction and Change	2
407	The Research Process	2
422	Conceptual and Theoretical Bases for Nursing Practice	2
423	Preceptorship Study	2
424	Advanced Preceptorship Study	3
433	Current Professional Issues	3
467	Leadership and Change	3
Upper Division non-nursing course supportive of the preceptorship		3
		39

(+ General Education and elective units as needed to meet University graduation requirements)

Master of Science Nursing

The Master of Science in Nursing prepares Registered Nurses with a B.S. Degree in Nursing for advanced nursing practice in areas of specialization. The goal of the graduate nursing program is to provide advanced professional education with a sound foundation in the liberal arts and sciences. Graduate education in nursing builds upon the undergraduate knowledge base in the natural, social, behavioral and nursing sciences. It expands the science of nursing by study in depth of the person, the environment, health and nursing practice. Graduates are prepared for increasing responsibilities in clinical practice, leadership and research.

The current concentration in the Master of Science program is specialization as a Family Nurse Practitioner. Initiation of a second concentration in Nursing Administration is planned.

FAMILY NURSE PRACTITIONER PROGRAM

The purpose of the Family Nurse Practitioner graduate program is to prepare Registered Nurses with a B.S. Degree in Nursing for advanced clinical practice with an emphasis on promoting family wellness. The FNP specialization focuses upon the theoretical and scientific bases for the diagnosis and treatment of common illness, as well as health teaching, counseling and preventive services. Emphasis is placed upon advanced clinical skills, including history-taking and physical examination, health screening, management of common illness, and techniques of prevention and risk reduction.

An understanding of the economic factors affecting health care delivery, and the ethical bases of health services, provides nurses with unique capabilities to respond to society's complex needs. A central theme in the curriculum is the family as a conceptual framework for primary care practice. The ability to evaluate, selectively apply, and conduct clinical research is included as an important dimension of advanced professional practice.

Curriculum

The graduate nursing program includes core courses which focus upon theoretical and conceptual foundations of nursing practice, research, and professional leadership, issues and communication processes. These courses include content basic to all nursing specializations.

The first year of the graduate Family Nurse Practitioner Program focuses upon the theory and practice of family nursing in primary (and some secondary) care settings. Students have a three-semester clinical preceptorship with a primary care physician or nurse practitioner. The student is responsible for finding an acceptable preceptor. Content includes health needs and risks of all family members, family theories, and legal and professional issues pertinent to nurse practitioners.

The second year concludes the preceptorship experiences. Students developing and conduct research projects, and take courses in health economics and ethics of health care. Elective courses are offered in nursing education and administration of health care services. Students may elect to complete a thesis or take a comprehensive examination which serves as an integrating experience for the diverse content areas in the curriculum.

The SSU Family Nurse Practitioner Program meets criteria specified in Section 1484, Title XVI of the California Administrative Code; and is approved by the California Board of Registered Nursing.

Prerequisites for FNP Program

—B.S. Degree in Nursing
—GPA of 3.0 in the last 2 years (60 units) of undergraduate study
—Current California licensure as a Registered Nurse
—Acceptable scores on the Graduate Record Examination
—Completion of courses in community health nursing, physical assessment, statistics, and physiology within the last 7 years

Accelerated M.S. Degree Option for FNP Program

B.S. degree nurses who have prior nurse practitioner training are able to progress more rapidly through the program using a series of challenge examinations. A maximum of 12 semester units may be counted toward the M.S. degree by prior coursework and challenge examination. A total of 24 units must be taken in residence at SSU. Students are evaluated individually to determine which courses have been met by prior coursework and which courses may be challenged. By using this option, it is possible for eligible students to receive credit for the theory of diagnosis and management, and most of the clinical experiences required for FNP preparation. Students with prior training as FNPs may be able to complete the M.S. degree in one academic year.

APPLICATION

The standard California State University application form is used (available from the Office of Admissions, Sonoma State University, Rohnert Park, CA 94928). In addition, applicants must:

—complete a separate Department of Nursing application form;
—submit three letters of recommendation;
—and schedule an interview.

Transcripts must be sent to both the SSU Office of Admissions and to the Department of Nursing. Application packets are available from the Nursing Department. Eligible applicants who are enrolled at the University in other majors may apply to the nursing major using a "Change of Major" petition. Students completing the SSU undergraduate nursing program need to reapply to the University for graduate standing. Applications are accepted for *both* the Spring and Fall Semesters.

Refer also to the Section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Progression, Retention and Dismissal

Most graduate students are admitted in unclassified or conditionally classified standing. To become classified, students must be admitted by the nursing department to the graduate program, and must have completed all prerequisites. Advancement to classified standing becomes final when the G-1/G-2 Form, Advancement to Graduate Standing/Graduate Study Plan, is filed with the University.

Requirements for the Master of Science in Nursing include 36 units of approved upper-division and graduate coursework with maintenance of a B (3.0) minimum grade point average. All coursework applied for the graduate degree must have been completed within seven years of the date of award of the degree. If the graduate student's cumulative GPA falls below 3.0, he or she will be placed on academic probation. A student on academic probation who fails to attain a 3.0 GPA after one semester on probation is subject to academic disqualification. Disqualified students may petition the Office of Admissions and Records for reinstatement. The petition must provide evidence to justify reinstatement, and must be supported by the Nursing Department. Reinstated students are on probation for one semester, or until GPA deficiencies have been removed.

Students may be placed on administrative-academic probation, or disqualified, for other reasons, such as repeated failure to progress toward a degree, or failure to comply with an academic regulation common to certain groups of students.

All graduate students must take a writing proficiency test. This should be taken during the first semester of graduate work. Please refer to the SSU Catalog section on Post-Baccalaureate Degrees for further general requirements for the Master's Degree.

REQUIREMENTS FOR THE M.S. DEGREE IN NURSING

Family Nurse Practitioner Program

Nursing Courses:

		Units
Nurs 501	Assessment and Maintenance of the Well Family	3
Nurs 502	Theoretical Foundations of Nursing	2
Nurs 503A	Research Methods	3
Nurs 503B	Research Project	3
Nurs 510	Professional Leadership, Issues and Communication Processes	2
Nurs 540AB	FNP Diagnosis and Treatment in Primary Care	6
Nurs 550ABC	Family Nurse Practitioner Preceptorship	10

Non-nursing Courses:

		Units
Econ 393	Economics of Health Care Systems	4
Phil 380-2	Ethics of Health Care	3

Elective Courses:

		Units
Nurs 522A	Curriculum Development	(2) *
Nurs 522B	Teaching Methods and Strategies	(2) *
Nurs 526	Nursing Administration and Supervision	(4) *
Nurs 590	Master's Thesis	(2–6) *
	Total Required Units	36

Thesis or Comprehensive Examination: Degree requirements include completion of a Thesis, or passing a comprehensive examination which is taken during the last semester of study. There is no unit credit for the comprehensive examination.

* Not required for the major

Nursing Courses

Bachelor of Science

Major Courses

300. Introduction to Baccalaureate Nursing
(3) DeBella, Murray

Lecture/discussion, 3 hours. The student is introduced to principles and concepts of baccalaureate nursing practice, and to the Sonoma State University nursing curriculum. Individual student learning needs, including nursing and academic skills, are assessed and goals developed for professional nursing study. Concepts of self-care to maintain individual health are emphasized, including modalities for stress reduction and activities management.

302. Microteaching for Nurses
(1) Malmstrom and Department Faculty

Laboratory, 3 hours. Focus is on the promotion of health through client education designed to increase client responsibility. In the laboratory, students practice assessment of health education needs, formulation of teaching plans and strategies and application of the microelements of teaching in mini teaching sessions.
Prerequisites: Admission to the nursing major and/or consent of instructor.

310A. Concepts of Nursing in the Community
(3) DeBella, Freed, Hitchcock, Thomas, Young

Seminar, 2 hours; laboratory, 3 hours. The concepts of health, health promotion and maintenance in the individual, family and community are considered as the primary focus of the nurse's role, within a holistic framework.
Prerequisites: Admission to the nursing major; completion of, or concurrent enrollment in, N367; consent of instructor, malpractice insurance.

310B. Concepts of Nursing in the Community
(2) DeBella, Hitchcock, Thomas, Young

Seminar, 2 hours. Continuation of concepts of health with a focus on the community. Selected community health problems are examined within a holistic framework. Includes analysis of trends and issues in health care planning, delivery, and financing.
Prerequisites: Nursing 310A, concurrent enrollment in 311; consent of instructor.

311. Nursing Practicum in the Community
(4) DeBella, Freed, Hitchcock, Thomas, Young

Laboratory, 12 hours. Reality based experience in the community, utilizing a variety of settings and teaching strategies to facilitate students' understanding of the levels of health in individuals, families and communities. The student uses the nursing content acquired in the theory classes and simulated practice that precede or are concurrent with this course.
Prerequisites: Malpractice insurance, current driver's license; completion of Nursing 367; completion of, or concurrent enrollment in, Nursing 302, 310AB, 315, 316; consent of instructor.

315. Science Principles Applied to Human Phenomena
(4) Landis, Puntillo

Lecture/discussion, 4 hours. Promotes the integration and application of physiological and pathophysiological concepts to nursing. Focus is upon scientific consideration and physiological interpretation of signs and symptoms. Prerequisites: Admission to the nursing major; college chemistry with grade of "C" or above; college human anatomy and physiology taken within the last five years with a grade of "C" or above; consent of instructor. *Students who do not meet the five year recency prerequisite for Nursing 315 may:*

a. Complete an updated physiology course of 3 or more units with a grade of "C" or above prior to enrolling in Nursing 315; OR

b. Petition to waive the five year recency prerequisite based on
(1) an acceptable NLN Anatomy and Physiology test score, OR
(2) recent CE course in pathophysiology.

316. Health Assessment
(2) DeBella, Freed, Landis, Puntillo

Seminar, 1 hour; laboratory, 3 hours. This course is a combined seminar/learning lab which introduces basic concepts and skills of human health assessment. Instructional modules cover history taking, psychological assessment, and general examination techniques of selected body systems.
Prerequisities: Admission to the nursing major; completion of or concurrent enrollment in Nursing 315 and/or consent of instructor.

367. Interaction and Change
(2) Hitchcock, Murray, Nolan

Seminar, 2 hours. This course develops counseling, interviewing and assertive communication skills. Emphasis is placed on caring and empathy to promote constructive interaction in personal and professional relationships. Readings, peer counseling, a personal journal and classroom simulations foster awareness of feelings, attitudes and values and their influence on the communication process.
Prerequisites: Admission to the nursing major and/or consent of instructor.

407. The Research Process
(2) Young

Seminar, 2 hours. Introduces basic research concepts and processes, the nature of research, terminology, and research questions. Steps of the research process are explored within conceptual frameworks. Focus is on analysis and critique of research studies and formulation of research problems.
Prerequisites: Completion of Critical Thinking General Education requirement and Written English Proficiency Test (WEPT) or English 375; consent of instructor.

422. Conceptual and Theoretical Bases for Nursing Practice
(2) Martin, Nolan

Lecture/discussion, 2 hours. Selected nursing models are analyzed and compared with theories and models from other disciplines that are used in nursing. Examines definitions and elements of a theory and explores the usefulness of a theoretical basis for clinical practice. Should be taken concurrently with N423 and must be taken prior to N424.
Prerequisites: Completion of Critical Thinking GE requirement and WEPT or Eng. 375; consent of instructor.

423. Preceptorship Study
(2) Department Faculty

Laboratory, 6 hours. Introduces self-directed preceptorship study in various nursing settings. Students develop a learning contract which defines the conceptual framework for a selected area of nursing practice, including client population and nursing knowledge/skills. The clinical preceptor provides supervision in collaboration with a faculty advisor responsible for evaluation.
Prerequisites: Completion of Nursing 300 level courses; liability insurance; completion/concurrent enrollment in Nursing 422; consent of senior coordinator.

424. Advanced Preceptorship Study
(3) Department Faculty

Laboratory, 9 hours. Continues self-directed preceptorship study in selected nursing settings. Students implement a learning contract which develops clinical competency and independent decision-making/autonomy as a professional nurse. The conceptual framework is refined and applied in the setting. The clinical preceptor provides supervision in collaboration with a faculty advisor responsible for evaluation.
Prerequisites: Completion of Nursing 423; completion/concurrent enrollment in Nursing 407 and Nursing 467; liability insurance; consent of senior coordinator.

433. Current Professional Issues
(3) Freed, Malmstrom, McAthie, and Department Faculty

Seminar, 3 hours. Focuses on contemporary issues central to the nursing profession. Develops the concepts of professionalism and the numerous factors which inhibit or strengthen the evolution of the profession. Selected issues incorporating historical, social and political perspectives are examined. Analysis, proposals for future direction, and personal advocacy are emphasized.
Prerequisites: Admission to the nursing major and/or consent of instructor.

467. Group Leadership and Change
(3) Hitchcock, Murray, Nolan

Seminar, 3 hours. Develops knowledge of group interaction and introduces concepts and selected theories of group leadership, change, and dynamics. Includes six-week experience co-leading a health related group to develop beginning facilitator skills. Seminar activities include group simulations and peer supervision. Nursing management situations will be explored in terms of the above concepts and skills.
Prerequisites: Senior standing in the nursing major and consent of instructor.

Electives

Nursing electives, unless otherwise indicated, are open to non-nursing majors.

199. Special Studies
(1–4) Department Faculty

Individual or group study, under guidance of an instructor, enabling non-nursing majors to study areas of specific interest related to health and nursing.
Prerequisities: Consent of instructor and department chair. Specific guidelines available from the nursing department.

280. Alternative Approaches to Healing
(2) Murray

Lecture/discussion, 2 hours. Exploration of non-traditional and holistic approaches to healing with a focus on identifying and defining the mind/body relationship in healing and illness processes. Students will evaluate their own health practices and belief systems. Opportunities will be provided for practice and experience with selected healing techniques as demonstrated by local practitioners.
Prerequisite: Consent of instructor.

395. Community Involvement Program
(1-4) Department Faculty

CIP involves students in community problems related to the promotion of health and the prevention of illness. Credit may be given for such activities as volunteer work in health agencies, planning and participating in community health projects. A total of 6 units may be applied toward a degree. May be taken by petition only.
Prerequisites: Admission to the nursing major and consent of CIP coordinator for the Department of Nursing and department chairman.

396. Selected Topics in Nursing
(1–5) Department Faculty

A single topic or set of related topics not ordinarily covered by the nursing major curriculum. The course may be repeated for credit with a different topic, to a maximum of 12 units.
Prerequisites: Consent of instructor.

473. Health Education and Drug Abuse
(1) Young

Lecture, 1 hour. Emphasizes the teacher's responsibility for health promotion. Focus is on health issues affecting the school child's growth and maturation, and curriculum development for translating health knowledge into desirable health behavior. Includes units on nutrition and drug use and abuse. Course fulfills Health Education and Drug Abuse requirements of the Ryan Act Credential; enrollment priority is given to students in the Ryan credential program.
Prerequisites: Upper division standing and consent of the instructor.

495. Special Studies
(1–4) Department Faculty

Individual or group study, under guidance of an advisor, of special problems in nursing. Prerequisites: Admission to the nursing major and/or consent of instructor and department chair. Specific guidelines available from the Nursing Department.

MASTER OF SCIENCE

Major Courses

501. Assessment and Maintenance of the Well Family
(3) Blake, Martin

Lecture/discussion, 3 hours. Physical and psychosocial assessment of the family. Content focuses upon health promotion, illness prevention, and health maintenance. Family theories, behavioral change theories, concepts of health maintenance, and the practice of health habits of self, other students, and clients will be examined. Principles of family assessment, client health assessment, and health promotion groups are discussed.
Prerequisite: Consent of instructor.

502. Theoretical Foundations of Nursing
(2) Martin, Nolan

Lecture/discussion, 2 hours. This course builds upon an undergraduate foundation in nursing theories. The linkages between theory, research and practice are further developed. Concepts from selected nursing models/frameworks are critically analyzed and compared with theoretical foundations from other disciplines, including systems theory, developmental theory, interpersonal and transactional theories, and ethical theories. Students develop an explicit theoretical base for application to nursing practice or research.
Prerequisite: Consent of instructor.

503A. Research Methods
(3) Martin, McAthie, Nolan

Lecture/discussion, 3 hours. Focus is on understanding and applying the research process and incorporating research methods into nursing practice. Emphasis is on critique and analysis of research designs to study health problems, educational, or management issues in nursing. Students develop a preliminary design for a research proposal.
Prerequisite: Statistics

503B. Research Project
(3) Martin, McAthie, Nolan

Seminar, 2 hours. Laboratory, 3 hours. Focus is on further development of research proposals from Nursing 503A. Emphasis is on further refinement of the research problem, selection of methodology and research design, use of measurement tools, data collection and selection of analytic methods. Students complete data collection, analysis, and preparation of a research report with conclusions and recommendations. (May be waived if student elects Thesis Option.)
Prerequisite: Nursing 503A.

510. Professional Leadership, Issues, and Communication Processes
(3) Blake, Martin

Seminar, 3 hours. This course builds upon undergraduate foundation in individual and group communication processes. Focus is on power and influence in professional situations, including analysis of the impact of cultural variables. Current nursing profession issues are examined from the perspectives of leadership, power and communication processes. Activities include conducting case conferences, political presentations, and working with professional groups. Students develop personal leadership images and self-projections.
Prerequisite: Consent of instructor.

540A. FNP Diagnosis and Treatment in Primary Care
(3) Blake, Martin

Lecture/discussion, 3 hours. Content related to FNP assessment process and its application to primary health care for adults and children. Includes diagnosis and management of clients with common acute and chronic illness, within a biological-behavioral systems framework. Levels of FNP responsibility, consultation and referral to other health care resources are discussed.
Prerequisite: Acceptance into Master's Degree Program, FNP specialization.

540B. FNP Diagnosis and Treatment in Primary Care
(3) Blake, Martin

Lecture/discussion, 3 hours. Continued study of FNP assessment process and its application to primary health care for adults and children. Diagnosis and management of clients with increasingly complex acute and chronic illness is included, within a biological-behavioral systems framework. Greater responsibility for primary management is stressed, with appropriate consultation and referral.
Prerequisite: 540A.

550A. FNP Preceptorship I
(3–4) Department Faculty

Clinical preceptorship, 9–12 hours. Includes clinical practice for FNP students under supervision of faculty and preceptors. FNP students deliver primary health care for all family members in an office or clinic setting, including physical and psychosocial assessment, illness management, and health maintenance. Emphasis is upon increasing clinical expertise and judgement skills in the broad spectrum of family care.
Prerequisite: Acceptance into the Master's Degree Program, FNP specialization.

550B. FNP Preceptorship II
(3–4) Department Faculty

Clinical preceptorship, 9–12 hours. Continued clinical practice for FNP students under supervision of faculty and preceptors. Primary health care is provided for all family members in an office or clinic setting. Increasingly complex diseases and health problems are included in the case load. Emphasis is upon furthering clinical judgement skills and assuming greater responsibility for primary management.
Prerequisite: 550A or equivalent.

550C. FNP Preceptorship III
(2–4) Department Faculty

Clinical preceptorship, 6–12 hours. Clinical internship for FNP students with primary care preceptor. Continued practice of primary health care skills in selected settings, under supervision of faculty and preceptors. Students assume major responsibility for management of patient care, and function with high level of autonomy. Clinical practice may focus on area of student interest.
Prerequisites: Completion of 540AB and 550AB.

Electives

522A. Curriculum Development
(2) McAthie, Nolan

Seminar, 2 hours. Overview of components that comprise curriculum formation, revision, and evaluation. Curriculum design for nursing programs is examined critically. Attention is given to the dynamic process underlying the development and evolution of a curriculum. Individual and group student projects involve development of curricular models for selected nursing programs.
Prerequisite: Consent of instructor.

522B. Teaching Methods
(2) Nolan

Seminar, 2 hours. Overview of theoretical and practical aspects of the instructional role in the learning process. The major theories of learning are critically examined for the applicability to a variety of instructional experiences in culturally diverse educational settings. Teaching strategies are analyzed in relation to learning objectives. Students engage in a brief teaching practicum.
Prerequisite: Consent of instructor.

526. Nursing Administration and Supervision
(4) McAthie

Lecture, 2 hours; laboratory 6 hours. Study of the managerial functions of planning, organizing, and directing related to personnel, services, regulatory, and fiscal concerns of health care organizations. Includes field experience in administration and supervision in health care setting. Emphasis on initiation and management of a small medical/nursing practice.
Prerequisite: Consent of instructor.

590. Master's Thesis
(2–6) Department Faculty

Research on thesis developed by student in consultation with Nursing Department faculty, and approved by the department and the student's Thesis Committee. Students must submit a thesis proposal and receive approval before enrolling in this course. To register, student must present a completed and signed Thesis Prospectus Form at the time of registration.

595. Special Studies in Nursing
(2–4) Department Faculty

Individually arranged course for one or more students who wish to pursue academic interests beyond the scope of the regular curriculum.
Prerequisites: Graduate standing and consent of instructor and department chair. Specific guidelines available from the Nursing Department.

596. Selected Topics in Nursing
(1–4) Department Faculty

A single topic or set of related topics not ordinarily covered in the graduate curriculum. The course may be repeated for credit with a different topic, to a maximum of 12 units.
Prerequisite: Consent of instructor.

Philosophy: Your Life and Your Career

Philosophy is uniquely capable of providing direction, coherence, and stability in life. Our ability to think philosophically enables us to distinguish knowledge from mere opinion, assess values, acquire an integrated perspective on conflict and change, and reflectively and freely choose the course our lives will take. By studying philosophy, we can become conscious of the framework of assumptions that guides and structures our thoughts and actions. Thus we put ourselves in the position of becoming more rational in both our actions and thoughts.

Through the study of philosophy we can see our vocational choices as an essential part of the life shaping process; and so we can choose a vocation that enhances the coherence and value of our total life. We link together our efforts to become rational, humane, active, and successful, using standards that are reflectively considered and chosen by us. Philosophical thinking thus is our best tool for surviving as rational individuals in a world made more humane by our own critical efforts.

The curriculum in philosophy includes courses that develop necessary skills and provide knowledge for careers in such fields as Law, Business, and Government, as well as Philosophy. Recently, philosophy majors at a mid-Western university obtained internships in the following areas: Academic Administration, Alternative Teaching, Business, Counseling, Environmental Safety Standards, Family Planning, Grant Proposal Analysis, Hospital Administration, Juvenile Justice, Law, Medical Research, Mental Retardation, Public Policy Conflict Resolution, Public Relations, Third World Development, and Wildlife Conservation.

The generalizable intellectual skills and discipline obtained through the study of philosophy—skills in analysis, description, evaluation, synthesis and problem-solving—are an excellent means to vocational success, both inside and outside of the academic world. Philosophy students score exceptionally well on general verbal and quantitative aptitude tests, and when they choose to enter vocations like medicine or law, their acceptance rate is high. In fact, a recent study shows a significantly higher percentage of applicants to medical schools being accepted from philosophy than from biology. The Report of the Education Commission of the States predicts that the next generation of workers will need basic critical skills in evaluation, analysis, and synthesis.

A Senior Tutorial allows students to explore the vocational application of the philosophical skills they have developed.

Our Faculty and Curriculum

At the heart of our Philosophy Program is our faculty: highly individual philosophers who represent the major approaches to philosophy, and who are actively engaged in ongoing research and exploration. The curriculum is expressly designed not only to provide the major with needed methods and historical perspectives, but also to bring the major into contact with a broad spectrum of approaches to philosophy.

For detailed information on courses and faculty, see the course offerings below and consult the Philosophy Department, Nichols Hall 362 (664-2163).



Philosophy

Department Chair:

Philip Temko

Faculty:

Harold G. Alderman, Stanley V. McDaniel, Edward F. Mooney, Richard W. Paul, George L. Proctor, Philip O. Temko.

Part-Time Faculty:

Roger Bell, Dianne Romaine, Joel Rudinow.

Department Office:

Nichols Hall 362, phone (707) 664-2163

Bachelor of Arts Philosophy

Major

	Units
General Education	48
Major	42
Electives	34
Total	124

Philosophy majors are encouraged to take *at least* half of their elective units in fields other than philosophy, so as to maximize the interdisciplinary and applied value of their major. Students planning to do graduate work in philosophy are also encouraged to take at least two semesters of a foreign language.

Acceptance to the Major

Prospective students are accepted on probationary status during their first semester in residence (in certain cases, this requirement may be waived for transfer students). During the probationary semester, they must demonstrate motivation and proficiency in organization of thought and clarity of expression by receiving a grade of "B" or better in Phil 101, Critical Thinking, and Phil 204, Great Thinkers: Thales to Aquinas.

Advising

Advising is mandatory and begins with an initial advising interview with the Department Chair, after which the student will choose a regular faculty advisor.

Transfer Students

The Department welcomes transfer students from other institutions, and is eager to work out equivalances for classes completed elsewhere. Transfer students should consult with the Department Chair regarding their individual qualifications for the Philosophy Program.

Lower Division Program

A strong point of the Philosophy Major at Sonoma State is the thorough grounding provided in basic analytical tools. The lower division program, described below, includes training in both formal and informal methods of analysis. At the same time, a two semester Great Thinkers course provides the broad historical framework within which philosophical problems and methods develop.

Required Courses in recommended sequence:

	Units
First Semester Phil 101 Critical Thinking (3 units in G.E.)	0
Phil 204 Great Thinkers: Thales to Aquinas	3
Second Semester	
Phil 200 Introduction to Logic	3
Phil 206 Great Thinkers: Hobbes to Kant	3
Total Lower Division Units	9

Upper Division Program

The requirements for the upper division program introduce the student to a variety of faculty approaches. The course selections contain options to suit individual career goals and fulfill the department aim of comprehensive and effective training applicable to both traditional and contemporary philosophical work.

Required Courses:

Select six, one from each of the following areas:

A. Ethics and Value
   Ethics, Philosophy of Law, Medical Ethics, Aesthetics
B. Logic, Metaphysics, and Epistemology
   Philosophy of Mind, Philosophy of Language, Philosophy of Science, Theory of Knowledge
C. Historical Figures and Periods
   19th Century Philosophy, 20th Century Philosophy, Nietzsche, Kant, Plato, Aristotle, Heidegger
D. Conceptual Movements
   Phenomenology, Marxism, Pragmatism, Theory of

	Units
Critical Thinking, Analytic Philosophy (total)	18
One 400-level seminar in senior year	3
Upper Division Electives:	12
It is recommended that the Colloquium, Philosophy 300, be elected early in the Junior Year. Philosophy 470: Tutorial applications and careers 1–3 units of concentrated research with an advisor on available application and career choices appropriate to the interests and skills of the student.	
Summary:	
Lower Division Program	9
Upper Division Program	21
Electives	12
Total units	42

Minor in Philosophy

The minor in philosophy consists of 18 units approved by a Department Advisor. The minor track in philosophy may be designed to emphasize pre-law, pre-med, pre-business, critical thinking, and other applied areas and/or professional schools. Consult the Department Chair for further information.

Teaching Credential Single Subject Waiver Program Supplementary Authorization in the Teaching of Critical Thinking

The State of California now provides candidates for the single subject credential with the option of pursuing supplementary authorization for the teaching of critical thinking. The following courses will together fulfill the state requirements.

		Units
Phil 101	Critical Thinking	3
Phil 386	Advanced Critical Thinking	3
Phil 400	Theory of Critical Thinking	3
Phil 495	Special Study in Critical Thinking	3
		12

Center for Critical Thinking and Moral Critique

The Philosophy Department works in association with the Center in housing the Center's program for supplementary authorization in the teaching of Critical Thinking (under the Single Subject Waiver Credential Program of the State of California) and in helping its graduates to qualify as research interns for the Center. (Cf. page 28.)

Philosophy Courses

(Note: Lower division courses are designed to provide the student with fundamental background information and skills. Non-majors who wish to take upper division electives are encouraged to take six units of lower division course work in philosophy before taking upper division courses. 300-level courses are sometimes offered concurrently as 400-level courses; consult the Class Schedule for further information.)

100. Introduction to Philosophy
(3) Department Faculty

This course provides an introduction to some of the enduring questions of philosophy: What is the nature of knowledge, of morality and politics, of the self and interpersonal relations, of religion and the search for wisdom, of the structure of reality as a whole? Topics and approaches may vary from section to section; consult the Deparent office for current information, Nichols Hall 362.

101. Critical Thinking
(3) Paul, Alderman, Temko

Critical thinking is the best defense against intellectual trickery and self-delusion. It provides specific techniques and tools whereby we can avoid basic fallacies in our own thinking and detect them in the thought of others. Reasoning is a highly complicated human activity and cannot be satisfactorily studied in an intellectual vacuum. Hence, in this course, critical and uncritical thought are contrasted in the context of the world of human interests and activities—social, political, scientific, etc. All of the basic "tricks" for persuading people to accept false premises and conclusions as true are systematically laid out and their detection practices.

200. Introduction to Logic
(3) Department Faculty

An introduction to the nature of contemporary, systems of logic and their application. Students will learn how to abbreviate arguments in ordinary language, and deduce conclusions and locate fallacies. Recommended for students of the sciences, computer programming, mathematics, and the general student interested in the structure of arguments.

204. Great Thinkers of the West: Thales to Aquinas
(3) Mooney, Proctor, Alderman

This course is an introductory survey of the great thinkers of Greece, Rome, and Medieval Europe, from Thales and Heraclitus, to Socrates, Plato, and Aristotle, and on to Augustine, St. Francis and Aquinas. We trace the emergence of philosophy in the ancient world, its flowering in the "Golden Age" of Greece, and its decline in the Hellenistic period, followed by the making of a new synthesis of Greek, Roman and Biblical elements in Medieval thought and culture.

206. Great Thinkers of the West: Hobbes to Kant
(3) Mooney, Proctor, Alderman

This course covers modern philosophy, from the dualism of Descartes to the atomistic empiricism of Hume and Locke, and then to the great Kantian synthesis at the start of the contemporary era. We will emphasize in this survey the basic epistemological, metaphysical and ethical positions developed in this period, which lay the foundations for contemporary, western philosophy, culture and common sense.

300. Department Colloquium
(1 or 3) Department Faculty

The Department Colloquium introduces students to the members of the Philosophy Department, each of whom gives a presentation in the Colloquium lecture series. The lecture series usually explores a single topic, each faculty member taking one aspect of the topic for the theme of his/her presentation. Students enrolling in the Colloquium for three units of credit attend the lectures, cover reading assignments of related material, and meet regularly for discussion. For one unit of credit, a student may enroll for the lecture series alone. Lectures are open to the university community as a whole.

302. Ethics and Value Theory
(3) Mooney, Alderman, Temko, Paul

An introduction to the philosophical analysis of ethics, morality, and values, and a survey of the various systems of moral philosophy. The course covers such issues as: What is the good life?, What considerations are relevant to making moral decisions?, Are certain moral principles universal, or relative to a given society?, How, if at all, can moral judgments be justified or moral disagreements resolved?, and, What is the relationship between values and personal attitudes?

308. Theories of Knowledge
(3) McDaniel, Proctor, Paul

This course approaches the study of philosophy by surveying various "theories of knowledge" and their relationship to one's belief about and actions in the contemporary world. This includes a study of such topics as: "common sense", the role of "reason" and "the senses", "scientific knowledge", "the mystical experience", "religious beliefs", the relationships between knowledge, language, biology and society, "self-knowledge", certainty, and "wisdom". Theories and ideas from a variety of cultures, historical periods, and philosophical traditions will be considered.

310. Metaphysics
(3) Temko, McDaniel, Proctor

A survey of metaphysical thought, through an examination of both classical and contemporary sources, intended to introduce the student to such basic philosophical topics as: What is the nature of being, existence, and reality?, What sorts of things are "real"?, How do alternative world-views compare?, and What is the relationship between reality and knowledge?

320. Philosophy in Literature
(3) Temko, Mooney, Alderman

Reading and discussion of selected novels, plays, and poetry: What is the portrait of good and evil, reality and illusion, self and community, freedom and fate that emerges within the vision of each writer? Some of the writers typically covered are Dostoevsky, Tolstoy, Camus, Beckett, Albee, Mann, and Hesse.

322. The Religious Dimension
(3) Mooney

A philosophical look at the meaning of religious orientations. Is there a basic form or pattern to the religious quest? Is religion an outmoded or irrational way of understanding—and transforming—a persons's relationship to himself or herself, to others, to nature, to spiritual ideals? In addition to exploring the orientation of modern thinkers sympathetic to religion (e.g., Buber, Tillich, Kierkegaard), we will consider the critique of religion by anti-religious thinkers (e.g., Freud, Marx, Russell). The contrast between Western and non-Western religious perspectives will be considered.

332. Social and Political Philosophy
(3) Department Faculty

A critical survey of theories concerning the ideal society and theories critical of existing social and political systems. This includes consideration of such topics as: the relationship between the individual and authority, the tension between individual freedom and social order, the funtions of social and political organizations and their relationship to the fundamental goals or purposes of society, and an examination of the fundamental assumptions about human nature underlying different social and political philosophies.

334. Philosophy of Law
(3) Departmental Faculty

This course covers two basic "meta-legal" issues: (1) alternative philosophical justifications for the existence, authority, and nature of law and legal institutions and (2) alternative philosophical theories regarding the relationship between law and morality. The course considers the theories of natural law, legal positivism, and legal realism, and applies all of the above to particular problems within the law which raise philosophical issues (e.g., insanity and legal responsibility, criminal punishment, nature of legal reasoning, law and civil disobedience).

338. Pragmatism
(3) McDaniel

Pragmatism, an early development of American philosophers which figured prominently in philosophy in the early 1900's, has in recent times been acknowledged as a distinctive and important trend which complements other major contemporary approaches to philosophy. This course introduces the basic tenets of the pragmatist methodology and the pragmatic theory of truth and value, through readings in Peirce, Dewey and others.

344. Phenomenology
(3) Alderman

A discussion of the origin of phenomenology in the work of Brentano and Husserl and an examination of key concepts such as intentionality, epoche, and world. The course will distinguish between eidetic and existential phenomenology, and consider the use of phenomenology in the social sciences.

346. Studies in Nineteenth-Century Philosophy
(3) Alderman, Mooney, Paul

A study of major themes and figures in European philosophy after Kant: Hegal, Kierkegaard, Marx, Mill, Schopenhauer, Nietzsche; the foundations of existentialism; Utilitarianism, and Marxism. Emphasis will vary semester to semester.

348. Studies in Twentieth-Century Philosophy
(3) Alderman, Mooney, Paul, Temko

A study of major themes and figures in twentieth-century philosophy: the analytic tradition from Russell and Moore to Wittgenstein, Austin and Strawson; the continental tradition from Husserl and Heidegger to Sartre and Camus; the convergence of these two traditions in the work of current philosophers. Emphasis will vary semester to semester.

350. Advanced Logic
(3) McDaniel

An examination of selected contemporary deductive techniques applied to the sentential calculus, first-order predicate calculus with identity; exploring such issues as axiomatic systems and their properties, logical truth, and extensionalism. Prerequisite: Philosophy 200, or consent of the instructor.

352. Philosophy of Language
(3) Temko, Paul

A study of classical and current theories about the nature and functions of language, and about truth and meaning. Analysis of the relevance of philosophy of language to other branches of philosophy, linguistics, psychology, and the social sciences. Analysis of philosophical issues in the language of fiction and poetry.

354. Philosophy of Science
(3) Proctor

An examination of the central concepts of modern science (causality, explanation theory, prediction, evidence, experiment, probability, etc.) and of the open philosophical problems and conflicting views to which these concepts give rise. Consideration of the nature of science, with particular attention to the relation between the social and physical sciences, and the problem of the scientific status of the former. Selected readings in recent literature on the subject.

356. Philosophy of Mind
(3) Paul, Temko

A study of some philosophical theories of "mind", its relation to the body, and its relationship to the physical and biological world. Particular attention will be paid to metaphysical, epistemological and empirical assumptions and consequences of these theories. The course will include discussion of such topics as "mental structures", the role of mind in perception, "consciousness", "mental states", and how one talks about one's "mental life".

360. Eastern Philosophy
(3) McDaniel

This core course in Eastern philosophy (also an important course in the curriculum of the India Studies Program), stresses knowledge of *concepts* rather than memorization of *systems,* and accordingly emphasizes the learning of key Eastern concepts (especially those which differ considerably from Western ones) by exploring their use in selected Eastern texts.

372. Aesthetics
(3) Alderman, Temko

An analysis of the nature of the arts (poetry, painting, architecture, literature, music, dance). It includes consideration of such problems as: the cognitive role of the arts, the arts and perception, the artist and his/her world, purposes of the arts, and artistic imagination and creativity.

Topics Courses

Courses intended to cover some particular aspect of a philosophical problem, a particular philosopher, or some philosophical issue not normally explored in detail in any of the standard course offerings. The course titles and contents may vary from semester to semester and may be repeated for credit. Courses taught under this rubric include philosophy of feminism, philosophy of comedy, and transtantric philosophy, among others. See the class schedule for particular topics courses offered each semester.

380. Topics in Value Theory
(1–6)

382. Topics in the History of Philosophy
(1–6)

384. Topics in Social and Political Philosophy
(1–6)

386. Topics in Logic and Language
(1–6)

388. Topics in Metaphysics
(1–6)

390. Topics in Theories of Knowledge
(1–6)

394. Topics in Phenomenology
(1–6)

396. Topics in Marxism
(1–6)

Advanced Courses

400. Seminar
(1–6)

Seminars are designed for advanced students who wish to do specialized intensive work in a particular area of study. Titles and contents of seminars vary from semester to semester; therefore Philosophy 400 may be repeated for credit. (See the class schedule for seminars offered each semester.)

450; 452. Senior Thesis
(3–3)

Writing of a paper deemed acceptable by a faculty director and reader. Superior papers nominated for distinction will be defended before the philosophy faculty. Students wishing to be candidates for graduation with distinction are urged to write a thesis. 450 is a prerequisite for 452.

460. Teaching Assistant in Philosophy
(1–6)

Open only to advanced students. Intended to give students experience in assisting the instructor in a philosophy course by doing research and tutoring students in the class. Consent of the instructor is required.

462. Research Assistant in Philosophy
(1–6)

Open only to advanced students by faculty invitation. Intended to give selected students experience in participating in the construction of a professor's research project.

470. Philosophy Tutorial
(1–6)

Advanced individualized instruction and research with one or more members of the philosophy faculty. The course is designed to provide advanced students with an opportunity to do specialized research and study under strict faculty supervision. Consent of the instructor is required.

495. Special Studies
(1–4)

Specific requirements must be arranged with instructor prior to registration. Consent of instructor is required.

Graduate Study

The Philosophy Department does not offer a Masters Program. However, a number of students have received graduate credit for work in Philosophy under the auspices of the Special Interdisciplinary M.A. Interested students should consult the Chair of the Philosophy Department and the ITDS/Special Major advisor.

510. Graduate Research in Philosophy
(1–6) Department Faculty

Advanced research and writing. Students work under close supervision of faculty members. Subject matter variable. May be repeated for credit.



Physical Education and Health Sciences

The discipline of Physical Education encompasses the study of human movement as expression of an individual's aesthetic values, health and physical being, and/or competitive nature. As such, it is integral and fundamental to a liberal education. The Physical Education and Health Sciences Department offers programs leading to B.A. and M.A. degrees which are designed to meet a variety of students' needs and interests. A core of courses which is required for all majors, examines the physiological, psychological, sociological and anatomical/biomechanical bases of sport and human movement.

Beyond this core, the Program consists of several concentrations which allow students to select courses that focus on their special interests. These focused areas of study include: teaching/coaching; adapted physical education; exercise science and interdisciplinary studies in physical education. The teaching/coaching and adapted physical education options prepare students for entry into the credential program. In the exercise science concentration a student may choose an emphasis in adult fitness, biomechanics, exercise physiology, athletic training, or pre-physical therapy. A student with a special career goal may select the interdisciplinary concentration and with an advisor develop an individualized program.

Theoretical and practical learning experiences are an important part of all programs. Students are required to participate in a variety of field experiences, working as coaching assistants, teacher's aides, exercise/recreation leaders, and instructors for disabled students.

The Physical Education Major concentrations and their related experiences provide training for a variety of careers: teaching and coaching at all educational levels, entry into physical therapy certificate or degree programs, directing adult fitness programs, assisting in cardiac rehabilitation programs, teaching in special education. In addition, graduates are prepared to continue their education in pursuit of master's or doctoral degrees.

Facilities for laboratory, activity, and athletic programs are excellent. There are very well equipped laboratories in exercise physiology and biomechanical kinesiology. The main gymnasium provides three full basketball and volleyball courts and seating for 3000. A new swimming pool is available for classes and recreational purposes. Extensive outdoor facilities including twelve tennis courts, racquetball courts, fields for soccer, baseball, softball, a football stadium and practice fields, and numerous running trails are available for student use.

The Physical Education and Health Sciences Program at Sonoma State University provides training for a variety of careers: teaching and coaching in elementary through college and university levels; preliminary training for entry into physical therapy; special education teaching; adult fitness and cardiac rehabilitation; school district administration; private instruction; sports business and management.

In addition, graduates may continue their education and pursue graduate studies for master's or doctoral degrees.

Department Chair:

James Gale

Faculty:

C. Douglas Earl, Kenneth Flynn, Vivian Fritz, James Gale, Marcia Hart, Kathryn Klein, Robert Lynde, G. Edward Rudloff, Robert Sorani, Ella Trussell, Martha Yates.

Department Office:

P.E. 14, phone (707) 664-2357.

Bachelor of Arts in Physical Education

Major

	Units
General Education	48
Major Requirements	45–51
Electives	25–31
Total	124

Course Requirements

A. Core Courses (All Majors)

	Units
PEHS 301 Philosophy/History of Physical Education	4
PEHS 305 Motor Learning	4
PEHS 315 Sociology of Sport	3
PEHS 330A Measurement and Evaluation	1
PEHS 351 Biomechanics	3
PEHS 352 Anatomical Kinesiology	2
PEHS 360 Physiology of Exercise	4
PEHS 470 Professional Seminar	3
	24

B. Concentrations

Several options are available to a student in advancement toward a specific goal in the degree program. A student may select a pattern of courses in any one of the following concentrations.

Adapted Physical Education. After completing the baccalaureate degree, students may pursue career opportunities in private or public agencies. In combination with the Teacher Preparation Concentration (single subject credential) a student may meet the requirements for the special emphasis credential in adapted physical education.

Physical Education Core ..... 24 units

Adapted Physical Education Concentration

Required:

	Units
Educ 430 Special Education for Teachers	4
Psych 434 Psychology of Disability	2–4
PEHS 410 Human Motor Development	3
PEHS 325 Adapted PE-I Basic Concepts and Special Populations	3
PEHS 326 Adapted PE-II Program Development	3
PEHS 430C Field Experience in Adapted PE (concurrent enrollment with PEHS 325 or PEHS 326 required)	1–3
PEHS 495C Special Studies in Adapted PE (minimum of 2 units)	1–4
	22

Teacher Preparation. Students who are interested in teaching physical education and coaching in the schools may select this option. This concentration will satisfy the requirements for entry into the credential program.

Physical Education Core ..... 24 units

Teacher Preparation Option

Required:

	Units
PEHS 300 Analysis of Motor Performance:	
Aquatics	2
Track and Field	2
Folk and Square Dance	
Tumbling	
one racquet sport (from Badminton or Tennis)	
two team sports (from Basketball, Field Sports, Softball, or Volleyball)	2
one elective	1
PEHS 320 Practicum	2
PEHS 330B Measurement and Evaluation	
PEHS 331 Observation and Participation in Physical Education Programs	
PEHS 341 Care and Prevention of Athletic Injuries	3
PEHS 390 Techniques of Conditioning	
PEHS 400 Theory of Elementary School Physical Education	
PEHS 430C Field Experience in Adapted Physical Education (must be completed in the University adapted physical education program)	
PEHS 420 Theory of Coaching	
Two courses selected from, e.g., Basketball, Football, Soccer, Tennis, Volleyball, 2 units each, or one course selected from Theory of Coaching plus 2 units of	

approved Field Experience in the same sport (PEHS 430A) 4

27

For information on credentials and professional education requirements see p. of this Catalog and the University's special bulletin on *Programs in Teacher Education.*

Credential candidates must complete a one-unit course on drug abuse and health education.

Exercise Science Concentration

Students who have an interest in athletic training, adult fitness, biomechanics, exercise physiology, and pre-physical therapy may select this concentration. It contains a core of courses beyond the required core (listed above) and a set of courses specific to the subspeciality within this concentration.

Physical Education Core..... 24 units

Required Courses

	Units
PEHS 341 Care and Prevention of Athletic Injuries ..... (in special cases Adv First Aid may be substituted)	3
PEHS 390 Techniques of Conditioning.....	2
PEHS 410 Human Motor Development	3
PEHS 435 Field Experience or PEHS 495 Special Studies	2
BIOL 380 Principles and Problems in Human Nutrition.....	4
	16

Areas of Interest in Exercise Science

	Units
Adult Fitness Management	
MGT 230 Financial Accounting Fundamentals.....	4
MGT 351 Small Business Mgmnt	4
	8
Athletic Training	
PEHS 325 Adapted Physical Educ	3
PEHS 340 Advanced First Aid	3
PEHS 435B Fld Experience in Ath Training	2
PEHS 495E Spec Studies in Ath Training.....	2
	10
Biomechanics	
CIS 101 Introduction to Computing	3
MTH 107 Algebra and Trigonometry	3
	6
Exercise Physiology	
CIS 101 Introduction to Computing	3
CHEM 340 Introductory Biochem.....	3
	6
Pre-physical Therapy	
PSY 425 Abnormal Behavior	4
PEHS 325 Adapted Physical Educ	3
PEHS 435 Field Experience in Health Sciences.....	2
	9

The student interested in entering a physical therapy program must also take courses in Biology, Chemistry, and Physics to satisfy admission requirements to Master's or certificate programs. Check with the schools to which you plan to apply for specific requirements.

Interdisciplinary Concentration. In consultation with their advisors, students design a concentrated course of study or special interest track in preparation for a career goal. Areas of study may include sports communication, sport art, sports management, community recreation, and others.

Physical Education Core..... 24 units

The student in consultation with an advisor shall select a minimum of 22 units to complete the program requirements. Courses in physical education and those offered by other departments are appropriate and may be applied to this track. A minimum of 3 units, and not more than 6 units, in Field Experience (PEHS 430) and/or Special Studies (PEHS 495) must be taken. The proposed study list must be signed by the student and advisor and submitted to the Department Chair for approval. A copy of the signed approved study list is to be placed in the student's advising folder.

22 units

Minor in Physical Education

Students majoring in other disciplines may complete a Minor in Physical Education to further their career goals. The Minor requires a minimum of 22 units and includes a core of 11 to 14 units (required by all students) and a minimum of 8 to 11 units of electives. The minor in Physical Education may be desirable for credential candidates pursuing a second teaching area or a career in coaching, for management students entering sport/fitness businesses, for environmentalists involved in outdoor recreation programs, for students in performing arts, desiring a physical education/dance background. Students pursuing a Physical Education minor must consult with a departmental advisor for program requirements.

Minor Core (11 to 14 units required of all students)

	Units
PEHS 330A Measurement and Evaluation.....	1
One course from the following:	
PEHS 301 History and Philosophy of Physical Education	4
PEHS 315 Sociology of Sport	3
Two courses from the following:	
PEHS 305 Motor Learning.....	4
PEHS 351 Biomechanical Kinesiology	3
PEHS 360 Physiology of Exercise....	4

Minor Options (7 to 11 units of electives)

These courses are to be determined with, and approved by a Departmental advisor. They may include a maximum of 3 units of Field Work and/or Special Studies.

Master of Arts in Physical Education

The goal of the Master of Arts degree program in Physical Education is to provide increased understanding of the body of knowledge in physical education which is based on the biological, sociological, kinesiological, and psychological influences on man as he performs in games, sports, and dance.

The Program has been designed to emphasize exercise physiology and adult fitness, yet also allows other concentration options depending upon the student's area of interest.

Courses required of all students are:

	Units
PEHS 500 Introduction to Research	3
PEHS 501 Graduate Seminar	3
PEHS 525 Thesis/Project	3
PEHS 505 Adv. Motor Learning	3
PEHS 550 Adv. Kinesiology	3
PEHS 560 Adv. Exercise Physiology	3
Electives	12

As an example of study concentration, a student who wishes to pursue the adult fitness program will select electives from the following list:

Biology 380 Nutrition (4)
Sociology 319 Gerontology (4)
Management 342 Human Relations in Management (4)
Management 352 Starting a Small Business (4)
PEHS 410 Human Motor Development (3)
PEHS 450 Leading Adult Fitness Programs (3)
PEHS 561 Cardiovascular Programs (3)
PEHS 595 Special Studies (3)

Other emphases may be established in consultation with the department graduate coordinator.

The Department of Physical Education and Health Sciences offers the MA in Physical Education via the thesis or project option, requiring an original investigative thesis or an equivalent project.

Admission Procedures

1. Apply for admission to the university at the Office of Admissions.
2. Unclassified Postbaccalaureate—Applicants who desire only postbaccalaureate coursework and who do not intend to pursue an M.A. degree only need acceptance by Sonoma State University. The department does not review these applications.
3. Conditionally Classified Graduate—Application for students interested in pursuing a Master's Degree in Physical Education will be forwarded to the department for consideration. The student must submit, along with the application to the Office of Admissions, transcripts of all college work. These should show a B.A. degree or its equivalent and a grade point average of at least 2.5 for the last 60 units of work attempted. Students who have degrees in other areas of study must make up deficiencies in undergraduate areas: descriptive statistics, kinesiology, motor learning, physiology of exercise and sociology of sport. Only one (up to 4 units) of these courses may be counted toward the M.A. degree.

Refer to the Section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

The Graduate Coordinator serves as advisor to all conditionally classified graduate students until the students select a major advisor and advance to classified graduate status.

Classified Graduate Status

Classified graduate students are those who have selected an advisory committee, designed an approved course of study (Form G-2), and been approved by the department faculty for the M.A. Program. Classified students must be registered each semester while working toward the degree.

Advancement to Classified Graduate Status

Although students are admitted to the University, they are not fully recognized as being advanced the candidacy for the M.A. degree until they have successfully completed at least nine units of coursework at Sonoma, the Graduate Records Examination, and all undergraduate prerequisites.

After completion of these preliminary requirements the candidate must apply to the departmental graduate studies committee by completing form G-2, a proposed course of study and taking a preliminary examination in the area selected for thesis study. The committee may approve the course of study, suggest changes and/or recommend additional supporting coursework (based upon previous work and the examination paper) before approval and subsequent advancement to candidacy.

Matriculation alone does not guarantee the right to advancement to candidacy. Work in graduate level courses, completion of undergraduate prerequisites, the preliminary examination, and GRE scores may be considered in approving (or disapproving) advancement to candidacy.

The study agreement will list the 30 units which must be completed before the awarding of the M.A. Degree in Physical Education. These forms must be approved by the departmental graduate committee before they are forwarded to the Dean of Graduate Studies. These forms must be completed and approved and the GRE score submitted before the student may begin any of the final 15 units (of the 30 units included on the study agreement).

Requirements for Completion of the MA Degree

A description of the course requirements and other regulations pertaining to the M.A. Degree are available in the department office.

Physical Education and Health Science Courses

101. Physical Education Activities
(1) (Fall and Spring) Department Faculty

Activities Classes: Classes are conducted in the following activities: *Aquatics,* Swimming, Diving, Life Saving, Water Safety Instruction, and SCUBA. *Individual Sports,* Adapted Activities, Archery, Badminton, Bicycling, Fencing, Frisbee, Golf, Handball, Martial Arts, Personal Defense, Racquetball, and Tennis. *Fitness,* Conditioning, Jogging/Running, and Weight Training. *Dance,* Folk and Square. *Outdoor Activities,* Backpacking, Canoeing, Cross Country Skiing, Fishing, Orienteering, Outward Bound, Rock Climbing, and Sailing (Fee). *Team Sports,* Basketball, Soccer, Softball, Volleyball, and Ultimate Frisbee. (A fee may be charged for canoeing, fishing, sailing and scuba; check with the instructor to determine the current fee.)

Most sections meet twice weekly, with some sections meeting at specially arranged times according to the nature of the activity. All are open to both men and women. Students may take, for credit, as many *different* 101 classes as desired. The *same* 101 activity may be repeated once for credit.

300. Analysis of Motor Performance
(1 or 2) (Fall and Spring) Department Faculty

Lecture/Laboratory. A series of one unit courses. Each course is designed to provide the students with an understanding of the mechanics of the neuromuscular skills and functional application of the activities presented within the course. Performance prerequisite skills are required for some of these classes.

Fall: Aquatics, Field Sports, Tennis, Badminton, Basketball, Tumbling and Vaulting.

Spring: Volleyball, Softball, Gymnastics-apparatus, men and women's Folk and Square Dance, Track and Field.

301. History and Philosophy of Physical Education
(4) (Fall and Spring) Lynde

An introduction to significiant historical and philosophical considerations in the development of physical education. Contemporary philosophical issues as well as active physical participation with an experiential emphasis will be studied.

305. Motor Learning
(4) (Fall and Spring) Klein

Lecture, Laboratory. Perception, learning, motivations and emotion in relation to motor performance. The psychology of competiton, personal adjustment and social behavior as observed in play.
Prerequisite: Completed or concurrent enrollment in PE 330 (Part I).

306. Wilderness Travel
(3) Trussell/Klein

Survey of equipment and techniques necessary for safe, low impact wilderness travel. Field trips challenge the student to apply skills in outdoor settings. Material includes map and compass, equipment and food, safety and survival.

310. Analysis of Motor Skills
(2) (Fall) Sorani

Study of concepts and application of a variety of analytic techniques used for analyzing human performers in motion, in the context of exercise, sport, and dance.

311. Selected Topics
(1-4) (Fall and Spring) Department Faculty

Selected upper division courses that are taught on a one-time basis.

312. Wilderness Safety
(2) (Spring) Trussell

Lecture/discussion. The course is offered for individuals of varied backgrounds whose activities place them where immediate medical help is not available. It includes health safety, and material that will prepare the student to respond to emergency situations in a way that will sustain life, prevent further injury, and secure evacuation.
Prerequisite: Advanced First Aid or consent of instructor.

315. Sociology or Sport
(3) (Fall and Spring) Earl

Examines and utilizes basic sociological concepts and demonstrates their manifestations in the teaching of Physical Education and sports.

320. Practicum/Methods
(2) (Fall and Spring) Fritz

A semester of supervised observation and teaching experience in physical education activity programs. May be repeated for credit.

325. Adapted Physical Education I: Basic Concepts and Special Populations
(3) (Fall) Hart

Lecture/discussion. An introduction to adapted physical education—common definitions, scope and basic concepts which provide a framework for innovation; a study of selected, common disabilities, with a primary focus on identification, etiology and implications for physical education.
Prerequisites: Consent of instructor and concurrent enrollment in PE 430C.

326. Adapted Physical Education II: Program Development
(3) (Spring) Hart

Lecture/discussion/lab. Planning and developing appropriate programs for special populations—principles of diagnosis, appraisal, and prescriptive teaching; techniques for adapting programs to individual needs and capabilities; activities and programs in basic skills and movement exploration, rhythms and dance, active games and sports (individual and group), physical fitness, aquatics and relaxations. Prerequisites: PEHS 325 or consent of instructor, and concurrent enrollment in PEHS 430C.

330A. Measurement and Evaluation
(1)

A survey of descriptive statistics. Includes measures of central tendency, variability, scale scores, correlation, and graphing with applications in health science and physical education. Meets first half of the semester. Required for all physical education majors. Prerequisite: Pass ELM or permission of instructor.

330B. Measurement and Evaluation
(1)

The application of measurement techniques in the selection of tests and the development of evaluation instruments in psychomotor, cognitive, and affective domains in physical education. Meets second half of the semester. Required of majors in teacher preparation track.

336. Community Recreation
(3) (Fall, even numbered years) Flynn

A course designed to orient students to the breadth, scope and nature of the professional program in recreation. Study of community recreation programs, analyzing desirable objectives, functions, programs and leadership. Stresses community planning and organization for parks, playgrounds, and recreation programs.

340. Advanced First Aid
(3) (Spring) Orr, Cotter

Study of the principles and practical applications of advanced first aid techniques required to provide the initial emergency care necessary to sustain life and to maintain life support until the victims of accidents or sudden illness are cared for by qualified medical personnel.

341. Care and Prevention of Injuries
(3) (Fall) Orr

Lecture, laboratory. A study of the types of injuries which occur in athletic participation. Prevention, care and rehabilitation of injuries through selection and use of equipment, and properly applied techniques of training and conditioning. $10 fee required for this course.
Prerequisite: Biology 220, Human Anatomy, or equivalent.

351. Biomechanics
(3) Trussell

The qualitative and quantitative analysis of human movement in relation to mechanical effects such as application of force in relation to center of mass, displacement, velocity, acceleration of bodies, buoyancy, etc. Emphasis is on understanding and application of principles to any movement pattern.
Prerequisite: BIOL 220 Human Anatomy (or equivalent); Concurrent enrollment in PEHS 352.

352. Anatomic Kinesiology
(2) Sorani

A course on the anatomy of motion. The primary objective of the course is to present the anatomical background essential for understanding human movement. Subject matter is presented in a functional manner, the emphasis throughout being on the relation of anatomic structure to function. Laboratory experiences are included to help accomplish this goal.
Prerequisite: BIOL 220 Human Anatomy (or equivalent); Concurrent enrollment in PEHS 351 is required by Physical Education majors.

360. Physiology of Exercise
(4) (Fall and Spring) Yates, Gale

Lecture, laboratory. Study of the acute and chronic effects of activity on the human organism. Laboratory and field experiences in the measurement of work capacity, cardio-respiratory function and skeletal muscle physiology. An analysis of the physiological factors related to teaching and coaching.
Prerequisite: Biology 224.

368. Extramural Sports
(2) (Fall and Spring) Department Faculty

Organized club sports, providing instruction, training, and competition. Activities may include: sailing, fencing, and golf. Sports may be added or omitted according to student interest and available resources. May be repeated for credit.

371–377. Varsity Intercollegiate Sports for Men
(2) (Fall and Spring) Department Faculty

Activities include: Cross-country, soccer, football, basketball, baseball, tennis, track and field. May be repeated for credit.

381–387. Varsity Intercollegiate Sports for Women
(2) (Fall and Spring) Department Faculty

Activities include: soccer, volleyball, tennis, track and field, cross-country, basketball, gymnastics, and softball. May be repeated for credit.

390. Techniques of Conditioning
(2) Sorani

An introduction to scientific principles and other factors which provide the basis for sound conditioning techniques and training programs. Students will study and experience a variety of techniques in order to better understand their applications and possible outcomes in areas of physical fitness, sports and recreation, and injury prevention and/or rehabilitation.
Prerequisite: PEHS 360.

395. Community Involvement Program
(1–3) (Fall and Spring) Department Faculty

Physical education and recreation oriented community service projects developed by the students after consultation with a member of the physical education faculty and approved by the department. May be taken for 1–3 units as determined by the departmental faculty sponsor. Applies only as general elective credit towards graduation.

400. Elementary School Physical Education
(3) (Spring) Flynn, Lynde

Theory and practice in elementary school physical education.

404. Theory of Coaching

This course will be offered as separate classes of coaching theory for sports commonly played in the public schools. These sports will include football, basketball, volleyball, baseball, and softball; other sports may also be taught. Team organization, skill development techniques, drills, game strategy, specialized conditioning programs, etc., will be discussed.
Prerequisite: Applicable PEHS 300's.

410. Human Motor Development
(3) (Fall) Trussell

Survey of the development of perceptual—motor function from birth through adolescence with emphasis on gross motor performance.

430A. Field Experience in Physical Education
(1–3) (Fall and Spring) Department Faculty

This course provides upper-division physical education majors experiences of coaching or teaching in public or private organizations. The students who enroll in this course should already have backgrounds which will allow them to contribute to the program they enter.

430B. Field Experience in Wilderness Leadership
(1–3) (Fall and Spring) Department Faculty

This course provides upper-division physical education majors specializing in wilderness recreation an opportunity to be involved in teaching and assisting in wilderness recreation programs. The students who enroll in this course should already have backgrounds which will allow them to contribute to the program they enter.

430C. Field Experience in Adapted PE
(1–3) (Fall and Spring) Department Faculty

This course provides upper-division physical education majors specializing in adapted physical education an opportunity to work with the disabled in school or private settings. The students who enroll in this course should already have backgrounds which will allow them to contribute to the program they enter.

431. Organization and Management of PE
(1) (Fall and Spring) Flynn

Observation and assisting with assigned tasks in the junior and senior high school physical education programs, with special emphasis on class organization and management techniques, teaching progressions, methods of evaluation, and disciplinary measures utilized during a total unit of instruction.

435A. Field Experience in Health Science
(1–4) Department Faculty

This course is designed to provide qualified upper-division students an opportunity to gain experience in either applied exercise physiology or kinesiology.
Prerequisite: PEHS 351, 352 or 360 (as appropriate).

435B. Field Experience in Athletic Training
(1–4) Department Faculty

This course is designed to provide qualified upper-division students an opportunity to gain experience with athletic programs in the practice of athletic training skills.
Prerequisite: PEHS 341.

450. Leading Adult Fitness Programs
(2) (Spring, Even numbered years) Gale Even

Emphasis on physiological concepts and program considerations for leading adult fitness programs for the purpose of improving or maintaining health related factors of physical fitness. This course is for persons who plan to conduct and/or lead adult physical activity programs.
Prerequisite: A laboratory course in exercise physiology equivalent to PEHS 360.

470. Proseminar
(3) (Fall and Spring)

Emphasis will be on critical thinking and its characteristics of thesis, antithesis and synthesis. Subjects to be considered include a self-evaluation of one's personal and professional self in relation to the discipline of human performance and the profession of physical education; to acknowledge the contributions of the humanities and the natural, social, and behavioral sciences and; to conceptualize and clarify "the totality" of the discipline's academic and intellectual infrastructure in relation to man, mankind and specific societies as they move individually and collectively in sports, games, exercise and dance. Must be taken during the semester preceding graduation.
Prerequisite: PEHS 301.

495. Special Studies in Physical Education
(1–4) (Fall and Spring) Department Faculty

Includes completion of a project designed to meet a specialized advanced study need. The student should have prerequisite skills. The project should be planned and described in written form in consultation with, and with the consent of the faculty advisor. There are three areas of study: 495A, Special Studies in Physical Education; 495B, Special Studies in Wilderness Leadership; and 495C, Special Studies in Adapted PE; 495D, Special Studies in Health Science; 495E, Special Studies in Athletic Training.

496. Physical Education Forum
(1) (Fall and Spring) Department Faculty

Presentation and discussions of selected current topics in physical education. May be repeated for credit.

497A. Selected Topics in Physical Education
(1-4) Department Faculty

A single topic or set of related topics not ordinarily covered by the physical education major curriculum. The course may be repeated for credit with a different topic.

497B. Selected Topics in Health Sciences
(1-4) Department Faculty

A single topic or set of related topics not ordinarily covered by the physical education major curriculum. The course may be repeated for credit with a different topic.

500. Introduction to Research
(3) (Fall even numbered years) Gale

Study of research design and its application to health and physical education. An introduction to statistical analysis of data as a tool for understanding of pertinent literature and development of personal research.
Prerequisite: PEHS 330A or a course in descriptive statistics; an introductory course in computer science. Classified graduate standing.

501. Graduate Seminar
(3) (Spring odd numbered years) Gale

Exploration of various individual research problems in the areas of health and physical education. Emphasis will be on research in areas of interest to the student, which will enable him to develop a deeper insight into research techniques and methodologies. Students will report and discuss current research developments as well as student research problems.
Prerequisite: PEHS 500. Classified graduate standing.

502. Women and Sport
(2) Yates

An overview of the impact of women on sport and of sport on women. The historical, physiological, sociological and legal implications of woman's involvement in sport and athletics are examined.

505. Advanced Motor Learning
(3) Klein

Increased depth in the specifics of motor learning. Included are factors of neuroanatomy/neurophysiology affecting motor performance, theories of learning (both physiological and psychological), and behavioral modification. Independent projects will require the use of laboratory facilities.
Prerequisite: Undergraduate course in Motor Learning.

525. Thesis Project
(3) Department Faculty

The master's thesis is based upon laboratory and library research with focus on a project central to the student's area of concentration. An authorized "Thesis Prospectus Approval Form" must be presented in order to enroll in 525.

550. Advanced Kinesiology
(3) (Spring even numbered years) Trussell

Consideration of anatomical and mechanical principles of human movement, and analysis of movement by goniometric, photographic, cinematographic, electromyographic and associated techniques.
Prerequisite: Undergraduate courses in Kinesiology.

560. Advanced Exercise Physiology
(3) (Fall odd numbered years) Gale

A course which includes the evaluation of human work capacity, the effects of exercise on cardiorespiratory function and metabolism, and the physiology of muscular contraction. A special emphasis on current literature will be pursued.
Prerequisite: Undergraduate course in physiology of exercise.

561. Cardiovascular Exercise Physiology
(3) (Spring odd numbered years)

This course is designed for students who wish to understand the clinical applications of exercise physiology as it pertains to cardiovascular system. Topics will include cardiovascular physiology, pathology related to ischemic heart disease, cardiac drugs, effects of training programs on heart disease, and exercise stress testing.
Prerequisite: A laboratory course in exercise physiology equivalent to PEHS 360. Graduate standing or consent of instructor.

595. Special Studies
(1-4) Department Faculty

Includes completion of a project to meet a highly specialized advanced study need. Project to be selected in conference with the faculty advisor and approved by the departmental graduate studies committee.
Prerequisites: Consent of instructor and approval of departmental graduate studies committee before the study is initiated.

The minor in physical science for elementary teachers provides an introduction to the physical sciences at a nontechnical (nonmathematical) level. The minor is intended for Liberal Studies majors who intend to complete also the multiple subject credential program. The minor will provide the background and skills to teach some physical science in the elementary schools. This minor is not appropriate for students planning to teach science in the secondary schools; they should study physical science at a more technical level, and may choose a minor in astronomy, chemistry, geology, or physics.

REQUIRED COURSES (16–17 units, of which 6 may be used in General Education)

Astronomy 100 Descriptive Astronomy (3)
Chemistry 102 Chemistry and Society (3)
Geology 102 General Geology (3)
CIS 101 Introduction to Computers and Computing (3)
Physics 100 Descriptive Physics (3)

One of the following:

Astronomy 231 Intro Observational Astronomy (2)
Physics 102 Descriptive Physics Laboratory (1)

ELECTIVE COURSES (6 units to be chosen from the following)

Astronomy 305 Frontiers in Astronomy (3)
Geography 310 Meteorology (3–4)
Geology 306 Environmental Geology (3)
Geology 323 Hydrology (3)
Physics 300 Physics of Music (3)
Physics 342 Popular Optics (3)
Physics/Chemistry/Geology 400 History of Physical Science (3)

TOTAL UNITS IN MINOR: 22–23, including 6 in General Education

Students interested in the minor should consult with one of the following advisors:

Dr. Douglas Rustad, Chemistry Department
Dr. Rolfe Erickson, Geology Department
Dr. Joseph Tenn, Physics and Astronomy Department



Physical Science Minor for Elementary School Teachers



Physics

Those engaged in the discipline of physics have as their goal the discovery, elucidation, and application of the laws that govern the interactions of matter throughout the physical universe. In its most abstract form, physics is a search for the forces of nature and the source of the presently known fundamental forces of gravitation, electricity and magnetism, and the weak and strong nuclear interactions, and for the elementary particles from which all matter is formed.

Physics then provides a description of complicated phenomena in terms of a few simple principles and laws.

Physicists also use their knowledge of fundamental principles to solve more concrete problems. Problems in the properties of semiconductors, metals, and ceramics; in the theory, design, and applications of lasers; and the theory and design of modern electronic instrumentation, among many others, are amenable to solution using the techniques of physics. Such topics, usually described as "applied physics", often overlap with engineering. Indeed, many of the department's graduates are currently employed in engineering positions.

The curriculum is divided into two degree patterns, a traditional, mathematically rigorous program leading to a B.S. degree, and a more flexible B.A. program. Both programs stress fundamental concepts and techniques and both offer an unusually rich laboratory experience and heavy use of computers. A concentration in applied Physics is offered as an option under the B.S. degree. With the selection of appropriate courses, students can use such instruments as a tunable dye laser, a 5 watt argon-ion laser, a neutron activation analysis system, microprocessors, and a photoelectric photometer and microdensitometer used with the observatory telescopes.

In addition, many of the junior and senior level theoretical courses are notable for the advanced treatment they give to major topics.

A substantial program in undergraduate astronomy includes many courses, listed in this catalog under Astronomy, which may be included in the two degree programs.

Department Chair:

Samuel L. Greene, Jr.

Faculty:

John R. Dunning, Jr., Richard H. Karas, Duncan E. Poland, Saeid Rahimi, Gordon G. Spear, Joseph S. Tenn

Department Office:

Darwin 121, phone (707) 664-2119

Physics Major For The B.S. Degree

Major

The B.S. Program is a thorough introduction to the principles of physics, providing a strong foundation for graduate study or industrial research. It is also intended for those students who wish to prepare for interdisciplinary studies on the graduate level in fields such as atmospheric science, biophysics, environmental science, geophysics, or physical oceanography.

	Units
Major (including 5 in G.E.)	50
Supporting Courses (including 4 in G.E.)	25
Remainder of General Education	39
Electives	10
	124

Major Course Requirements For The B.S. Degree

	Units
114, 214, 314—Introduction to Physics	12
116, 216, 316—Introductory Physics Laboratory	3
311, 311L—Elements of Electronics	4
320—Analytical Mechanics	3
330AB—Electricity and Magnetism	6
340—Theory of Light	3
381—Programming for Scientists	2
450—Statistical Physics	3
460AB—Quantum Physics	6
Upper Division Laboratory (must include two laboratory courses, one of which must be 400 level; Astronomy and Physics 411 do not meet this requirement)	2
Physics Elective (to be chosen from Astronomy 380, 390, 482, Physics 312, 333, 354, and 400 level Physics Courses; certain Selected Topics, Astronomy or Physics 396, may be approved by the Advisor)	6
	50

Supporting Courses

	Units
A. Mathematics 161, 211, 261, 231	15
B. Chemistry 115AB or 125AB	10
	25

The B.S. in Physics with a Concentration in Applied Physics

Students may choose to earn a B.S. in Physics with an emphasis in applied physics.

Courses presented for completion of this degree are identical to those presented for the B.S. in physics except that Physics 460B (3 units), upper division laboratory (2 units), and physics elective (6 units), are replaced by the following requirements:

	Units
Physics 493—Senior Design Project	2
Physics Elective (to be chosen from Physics 312, 386, 412, 425, 445, 447, 470, 475, 481, 482)	9

Physics Major For The B.A. Degree

The B.A. Program allows considerable flexibility for the student who wishes to study physics as part of a liberal arts education. Three advisory plans are offered:

Major Course Requirements For the B.A. Degree

Advisory Plan A is descriptive; it requires little mathematics. Frequently chosen as part of a double major, it is intended for those who wish to study physics and astronomy but who do not intend to become scientists. Its graduates may be found in many fields, including science writing, public service, scientific sales, library work, or in seminary, business, or law school. This advisory plan may also be appropriate for those who wish to combine the study of physics with music, art, environmental design, management, economics, philosophy, psychology, or physical education.

Lower Division Requirements:

	Units
Astronomy 100—Descriptive Astronomy	3
Physics 100—Descriptive Physics	3
One of the following laboratory courses:	
Astronomy 231—Introductory Observational Astronomy	2
Physics 102—Descriptive Physics Laboratory	
	7–8

Upper Division Requirements:

	Units
Upper division physics and astronomy courses to be chosen in consultation with an advisor	24
Courses presented for the major must include, either in the upper or lower division, the following:	
one course in modern physics or astronomy: Astr 305 or Phys 314	3–4
one course in optics: Phys 340 or 342	3

	Units
one course in computer programming: Physics 381 or CIS 150, or 158F or Math 158B	2–4
Area of concentration (one other subject)	12

Advisory Plan B uses Algebra and Trigonometry. Since students thereby can take a larger and more sophisticated range of upper division courses, they frequently choose careers as technicians, programmers, or other technical specialists. There is opportunity to take courses which lead to careers in the health sciences or environmental fields. Advisory Plan B is also often taken as part of a double major.

Lower Division Requirements:

	Units
Physics 209AB—General Physics Lab	2
Physics 210AB—General Physics	6
Math 107—Algebra and Trigonometry	4
	12

Upper Division Requirements:

	Units
Upper division physics and astronomy courses to be chosen in consultation with an advisor	24
Courses presented for the major must include, either in the upper or lower division, the following:	
one course in modern physics or astronomy: Astr 305 or Phys 314	3–4
one course in optics: Phys 340 or 342	3
one course in computer programming: Physics 381, CIS or Math 150 or 158F, or Math 158B	2–4
Area of concentration (one other subject)	12

Advisory Plan C use calculus. Students who choose this, the most popular plan, have the prerequisites to take nearly all of the courses in the department. They find employment in scientific and engineering fields. Some go on to graduate school in interdisciplinary ciences.

Lower Division Requirements:

	Units
Physics 114, 214—Intro. Physics I, II	8
Physics 116, 216—Intro. Labs	2
Math 161, 211, 261—Calculus	12
	22

Upper Division Requirements:

	Units
Upper division physics and astronomy courses to be chosen in consultation with an advisor	24
Courses presented for the major must include, either in the upper or lower division, the following: Physics 314—Introduction to Physics III	4
One course in optics: Physics 340 or 342	2–4
One course in computer programming: Physics 381; CIS or Math 150 or 158F, or Math 158B	2–3
Area of concentration (one other subject)	12

Elementary and Secondary Teaching Credential Preparation

A major in Physics is acceptable preparation for an elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, physics majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must complete the single subject waiver program in physical science. Physics majors seeking a teaching credential are encouraged to consult with a department advisor, and review the University's special bulletin on *Programs in Teacher Education*. For further information on credentials and professional education requirements see p. 106 of this Catalog.

Minor In Physics

Completion of a minimum of 20 units in physics courses, including not more than one first course nor more than one second course, will constitute a minor in physics. Interested students should consult with an advisor in the Department of Physics and Astronomy regarding courses.

Grading Policy: All courses submitted toward major requirements in the Physics and Astronomy Department must be taken for a letter grade (A–F). This policy does not apply to courses challenged.

Physics Courses

100. Descriptive Physics
(3) (Fall and Spring)

A descriptive survey of the important principles of physics. This course may be used to fulfill part of the general education requirement in Natural Science. Not recommended for B.S. students. Registration for credit in this course by Chemistry, Physics or Mathematics majors requires approval of the Physics and Astronomy Department.

102. Descriptive Physics Laboratory
(1)

Laboratory, 3 hours.
Experimental demonstrations, exercises and field trips illustrating the methods by which physicists have learned what they claim to know about the world. Instruction is at the Physics 100 level. Satisfies the laboratory portion of General Education requirements in Natural Sciences.
Prerequisites: Previous or concurrent enrollment in Physics 100 or Astronomy 100 or consent of instructor.

114. Introduction to Physics
(4) (Fall and Spring)

The first of three basic sequential courses in physics for science and mathematics majors. Introduction to vectors; classical mechanics, including particle dynamics and fluid mechanics; mechanical waves; thermophysics.
Prerequisite: Mathematics 161.

116. Introductory Laboratory Experience
(1) (Fall and Spring)

Laboratory, 3 hours.
Demonstrations and participatory experiments are used to increase the student's familiarity with gravitational, electromagnetic and nuclear forces in nature. Applications include biological, geophysical, medical, and environmental phenomena.
Prerequisite: Concurrent enrollment in Physics 114 required.

209AB. General Physics Laboratory
(1–1) (Fall and Spring)

Laboratory, 3 hours.
Laboratory experiments to accompany Physics 210AB and develop the student's ability to perform measurements of physical phenomena and to increase his/her appreciation of the sense of the physical universe gained through experimentation.
Prerequisites: High school algebra, trigonometry and a high school physical science. For 209A, concurrent or previous enrollment in Physics 210A. For 209B, completion of 209A and concurrent or previous enrollment in 210B.

210AB. General Physics
(3–3)

Lecture, 3 hours.
A basic course in physics for students majoring in biology, geology or preprofessional programs. Fundamentals of Newtonian mechanics, thermophysics, optics; electricity and magnetism, special relativity, and quantum physics. Registration by Mathematics majors requires Physics and Astronomy Department approval.
Prerequisite: High school algebra, trigonometry and a high school physical science.

214. Introduction to Physics II
(4) (Fall and Spring)

The continuation of Physics 114. Electrostatics, quasistatic fields and currents, magnetostatics; electromagnetic induction; physical and geometric optics.
Prerequisite: Physics 114; completion of, or concurrent enrollment in Mathematics 211.

216. Introductory Laboratory
(1) (Fall and Spring)

Laboratory, 3 hours. Selected experiments to increase the student's working physical knowledge of the natural world.
Prerequisite: Physics 114, 116; concurrent enrollment in Physics 214 strongly recommended.

300. Physics of Music
(3)

Introduction to physical principles encountered in the study of music; applicable laws of mechanics and acoustics; harmonic analysis; musical scales; sound production in musical instruments; elements of electronic music. Satisfies part of the general education requirement in Natural Science.
Prerequisites: Physics 100 or Astronomy 100 or consent of instructor.

311. Elements of Electronics
(3)

Lecture, 3 hours. Basic DC and AC circuit theory, applications of diode circuits, principles of transistor amplifiers, oscillators, and electronic instruments; applications of integrated circuit operational amplifiers. CONCURRENT ENROLLMENT I PHYSICS 311L IS MANDATORY.
Prerequisites: Mathematics 107; Physics 210B or 214; or consent of instructor.
Cross-listed with Chemistry 311.

311L. Elements of Electronics Laboratory
(1)

Laboratory, 3 hours. Lab to accompany Physics 311. CONCURRENT ENROLLMENT IN PHYSICS 311 IS MANDATORY.

312. Elements of Digital Electronics
(3)

Lecture, 3 hours. Principles of digital logic, Boolean algebra, number systems and character codes, families of logic devices, basic logic circuits, MSI and LSI devices, design applications; introduction to microprocessors. CONCURRENT ENROLLMENT IN PHYSICS 312L IS MANDATORY.
Prerequisite: Physics 311 and 311L or consent of instructor.

312L. Elements of Digital Electronics Laboratory
(1)

Laboratory, 3 hours. Lab to accompany Physics 312. CONCURRENT ENROLLMENT IN PHYSICS 312 IS MANDATORY.

314. Introduction to Physics III
(4)

The continuation of Physics 214. Special relativity; elementary quantum mechanics; The Bohr atom and deBroglie waves; the Schrödinger wave equation with applications to simple one dimensional problems and to atomic structure; elementary nuclear physics; introduction to equilibrium statistical mechanics; the partition function, Boltzmann statistics.
Prerequisite: Phys 214, completion of, or concurrent enrollment in Math 261.

316. Introductory Quantum Laboratory
(1)

Laboratory, 3 hours. Selected experiments to increase the student's appreciation of the quantum nature of the physical world.
Prerequisites: Physics 214, 216; concurrent enrollment in Physics 314 strongly recommended.

320. Analytical Mechanics
(3) (Fall)

Principles of Newtonian mechanics. Relativistic dynamics. Introduction to Hamiltonian mechanics. Applications to central force problems and small vibrations.
Prerequisite: Physics 114, Mathematics 231 (may be taken concurrently).

330AB. Electricity and Magnetism
(3–3)

Electrostatics; magnetostatics; electric currents, electromagnetic induction. Electric and magnetic fields in matter; Maxwell's equations, retarded potentials, radiation reaction, light emission, simple scattering and antenna theory, properties of waveguides, relativistic formulation of electrodynamics, Fourier decomposition of fields.
Prerequisite: Physics 214, Mathematics 231 (may be taken concurrently).

333. Precision Machining for Experimental Physics
(1) (Spring)

Laboratory, 3 hours. Techniques of precision machining as employed in the fabrication of experimental scientific apparatus. Emphasis on the use of the lathe and milling machine, working properties of metals and plastics, conventions of design drawings.
Prerequisite: Advanced standing as a Physics major or consent of instructor.

340. Theory of Light
(3) (Spring)

The quantum theory of light; coherence, interference, diffraction and polarization, masers, lasers, geometrical optics, spectroscopy.
Prerequisites: Physics 314, Physics 330A.

342. Popular Optics
(3) (Spring)

A descriptive, non-mathematical, but analytical treatment of the physical properties of light, the camera, telescope, microscope, and laser, holography, mirages, rainbows, and the blue sky, colors in flowers, gems, and pigments, human and animal vision and visual perception. Satisfies part of the natural science general education requirement.
Prerequisites: Any physical science course or consent of instructor.

354. Problems in Environmental Physics
(3) (Fall)

Introduction to the physics of gas, liquid, and thermal flows of environmental interest. The causes and nature of the hydrodynamic, diffuse, and radiative processes important in air and water pollution. Applications to the environmental problems of significance in California.
Prerequisite: A one-year course in basic physics; Mathematics 161 is recommended.

386. X-Ray Phenomena
(2)

Lecture, 1 hour; laboratory, 3 hours. Interaction of x-rays with matter. Synchrotron radiation and conventional x-ray sources. X-ray fluorescence will be taught as an analytical technique. Current applications of synchrotron radiation.
Prerequisites: Physics 214, 216; Chemistry 115B.

381. Progamming for Scientists
(2) (Spring)

Cross-listed with Chemistry 381. FORTRAN and BASIC programming with emphasis on applications.
Prerequisite: Physics 114 and Mathematics 211.

395. Community Involvement Program
(1–2)

CIP involves students in basic community problems related to physics and astronomy—performing such tasks as tutoring, reading to the blind, service to local, county, and state agencies, service as teacher aides to elementary schools, etc. Students receive 1–2 units depending on the specific task performed. Not more than 4 CIP units will be applicable to the major requirements. May be taken by petition only.

396. Selected Topics in Physics
(1–3)

A course of lectures on a single topic or set of related topics not ordinarily covered in the physics curiculum. The course may be repeated for credit with a different topic.
Prerequisite: Consent of instructor.

400. History of Physical Science
(3) (Spring)

A survey of the historical development of the physical sciences. Same as Chemistry 400 and Geology 400.
Prerequisite: Major in the physical sciences or consent of the instructor.

411. Laboratory Instruction Practicum
(1)

Laboratory, 3 hours. Presentation of experimental techniques and guidance of student activities in a lower division physics laboratory under the supervision of the instructor in charge of the laboratory. Development and application of instructional experiments in physics. May be repeated for up to 3 units credit with different subject matter in each repetition. Prerequisites: Junior standing in Physics and consent of instructor.

412. Microprocessor Applications
(2) (Fall and Spring)

Lecture, 2 hours. Topics covered will include: Microprocessor architecture, instruction sets, elements of microprocessor based systems, hardware and software design (with emphasis on peripherals and interfacing techniques). Use of microprocessors for instrumentation and control purposes will be stressed. Students will be required to complete a microprocessor-based project as part of their course work. CONCURRENT ENROLLMENT IN PHYSICS 412L IS MANDATORY.
Prerequisite: Physics 312 and 312L, or equivalent, or consent of instructor.

412L. Microprocessor Laboratory
(1)

Laboratory, 3 hours. Lab to accompany Physics 412. CONCURRENT ENROLLMENT I PHYSICS 412 IS MANDATORY.

425. Introduction to Mathematical Physics
(3)

Topics selected from: coordinate systems; tensor calculus; differential equations; Sturm-Liouville theory; self-adjoint equations, orthogonal functions, expansions; Fourier series and Fourier integrals; special functions; complex analysis; calculus of variations; numerical methods.
Prerequisite: Physics 314 or 320, Mathematics 231, or consent of instructor.

445. Theory of Signal Processing
(3)

Course will cover information theory, stochastic processes, and Fourier transform theory. Topics discussed may include sampling, the fast Fourier transform, *z*-transforms, optical transforms, spatial filtering, and A/D and D/A conversion.
Prerequisites: Physics 330A and Math 231.

447. Lasers and Holography
(2)

Lecture, 1 hour; laboratory, 3 hours. Theory of lasers; laser light detector characteristics; alignment of an external mirror laser; use of the scanning Fabry-Perot interferometer; longitudinal and transverse mode structure and coherence; modulation of laser light techniques of holography including the making of holograms. Experiments may make use of the Argon ion laser, dye laser, Helium-Cadmium laser, and Helium-Neon lasers.
Prerequisites: Physics 314, Physics 216.

450. Statistical Physics
(3) (Spring)

The laws of thermodynamics; the partition function; Boltzmann, Bose, and Fermi statistics; elementary transport theory; applications to solid state physics, atmospheric physics, plasma physics, and low temperature physics.
Prerequisite: Physics 314.

460AB. Quantum Physics
(3–3)

The Schrödinger equation; atomic theory; scattering theory; the Dirac equation; axiomatic formulation of quantum mechanics; topics in nuclear physics, elementary particle physics, and field theory.
Prerequisite: Physics 320, 330A; Mathematics 231.

470. Solid State Physics
(3)

A survey of basic concepts of solid state physics including lattice periodicity, wave propagation in crystal lattices, electron energy states, conduction and optical properties of metals and semiconductors, magnetism, superconductivity.
Prerequisite: Phys 314; 450 is recommended.

475. Physics of Semiconductors
(2)

Lecture, 1 hour; laboratory, 3 hours. Energy-band structure, statistics of electrons and holes, and some basic thermal, electrical and optical properties of semiconductors. Basic principles of p-n junctions, Schottky barriers, and photovoltaic cells will be discussed. Students will prepare their semiconductor samples in lab, and perform resistivity and Hall-effect measurements and characterize diodes by I-V and C-V measurements.
Prerequisite: Physics 316.

481. Applied Nuclear Chemistry and Physics
(2) (Fall)

This course offers working knowledge of nuclear radiations, radioactive sources and nuclear reactors. Interaction of ionizing radiation with matter; physical, chemical and biological effects. Radiochemical dating. Nuclear models. Nuclear reactor theory and neutron activation. Radioactive tracer methods. (Same as Chemistry 481.)
Prerequisites: Physics 214, chemistry 115B, and one upper division course in the natural sciences.

482. Applied Nuclear Chemistry and Physics Laboratory
(2) (Fall)

Laboratory, lecture, 1 hour; laboratory, 3 hours. The use and production of radioactive sources. Nuclear reactor problems using a neutron howitzer. Applications to detection of trace elements, nuclear chemical phenomena, radiological safety. State-of-the-art instrumentation and laboratory practices. (Same as Chemistry 482.)
Prerequisites: Physics 216, previous or concurrent enrollment in Physics 481.

493. Senior Design Project
(2)

A directed project to develop either a working prototype or a detailed conceptual design for an operational laboratory device. A report on the design characteristics considered and selected for the device will be required.
Prerequisites: Physics 311L, 330A.

494. Physics Seminar
(1)

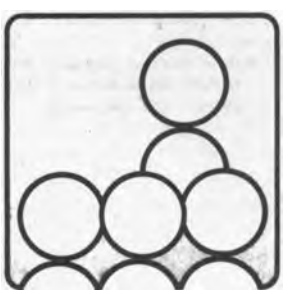
A series of lectures on topics of interst in physics, astronomy, and related fields. May be repeated for credit up to three units maximum.
Prerequisite: Consent of instructor.

495. Special Studies
(1–4) (Fall and Spring)

The Physics and Astronomy Department encourages independent study and considers it to be an educational undertaking. Students wishing to enroll for Special Studies are required to submit proposals to their supervising faculty members which outline their projects and exhibit concrete plans for their successful completion.

497. Undergraduate Research in Physics
(3)

Supervised research in an area of physics that is currently under investigation by one or more members of the Physics and Astronomy Department's faculty. This course may be repeated for up to 6 units of credit.
Prerequisites: Junior standing and consent of instructor.



Political Science

The B.A. in Political Science is a liberal arts degree program designed to develop a broad understanding of the values, processes and institutions comprising the modern political experience. Students will be introduced to various fields within the discipline so that they will be able to make informed analyses and judgments on the impact of politics in the contemporary world.

No special high school preparation is required for a Major in Political Science although, as with any liberal arts major, verbal skills are important. Community college students interested in the major should take basic courses in American Government and Economics. In addition, a background in other Social Sciences such as Sociology, Anthropology, History and Geography is helpful although not required.

The Major in Political Science leads to a broad variety of career opportunities. Graduates of the program now hold challenging positions in law, education, government and business. They work as city managers, district attorneys, budget analysts for private firms, legislative assistants, university professors and personnel officers. Others are high school teachers, FBI agents, members of law firms and elected officials.

Department Chair:

Robert Smith

Faculty:

Donald Dixon, John Kramer, Cheryl Petersen, Robert Smith, William Young, David Ziblatt

Department Office:

Stevenson 2070, phone (707) 664-2179

Bachelor of Arts in Political Science

Major

	Units
General Education	48
Major	40
Electives	36
Total	124

Course Requirements

Political Science 201 Ideas and Institutions
Political Science 202 Basic Issues in 20th Century American Politics
Political Science 302 Approaches to Political Analysis
(or substitute approved by department)
Political Science 498 Senior Seminar
An upper-division course in Political Theory
An upper-division course in International Relations
An upper-division course in Comparative Politics
An upper-division course in American Government and Politics
Economics 201 A or B (recommended)
Other upper-division Political Science courses to complete a total of 40 units in Political Science

Minor in Political Science

	Units
Political Science 200 or 202	3–4
Political Science 201	4
Upper Division courses	12–13
Total	20

Elementary and Secondary Teaching Credential Preparation

A Major in Political Science is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, political science majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must pass the National Teacher's Examination in Social Science, or complete the single subject waiver in government or social science. Political Science majors seeking a teaching credential are encouraged to consult with a department advisor. For further information on credentials and the professional education requirements, see the Credential Section of this Catalog.

Code Requirements

Political Science 200 (The American Political System) or Political Science 202 (Twentieth-Century American Politics) fulfills State Code requirements in U.S. Constitution and California State and Local Government. Upper-division courses may also be used to satisfy certain of these code requirements upon approval by the department chairman.

Master of Public Administration

Coordinator: Donald Dixon

A Program Emphasizing Public Administration

The Political Science Graduate Program is designed to provide those interested in administration with practical and conceptual tools for managing public and non-profit agencies.

Offered primarily as an evening program, the master's degree program provides a rigorous 36-unit curriculum which emphasizes the training required to effectively analyze, formulate and implement public policy at local and state levels of government. The program recognizes the need for a flexible combination of theoretical and practical learning. Students may choose from several tracts or specializations, and from a wide variety of electives in public administration, political science, economics, and management.

While the program emphasizes flexibility, each student is normally required to complete a 24-unit analytic core. This core is based upon the professional curriculum established for PA programs by the National Association of Schools of Public Affairs and Administration (NASPA), and typically includes courses in advanced public administration, organizational theory, public policy analysis, budget and fiscal policy, and personnel administration.

Up to nine units of graduate course work taken at other institutions may be transferred into this program.

Advancement to classified standing is contingent upon meeting the WEPT requirement.

Admission Requirements

A. A Bachelor's Degree with a major from an accredited college or university with a grade point average of at least 3.0 for the last 60 units of college-level work attempted and satisfactory GRE aptitude test results.
B. Prerequisite course: Satisfactory completion of approved undergraduate course in public administration *or* POLS 500-Structure & Function of State and Local Administrative agencies. A beginning or fund accounting course is recommended.

   A candidate deficient in the above courses can still be admitted to the program but must make up such deficiencies during the first year of graduate study. Such courses will not count toward the 36 unit M.A. requirements.
C. Completion of the departmental application form including three letters of recommendation.
D. Recommendation of the Departmental Graduate Coordinator.

Refer to the Section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

Graduation Requirements for the Master's Degree

A. Maintain a grade point average of at least 3.0.
B. Satisfactory completion of the agreed upon course of study and a master's thesis or passage of two comprehensive written exams.
C. Completion of the required courses, plus electives.
D. Satisfactory performance on an oral examination, thesis defense, or topical presentation is required for completion of the requirements above.

Required Courses:

	Units
POLS 501 Advanced Public Administration*	4
POLS 502 Organizational Theory .... or 506 Public Policy Analysis	4
POLS 503 Budget and Fiscal Policy or 507 Ethics in Administration	4
POLS 504 Public Personnel Administration	4
POLS 505 Research Methods for Public Managers	4

* Students must have prerequisite POLS 430 (Introduction to Public Administration) or suitable equivalent completed, or take concurrently.

ECON 411 Public Finance or other advanced economics course selected in consultation with advisor.

Total units 24

At least 26 units must be taken in the Political Science Department.

1. Master's Thesis Option	*Units*
Required courses	24
Courses at the "400" or "500" level	8
POLS 591 Master's Thesis	4
Total units	36
2. Master's Exam Option	
Required courses	24
Courses at the "400" or "500" level	12
Total units	36

Certificate Program in the Administration of Non-profit Agencies

In addition to regular public administration courses, the Political Science Department also offers a graduate certificate program in the administration of non-profit agencies. Oriented to the needs of staff, program administrators, executive directors and those interested in employment in non-profit agencies, this integrated series of courses provides an overview of contemporary trends in non-profit agency development, activity, funding, and offers an intensive exposure to the practical managerial and administrative techniques necessary for agency survival in the 1980's.

The Certificate Program requires 26 units of course work, 20 of which may be applied toward the master's degree in public administration. Although students in the non-profit certificate program are encouraged to pursue the master's degree, there is no requirement to do so.

Certificate Program Courses:

	Units
POLS 520 Administration of Non-Profit Community Agencies	4
POLS 521A Community Environment of Non-Profit Agencies	2
POLS 521B Structure and Operation of Non-Profit Agencies	2
**POLS 525 Personnel Management in Non-Profits	2
**POLS 526 Fiscal Administration for Non-Profits	2
**POLS 527 Analysis and Program Planning in Non-Profit Agencies	2
POLS 528 Applications in Non-Profit Agency Management	4
Two elective courses chosen in conjunction with the program advisor from the master's core curriculum	8
Total units	26

North Coast Data Archive

The Political Science Department operates and maintains a unique voting and survey archive. Professional and student surveys, national and international studies, and voting data are stored for student and community use.

The data archive offers students direct experience in computer application, survey techniques, and community research.

Political Science Courses

Lower Division Courses

150. Credit by Examination: U.S. Constitution
(3) Department Faculty

The State Code requirement in U.S. Constitution may be satisfied by passing the Political Science departmental examination or the CLEP subject examination in American Government. Approval of the examination and passing levels are determined by departmental policy.

151. Credit by Examination: California Government
(1) Department Faculty

The State Code requirement in California State and Local Government may be satisfied by passing an examination in the Political Science Department.

199. Media: Contemporary Issues
(2) Student Instructed

200. The American Political System
(3) Department Faculty

An examination of American politics and governmental institutions. Satisfies the code requirements in American Constitution, and California State and Local Government.

201. Ideas and Institutions
(4) Smith, Petersen

An analysis of the basic political values and their impact on society. students will be introduced to the relationship between values, ideology, and the political process. Political Science majors are expected to take this course, which stresses written expression, during their first year in the department.

** May be offered during the Summer Session.

202. Basic Issues in Twentieth-Century American Politics
(4) Young, Petersen

Leaders and issues in American political life considered in relation to major policies and movements, e.g. Progressivism, Isolationism, the New Deal, Containment. Open to majors and minors in Political Science. Meets code requirements in American Constitution and California State and Local Government.

Upper Division Courses

POLITICAL THEORY

310. Origins of Political Thought to 1500
(4) Petersen

A survey of classical conceptions of political community, the basis of feudal institutions, the political and social philosophy of medieval Christianity, and the foundations of the modern state in the late Middle Ages.

311. Development of Modern Political Thought Since 1500
(4) Smith, Petersen

Examination of the major writings from Machiavelli to the present. Emphasis on original sources and development of student opinions on ideas discussed.

312. American Political Thought
(4) Petersen

An examination of the development of American political ideas as reflected in the works and careers of representative writers and political leaders.

315. Democracy, Capitalism and Socialism
(4) Ziblatt

Examination of the major ideas of important theorists about the relationships among democracy, capitalism and socialism. A consideration of the actual strengths and shortcomings of some of the current world's major political-economic systems which attempt to put these ideas into practice.

415. Explorations in Political Theory
(3–4) Department Faculty

A seminar dealing with selected topics in political theory including contemporary theories of the political system, the political novel, revolutionary theorists, and socialist theory. A different area of emphasis will be offered each year. Consult class schedule for current offering. May be repeated for credit.

AMERICAN GOVERNMENT AND POLITICS

320. State, City and County Government
(4) Dixon, Young

An introductory study of the political structure and process at the state, county and municipal levels with emphasis on urban and regional problems. The changing relationships between the State and Federal governments will be explored. Political decision-making at all three levels will be discussed in depth. Satisfies the State Code requirement in California State and Local Government.

423. American Constitutional System
(4)

Judicial interpretation of the Constitution with particular emphasis upon separation of powers, presidential powers, relationship between state and national government, control of interstate commerce, and jurisdiction of the courts.

424. The Bill of Rights, Civil Liberties and the Constitution
(4)

Judicial interpretation of the Constitution in the areas of civil liberties, freedom of speech, freedom of religion, rights of persons accused of crimes, citizenship, and the government's responsibility to protect persons from discrimination.

425. The American Party System
(4) Young

An examination of the role of political parties in the American political system. The two party pattern, minor parties, campaigns, elections, the nature of the electorate. Proposed reform of the party system.

426. The Legislative Process
(4) Young

An examination of the organization and operation of the American Congress. For comparative purposes, legislatures in selected American states and Western European democracies will be briefly considered.

427. The American Presidency
(4) Young

An examination of the place of the Presidency in the American governmental system. Emphasis will be placed upon the interplay between the President and other elements of the system, particularly the Congress and the Bureaucracy.

428. Seminar in California Politics and Government
(4) Young

An analysis of the California political system. Some attention will be given to governmental institutions, but primary emphasis will be upon parties, interest groups, public opinion, ideologies, and leadership.

430. Introduction to Public Administration
(4)

An introduction to the field of public administration with emphasis upon bureaucratic life, leadership, and decision-making.

435. Problems of Local Public Management
(4)

An opportunity to meet local public administrators, identify with them the central managerial problems they currently face, and investigate possible solutions.

439. Political Science Internship
(2–5)

Field experience in city, county, state and federal agencies. Enrollment by prior arrangement only. May be repeated three times for credit.

461. Politics and the Media
(4) Kramer, Young

The role of the mass media in American political life. Emphasis on television, news magazines, major newspapers, and political columnists, and their interrelationship with American political institutions.

465. Pressure Groups
(4) Ziblatt

A study of contenders for power and influence in the American political system. Emphasis will be placed upon a variety of business, labor and professional groups. Their goals, leadership, membership, organizational forms and techniques of influence will be studied.

466. Political Psychology
(4) Ziblatt

Examination of the psychology of leader and follower behavior in organizations and communities. A study of the influence of personality, situational and cultural factors on the individual reaction to and use of authority.

PUBLIC POLICY ISSUES

481. Politics of Regulation and Land Use
(4)

An examination of regulatory policies as they affect business and land use decisions in the U.S. Structural, legal, and procedural aspects of regulatory process are explored along with reform and deregulation. Explores the economic, environmental and political consequences of land use control.

482. Domestic Communication and Information Policy
(4) Kramer

This course will examine the politics of government regulation and deregulation of electronic media, e.g., commercial and public broadcasting, satellite, cable and translator distribution systems. Issues include the controversies over deregulation at the federal, state and local levels, the treatment of rural areas in national telecommunications policy, and efforts to increase ownership by and access of women and minorities.

483. International Communication and Information Policy
(4) Kramer

This is a seminar on the politics and technology of international communications, including commercial and public broadcasting, telecommunications satellites, claims of "cultural imperalism," and calls for a New World Information Order. Policy issues deal with the productions of information, privacy, access, and the tension between efficient and equitable distribution of these goals.

484. Campaign Management and Electoral Behavior
(4)

Course examines the impact of the new styles and techniques of political campaigning on both the public decision-making process and control over public policy. Modern techniques of analysis and voter manipulation are discussed, along with the characteristics and behavior of the electorate and their historical patterns of political participation.

INTERNATIONAL RELATIONS

342. International Politics and Foreign Policy
(4) Smith

An introductory analysis of the dynamics of the international political system, stressing the roles of supra-national organizations, internal and external factors in foreign policy formulation by nation-states. Review of traditional and contemporary theories of international interaction.

345. Model United Nations
(2) Smith

Introduction to the political structure and functions of the United Nations, with emphasis on team participation at the United Nations conference of the Far West in Spring semester. Students play decisionmaker roles which they research for preparation of position papers on agenda items. Fall and spring semesters may be repeated once for upper-division credit but the second year cannot be credited towards the major.

444. United States Foreign Policy
(4) Smith, Young

An analysis of the forces, governmental and non-governmental, which influence the formulation of U.S. foreign policy. An examination of the organizational structure charged with the formulation and execution of that policy as well as the content of policy since World War II.

485. Arms Race, Control and Disarmament
(4)

This will be a seminar of readings, lectures, films and slides on the arms race emphasizing strategic nuclear arms and their control including SALT I, the Carter administration's unratified SALT II agreement, ant the START talks.

COMPARATIVE POLITICS

350. European Parliamentary Democracies
(4) Smith, Petersen

An analysis of the development of parliamentary democracies in Western Europe with emphasis upon how they originated and what is necessary for their survival. In addition to Britain, France and Germany, several smaller democracies will be studied as well as the political implications of the Common Market.

351. Totalitarianism and authoritarianism
(4) Smith, Petersen

An analysis of the major totalitarian political systems in the Twentieth Century with emphasis on Nazi Germany and the Soviet Union as well as non-European cases. A review of the theoretical literature on Communism, Facism, authoritarianism and military dictatorship will complement the case studies.

452. Third World Political Systems
(4) Smith

A comparative analysis of politics and political development of Third World countries. International and domestic obstacles to modernization will be studied. The general analysis will be supplemented by an intensive scrutiny of selected countries and regions.

RESEARCH AND SPECIAL STUDIES

302. Approaches to Political Analysis
(4) Kramer

This is a course in social science research and statistical methods which includes a significant component computer-based data analysis using the SPSS (Statistical Package for the Social Sciences) routines. It includes building data files and data analysis using multivariate tables, correlations, and regression techniques in a directed research project.

495. Special Studies in Politics
(1–4) Department Faculty

A student may be invited by a faculty member to participate in a continuing research project under the faculty member's direction. The research may extend for more than a single semester. Seniors who participate in this course may have their work considered for graduation with honors. This course may be repeated for credit.

498. Senior Seminar
(4) Staff

An opportunity for senior majors and graduate students to integrate their basic understanding of political science by exploring the interrelationship between the substantive subfields, basic concepts and the major modes of analysis current in political science today.

GRADUATE COURSES

Upper-Division Students may enroll in graduate courses with the permission of the instructor.

500. Structure and Function of State and Local Administrative Agencies
(4)

This course examines the structural aspects of local and state government, including the role of community agencies. Special attention is devoted to intergovernmental relations and patterns of fiscal and administrative interaction.

501. Advanced Public Administration
(4) Dixon

This core course examines a variety of public administration literature including aspects of organizational structure, group behavior, policy studies, and social-psychology. Special attention will focus upon specific topics within the field: organizational behavior, power, leadership, personnel, control, administrative responsibility.
Prerequisite: POLS 430 or consent of instructor.

502. Organizational Theory
(4) Ziblatt

An in-depth study of the literature of organization theory emphasizing the major writers and the distinctive contributions of various disciplines.

503. Budget and Fiscal Policy
(4) Dixon

An examination of the budgeting process in government with emphasis on the conflict between traditional pluralist theory and planning, programming, budgeting (PPB) reforms. Public policy formation and evaluation of results as revealed in the budget will be explored.

504. Public Personnel Administration
(4) Ziblatt

The evolving character of public personnel administration in the United States will be considered. Topics such as work life in organizations, motivation, employee participation and the relationship of public personnel administration to democracy will be explored.

505. Research for Public Managers
(4) Kramer

An examination of quantitative research techniques required by agency and program managers. Course includes work in data analysis, introduction to computer usage, techniques of needs assessment and program evaluation, and use of simple analytic models.

506. Public Policy Analysis
(4) Ziblatt

A practical, conceptual and critical approach to public policy analysis, emphasizing analytic procedures, conceptual models and the strengths and limitations of analysis.

507. Ethics in Administration
(4) Petersen

A seminar designed to help public administrators cultivate an awareness of ethical dilemmas, develop ways of conceptualizing them, and practice ways of thinking about their resolution.

511. Collective Bargaining in the Public Sector
(4)

A seminar in historical and current developments of public labor relations, changing concepts and their implications for existing institutions, processes and values in public personnel systems, and current issues and forces in public labor relations.

512. Organizational Development
(4)

An exploration of values, methodologies, strategies and theories of organization development.

513. Leadership and Supervision
(4)

Examines the role of leader and of leadership in administrative agencies, together with an examination of techniques of supervision and administrative control.

520. Administration of Non-Profit Community Agencies
(4)

Course examines structure, operation and organization of the non-profit community agencies. Given the increased role of these quasi-public, quasi-private agencies in supplying social services, this course will include a review of historical development, contemporary organizational and financial mechanism, inter-governmental relations, and strategies of administration and management.

521A. Community Environment of Non-Profit Agencies
(2)

An examination of the community environment of non-profit agencies. Topics to be covered will include demographic and political trends and non-profits, local community influence systems, the impact of community organization and social networks. The role of leadership and political skill in mobilizing community resources and support will also be discussed.

521B. Structure and Operation of Non-Profit Agencies
(2)

Analysis of the respective roles of the board, executive director, staff and volunteers in the non-profit sector.

523. Problems in Local Public Management
(4)

Weekly panels of local and state-level administrators will explore such topics as "the quality and motivations of elected officials" or "thwarting the public will—municipal elections in the post-Proposition 13 Era." Sponsored by the Department's public administration advisory board, this promises to be an exciting and controversial course which provides the opportunity to meet the Area's top local administrators.

524. Grant Writing and Administration
(1)

A seminar focusing on the role of grants in modern governmental operation both in terms of external funding by superior levels of government and as a means of insuring compliance with federal or state-level policy mandates. This is a one-unit four-week course.

525. Personnel Management in Non-Profits
(2)

An examination of current issues in the management of employees and volunteers in non-profit organizations. Recruitment, staff development, performance evaluations, labor management issues and affirmative action are reviewed.

526. Fiscal Administration for Non-Profits
(2)

An examination of basic principles of managerial finance and control in non-profit agencies. Budgeting, fund accounting, cash flow analysis, expenditure control, long-range financial planning, audits, grants, and contracts in non-profit agencies are studied.

527. Analysis and Program Planning in Non-Profit Agencies
(2)

A study of the techniques of strategic and operational planning as required by non-profit organizations. Topics include needs and services assessments, marketing analysis, program evaluation, and long-term planning.

528. Applications in Non-Profit Agency Management
(4)

An investigation of current issues and developments in the operation of non-profit agencies. In a seminar-style atmosphere students will prepare an analysis of the operation of a specific non-profit agency.

537. Bargaining, Politics and Administration
(4)

An examination of the politics of administration, into an emphasis on the dynamics of budgeting and interagency conflict. Of special interest in this course will be its focus on new theories of decremental budgeting—budgeting and political coalition building in an era of decreasing resources.

550. Special Topics: Program Analysis and Evaluation
(4)

Course examines techniques of administrative analysis and program evaluation. Included are examinations of techniques for assessment of policy impact and effectiveness, analysis of program objectives, evaluation methodologies, and the administration of evaluation systems.

551. Organizational Computer Usage
(4)

An investigation of contemporary developments in the area of information systems, this course views computer usage from the organizational rather than data processing perspective. Central areas of concern are organizational planning and change, and the development of information systems which meet the planning challenge.

560. Special Issues in Public Policy
(4)

An examination of selected issues in public policy/public affairs. Specific topics will be offered on the bases of student interest and current issue development.

561. Politics of Health and Aging
(4)

An examination of U.S., State and local health care and aging policy and administration.

562. Education Governance and Finance
(4)

An examination of educational governance and finance systems with a special emphasis upon federal, state and local intergovernmental relations.

563. Politics of Science and Technology
(4)

A study of the political factors influencing scientific research and technological application. Topics include "Big Science," the role of government grants, and politics and business/corporate structuring of scientific research. Policy examples include safety or research controversies over recombinant DNA, Malathion/Agent Orange, and nuclear waste and power.

570. Comparative Public Administration
(4)

Examines the theoretic and applications literature of the comparative administration field with special attention being given to cultural impacts on organizational structure and operation. Discussion of the impact of colonial civil service systems in Third World countries and their impact on modern governmental structures and operations.

591. Master's Thesis
(2–4) Department Faculty

An authorized "Thesis Prospectus Approval Form" must be presented before enrollment in 591.

595. Special Studies in Political Science
(1–4) Department Faculty

A student may be invited by a faculty member to participate in a continuing research project under the faculty member's direction. The research may extend for more than a single semester. This course may be repeated for credit.

596. Graduate Tutorial
(4) Department Faculty

Designed as an intensive review of the literature in specific areas of concentration including Budgeting, the American Presidency, Legislatures, and such public policy areas as Health and Aging and Regulation. The course is open *only* to those who have completed all required Master's course work.

597. Graduate Internship
(3–5) Department Faculty

Intensive field experience in a public or private agency. The student must define a current political problem, a strategy for dealing with the problem, and work toward implementing the strategy.



Pre-Law and Pre-Medical Programs

Pre-Law

The School of Arts and Humanities and the School of Social Sciences have developed within various majors a number of pre-law programs that are directed toward the needs of students who wish to attend law school. Although there are no courses specifically required for admission by the American Association of Law Schools, and thus no prescribed pre-law curriculum or list of recommended majors, certain skills and academic experiences are essential for students who wish to enter law school and succeed: effective use of written and spoken language; an understanding of human institutions and values; competency in the critical analysis and communication of ideas. Pre-Law programs are designed to develop these required skills and to offer relevant academic experiences. Special pre-law programs are offered within the following departments:

American Multi-Cultural Studies
Anthropology
Criminal Justice Administration
Economics
English
Environmental Studies
Foreign Languages
History
Hutchins School
Philosophy
Politics

Students wishing to pursue a pre-law program should consult the pre-law advisor in the appropriate department. In addition, Sonoma State University alumni who are practicing attorneys have undergraduate majors as diverse as their present fields of specialization: Anthropology, Criminal Justice Administration, English, French, History, Hutchins School, Management Studies, Mathematics, Mexican-American Studies, Philosophy, Physics, Sociology.

Departmental pre-law advisors and Advising Center staff can help students plan a program with the balance and rigor which provide sound preparation for the field of law. The Resource Library in the Career Development Center contains law school catalogs and information about special affirmative action programs in law. The Testing Center can provide information about the LSAT. The "Careers in Law Workshop" held in early fall brings together law school representatives, advisors, alumni and interested students, who can focus on specific aspects of preparation for the process of admission, study, and career development.

Pre-Medical

Sonoma State University provides preparation for graduate study in the health professional fields of medicine, dentistry, podiatry, veterinary medicine, optometry, osteopathy, pharmacy, physical therapy and chiropractic medicine.

Students interested in entering the health professions will select an appropriate major for undergraduate study. Since a majority of the courses required for admission to health related programs are in the sciences, most students earn degrees in biology or chemistry before going on to professional schools.

Most health professional schools require a bachelor's degree for admission, although schools of dentistry, pharmacy and chiropractic medicine may require fewer units and courses for admission. The outline of courses below will meet the requirements for admission to most medical schools. Since medical schools generally have the most rigid course requirements among the

health professional schools, these courses would generally meet or exceed the requirements for other schools. However, it is important to examine closely the requirements for any program and school and take courses to fulfill those requirements.

Courses Required For Admission to Health Professional Schools

	Units
Biology	
General Biology or Zoology (including vertebrate zoology)	8–10
Embryology	3–4
Chemistry	
Inorganic or General Chemistry	10
Organic Chemistry	8–10
Some schools also recommend physical chemistry or quantitative analytical chemistry	
English—Composition	6
Physics—A year course	8
Math—Some schools require a calculus course	4
Foreign Language—A few schools recommend a modern foreign language course	0–8
Psychology—An Introductory Psychology course is recommended by some schools	4

The Following Courses at Sonoma State University Will Meet the Basic Requirements For Medical Schools:

	Units
Biology 115 & 115L (Introduction to Biology & Lab)	4
Biology 117 (Biology of Animals)	4
Biology 215 (Introduction to Molecular Biology)	2
Biology 320 or 322 (Genetics)	4
Biology 370 (Comparative Anatomy)	4
Biology 372 (Vertebrate Embryology)	4
Chemistry 115 AB or 125 AB (General Chemistry and Laboratory)	10
Chemistry 335 AB + 336 (Organic Chemistry & Laboratory)	10
English 101 + 214 (Basic Composition)	6
Physics 210 AB + 209 AB (General Physics and Laboratory)	8
Math 161 (Calculus)	4

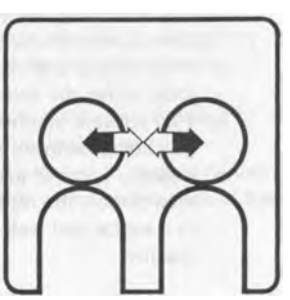
Applicants with a grade point average below 3.0 are almost never considered by medical admissions committees, and few students with a grade point average below 3.4 are accepted.

In addition to the required courses, most health professions students are required to take exams such as the New Medical College Admissions Test, Dental Admissions Test or the Biology Graduate Record Exam at or prior to the time of application.

The School of Natural Sciences Health Professions Advisory Committee has been established to offer assistance to students interested in careers in the health professions. The main functions of the committee are to:

(1) Advise students on how to best prepare for admission to health professional schools. Since the Sonoma State University campus is small, the Health Professions Advisory Committee has the opportunity to communicate with students on a personal basis. Individual departments may also have health professions advisors.
(2) Maintain career information related to health professions, including catalogs from various schools and registration materials for examinations and centralized application services required for admission to certain programs such as medicine, podiatry and dentistry.
(3) Evaluate candidates and write letters supporting their admission to health professional schools.
(4) Provide practice admissions interview for candidates applying to health professional schools.

Students interested in a health professions career are strongly encouraged to meet with a health professions advisor upon enrolling at Sonoma State University. Appointments can be made through the School of Natural Sciences.



Psychology

The Psychology Department at Sonoma State University provides a variety of approaches to the learning process and to the discipline of psychology itself. Some faculty members are traditional in their approach to psychology and/or the art of teaching while others represent newer methods and perspectives.

In early years, the Department was small and could be characterized as holding a single humanistic perspective. In the years that followed, more faculty were gradually added to the Department, and a diversity in viewpoints was deliberately sought. The Department now has a strong offering of general, theoretical and experimental courses. In addition, members of the faculty represent a wide spectrum of orientations, including archetypal, behavioristic, cross-cultural, existential, Freudian, humanistic, transpersonal, Gestalt, metaphoric, and phenomenological. By means of this diversity, the Department seeks to encourage each student to work out a psychology of his or her own and to discourage any doctrinaire approach.

Many courses in the Department are concerned with the discovery of values as well as facts, with deep experiencing as well as with rigorous analyzing. Some courses focus on self-knowledge, others on imparting the traditional subject matter of psychology and still others on providing skills and understanding useful to those who intend to work in psychological settings. Thus, the Program provides opportunities for both cognitive and affective learning, and encourages the student to develop a program of study that involves both theory and practice.

The Psychology Department has devised three advisory plans to meet the educational goals and interests of the majority of students. Each student is asked to select a personal academic advisor during his or her first semester as an upper-division student at the university. At this time, the student is required to select one of the following advisory plans: Humanistic Psychology; General/Research Psychology; or Human Services/Human Sciences.

Psychology Majors should consider completing one of the university's career minor programs, although this is optional. The Information and Reserach Career Minor and the Health Systems Organization Career Minor may be of particular interest. For more information on these programs see page 70 of this catalog.

A Degree in Psychology provides a useful background for a wide variety of occupational fields. Psychologists are employed by government and private agencies, educational institutions and businesses. Others are in private practice.

Sonoma State University Psychology graduates are found in positions such as: psychologist, family counselor, youth development specialist, biofeedback trainer, school outreach counselor, youth and family worker, probation officer, teacher, vocational education counselor, personnel analyst, personnel administrator, research associate, legislative counsel, and court administrator.

Psychology graduates also enter doctoral programs in Psychology, as well as graduate programs in fields such as clinical psychology, counseling, social work, public administration, law, business administration and management, speech pathology, human development, therapeutic recreation, public health, kinesiology, education and educational technology.

The Psychology department participates in the Sonoma State University CLEP credit by examination program. For further information see page 315 of this catalog.

Department Chair:

Charles Merrill

Faculty:

Eleanor Criswell, Victor Daniels, Stashu Geurtsen, Barry Godolphin, Robert Greenway, Laurence Horowitz, George Jackson, Bernd Jager, Norma Lyman (Emeritus), George McCabe, Edith Menrath, Gerald Redwine, Robert Rueping, Frank Siroky, Robert Slagle, Gordon Tappan, David Van Nuys, Arthur Warmoth.

Department Office:

Stevenson 3092, phone (707) 664-2411

Bachelor of Arts Psychology

The Psychology Major

By specific intent, the Major is flexible, enabling each student, in consultation with an advisor, to tailor a program to his/her own educational goals. The requirements for the Major are designed to insure basic competencies in the field.

1. To be able to choose intelligently from among the many courses and opportunities within the Major, the student must have a broad and comprehensive knowledge of Psychology. In order to insure that each student has this background, the Department requires Psy 250 "Introduction to Psychology" or an equivalent course completed within the last six years. The student may also elect to pass a comprehensive examination, designed and administered by the Department, which covers the various substantive areas in the field of psychology. Psy 250 is a prerequisite for Psy 305 and 306.
2. To introduce the many theoretical orientations, applications, and professional issues that make psychology a diverse, lively and controversial field, the Department offers a three-course "Core Curriculum" for all students. These core courses provide a conceptual perspective on the field of psychology, practical tools useful in both psychological work and daily life, and a chance to follow the student's interests and directions in some depth. Psy 305 and 306 should be taken as early as possible in the major, since they are also prerequisites to a number of other courses.

Core Curriculum

	Units
Psy 305 Foundations of Modern Psychology	4
Psy 306 Introduction to Psychological Practice and Inquiry	4
Psy 400 Seminar: Critical Issues in Contemporary Psychology	4

3. A Psychology Major must complete a minimum of 32 units of upper-division psychology courses, including the Core Curriculum, with a minimum grade of C or Credit in every course. These units may be in an individualized study plan ("Humanistic Advisory Plan") or in the context of a pattern of recommended courses designed to meet specific objectives ("General/Research Advisory Plan" or "Human Services/Human Sciences Advisory Plan"). No more than one-third of the courses used to satisfy this requirement may be taken on a Credit/No Credit basis. No more than 8 units of student initiated psychology courses may be credited toward the major.
4. The Department recognizes the relationship and interdependence of psychology with the other disciplines in the University. Therefore, the Department requires that students complete a minimum of 12 units of supporting work with a minimum grade of C or Credit. Normally, these units will be taken in departments other than Psychology. However, it is possible, with the support of the student's faculty advisor, to include psychology courses in the 12 supporting units. Courses used as part of another major or minor may be used as supporting courses. Students should obtain written approval from their advisor on the Department's Advisory Plan Forms before enrolling in courses they wish to use as supporting work. A record of this approval should be placed in the student's advising file in the Psychology Department office.
5. The student must be capable of taking an independent position on issues within the field. This requires both analytic and communication skills. Every student must demonstrate these skills in at least one area of psychology. Satisfaction of this requirement may be certified by any Psychology instructor who knows the student's work by completing a departmental form and placing it in the student's advising file. This form specifies that the student is able to:
   a) Write clearly and effectively on a topic within the field of psychology.
   b) Find relevant information on a specific psychological topic, analyze and critically appraise that information, and then present the results of that analysis in a logical and well-organized manner.

Both elements of this requirement are commonly met by a single high-quality term paper for one of the student's psychology classes. Less commonly, they are met separately by an informal paper for one class and an extensive seminar presentation for another class. Students are encouraged to satisfy this requirement before their final semester, lest their graduation be delayed. Psychology advisers can recommend specific courses to help students who have difficulty in this area.

Academic Advising

Students choose their own advisers from among the members of the faculty. The adviser may be changed at any time at the request of the student.

Students are required to meet with their faculty adviser once a semester, prior to registration. We encourage more frequent meetings to review academic plans and progress. During the first upper division semester as a student at Sonoma State, a student is required to sign up for one of the three Advisory Plans. (See the following section.)

The Psychology Advisory Plans

The Psychology Department has devised three advisory plans which we believe meet the educational goals and interests of the majority of students. During his or her first semester as an upper-division student at Sonoma, each student is required to select one of the three advisory plans described below.

The purpose of this requirement is to encourage the student to examine educational goals and objectives, not to restrict the student's freedom of choice. The Humanistic advisory plan is an individually contracted program of courses, and it may be revised at any time in consultation with an advisor. In addition, the student may freely change from one plan to another by consulting with a faculty advisor.

The advisory plans build upon the basic requirement for the major (see the description of the major) by suggesting lists of specific courses within and outside of the department which we believe will prepare our students for work or graduate study after graduation from Sonoma.

The Humanistic Psychology Advisory Plan is a contract-based plan designed for students who wish to concentrate on the rich selection of courses which the department offers in the area of humanistic psychology. It is based on the conviction that learning to choose wisely for oneself can help one develop a personal synthesis that contributes to intellectual growth and maturity. This plan may be used for students without specific career plans in professional psychology and for students planning graduate study in certain specialized, alternative graduate programs. This plan is especially suitable for students who wish to complete a double major which stresses an interdisciplinary approach to education.

The General/Research Psychology Advisory Plan is designed for students planning entry into traditional doctoral programs in psychology at a major university or professional school after graduating from Sonoma. It consists of courses that most university doctoral programs in the United States and Canada recommend as preparation for their programs, plus courses unique to Sonoma that are particularly useful for this purpose.

The Human Services/Human Sciences Advisory Plan is designed for students who plan to go directly into work in applied settings, as well as for those who are already performing psychological work who need additional information, concepts, and skills. It is also appropriate for students preparing for masters-level work in graduate programs, such as the Sonoma graduate programs in counseling and humanistic psychology.

More complete descriptions of the advisory plans are available from the Psychology Department office. Students interested in joint programs of study in Human Services between the Psychology and Sociology Departments should consult either chairperson.

The Psychology Minor

Students seeking a Minor in Psychology are encouraged to consult with a Psychology faculty advisor to assist them in planning a series of courses tailored to their own personal and career goals. The requirements of the minor are:

1. Completion of Psy 250, Introduction to Psychology (or an equivalent course) with a grade of C or better.
2. Completion of at least 20 units of upper-division psychology courses with a minimum grade of C or Credit in each course.

Field Work and Special Studies

Special Study: The department encourages self-initiated, independent study and research by its students on a wide range of student-selected topics and issues. We feel that this is an important preparation and practice for the life-long learning in which our students will engage after they leave Sonoma. Students are encouraged to contact an individual faculty member of their choice after they have formulated a preliminary outline of the project on which they wish to work.

The Community Involvement Program (CIP): The department actively participates in the University's Community Involvement Program wherein academic credit can be obtained for volunteer work in the community. (CR/NC Only)

Field Placements and Internships: Each semester a number of advanced undergraduate and graduate students participate in field placements and internship work experiences in organizations and agencies throughout the University's six-county service area. These internships involve on-the-job training by the agency and academic work under the direction of a faculty member. This forms an important base for academic credit and helps the student obtain a range of learning experiences not otherwise found in the department.

Master of Arts Psychology

See the separate description of the Master of Arts in Psychology—External Program, on page 282.

Residential (Internal) Program

The Master of Arts Program offers learning within a definition of psychology which both permits the study of human behavior in an objective and traditional sense and encourages in-depth explorations of basic human concerns and questions. Such explorations may involve studies of inner experience using phenomenological, archetypal, and related methodologies. The orientation of the Program is broadly humanistic.

Students who succeed in the Program typically are focused in their interests and able to work on a self-directed basis, with the supervision of an advisor and two other faculty M.A. committee members. The program is organized on a "mentorship" model of education in which students work closely with faculty advisors with whom they share important common interests. In addition, each semester we offer several graduate seminars, and graduate students may enroll in any undergraduate classes in the department. They may also make use of the resources of other departments throughout the University.

Currently, faculty are interested in working with graduate students in areas such as these: biofeedback; life-span development; sports psychology; Jungian; archetypal, transpersonal, and person-centered psychology; psychopathology; Gestalt therapy; family psychology; conflict processes, and community political psychology. We offer an emphasis on relationships with nature in general and wilderness in particular.

We have recently initiated, in cooperation with faculty from the Management Department, an integrated sequence of courses designed to prepare the student for this role of consultant in the Organization Development area. The Department specifically focuses on interventions designed to improve the quality of working life or humanize the workplace. In addition, a few faculty are willing to serve as advisors for students whose interests differ from any of those listed, so long as the student has a well-articulated sense of direction. The program does not prepare students for the MFCC (Marriage, Family, and Child Counseling) license, and students wishing this license are advised to explore the Master of Arts in the Counseling Education Program (Nichols 220). The Master of Arts in Psychology can serve as a terminal degree preparing you for work in psychology, human services, government, business, or it can serve as preparation for a Ph.D. program.

Applicants are admitted to the 30-unit Degree Program to begin their formal work in September of each year. Although it is possible to complete the program in one year, and some people have done it, most students require a year and a half to two years. Rate of progress depends primarily on the student's energy and commitment. On occasion, students who lack adequate undergraduate preparation are admitted conditionally, with a provision that they make up specified background courses. Students not admitted to the graduate Degree Program who meet the University's basic qualifications for admission to graduate study may take both graduate and undergraduate classes by enrolling as *unclassified graduate students.*

The number of students who can be accepted into the M.A. Program is limited to about 20 each year. Selection among applicants is based both on the candidate's apparent academic and professional promise, and on compatibility with faculty advisors' interests. With the concurrence of a student's graduate committee, up to 15 units of postgraduate work taken prior to advancement to candidacy may be applied toward the M.A. Degree. This can include work taken in unclassified graduate status.

Admission Requirements

Admission to the M.A. Program requires:

A. Bachelor's Degree from an accredited College or University with a major in psychology or at least 32 upper division units in psychology or an acceptable equivalent.
B. A grade point average of 2.5 for the last 60 units of academic work.
C. Knowledge of the general field of psychology and familiarity with the history and theoretical foundations of psychology. This may be met by appropriate courses in the applicant's background or by passing an examination administered by the Psychology Department.
D. The Graduate Record Examination Aptitude Test or the Miller Analogies Test are required, although no automatic cut-off scores are used.
E. Acceptance for admission by the Psychology Department Graduate Admissions Committee. The Committee will base its decisions in part on the above information and in part on other information provided by the applicant, including written statements of relevant life and work experience, letters of recommendation, and a preliminary program proposal. More information about these is available in the "supplementary information packet" available from the Department.

To apply to the M.A. Program, write to:

Graduate Admissions Committee
Psychology Department
Sonoma State University
Rohnert Park, CA 94928

Admission in Unclassified Graduate Status requires a bachelor's degree from an accredited college or university, and a grade point average of 2.5 for the last 60 units of academic work. Applications for such status are accepted on a continuing basis. To apply for admission as an unclassified graduate, write directly to the University Admissions Office.

Refer to the Section on Post-Baccalaureate Degrees in the front of this catalog (p. 21).

*** Requirements for the Master's Degree**

To complete the program, the candidate must:

A. Maintain a graduate grade point average of at least 3.0.
B. Complete 30 units of approved graduate study.

* Also see general university requirements.

C. Complete a thesis acceptable to the candidate's committee.
D. Pass a formal oral examination to be administered by the candidate's graduate committee.

Students who fail to register for two or more consecutive semesters will be held to the University regulation requiring applciation for readmission. If a student files a formal request for a leave of absence with the department at the time of leaving, and that request is reviewed and approved by the student's adviser, readmission will normally be automatic. A student who fails to file a request for a leave of absence will be required to justify readmission and to present a plan for completion of the MA requirements. Readmission will be subject to the availability of a faculty adviser.

Students who complete 6 units of Psy 590 without having produced an acceptable thesis or project are required to register in Psy 515 for at least one semester.

Course pattern

	Units
Psychology 590 Master's Thesis and Directed Reading	6
Support courses	24
	30

Elementary and Secondary Teaching Credential Preparation

A Major in Psychology is acceptable preparation for a California elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, psychology majors must pass the General Knowledge portion of the ational Teacher's Examination. For the secondary teaching credential, majors must pass the National Teacher's Examination in Social Science, or complete the single subject social science waiver program. Psychology Majors seeking a teaching credential are encouraged to consult with a Psychology department advisor, and review the University's special bulletin on Programs in Teacher Education. For further information on credentials and professional education requirements see p. 106 of this Catalog.

Psychology Courses

The following courses are required for the Psychology Major:

305. Foundations of Modern Psychology
(4)

This course introduces the student to the history and evolution of psychological thought. Critical assessment of past and present understandings of human experience focusing on principal controversies and viewpoints of psychology. Contemporary approaches considered include: cognitive, social, and behavioral as well as psychodynamic, existential, humanistic, phenomenological and transpersonal. The course will strongly encourage active and critical student involvement.
Prerequisite: Psych 250.

306. Introduction to Psychological Practice and Inquiry
(4)

Practical skills and perspectives useful in both psychological practice and interpersonal relationships. Applications of the contemporary approaches studied in Psych 305. Experiential microlabs in communication, awareness, behavioral change and personal exploration. Interdisciplinary connections are emphasized.
Prerequisite: Psych 250.

400. Seminar: Critical Issues in Contemporary Psychology
(4)

The focus is on key issues in human nature, science, and strategies of intervention and change. Students select an issue of central interest and explore it in depth within a context of cognitive and affective learning. Emphasis is on analysis, synthesis and clear writing. Course sections may have different thematic emphases.
Prerequisites: Psych 305 and 306.

Basic Courses

In courses listed with variable units (1-4), course unit value may vary from semester to semester. Consult Class Schedule for current unit offering.

200. Psychology of Personal Growth
(2–4)

This class is designed to help the student deepen his/her awareness as a thinking, feeling individual. It will examine the psychological aspects of interpersonal relationships, attitudes toward social groups and institutions, and the structure of values and beliefs.

237. Career Life Planning Through Self Exploration
(2–4)

Offers students an opportunity to explore and discover their values, skills, interests, life style preferences, and the undertaking of the personal strategies necessary to formulate career paths and alternatives.

250. Introduction to Psychology
(4)

This class introduces the student to human behavior through psychology and its practical-theoretical association with other related disciplines. The individual and the individual's relationship to groups, institutions, and special social settings is examined within the above framework. May be used for General Education category D-1 credit.

300. Current Trends in Psychology
(4)

A survey of general research and humanistic psychology, and of the human services field, with an emphasis on current developments in the field. Presentations by members of the psychology faculty and invited guest speakers. Especially recommended for new students who want an overview of the department and its faculty.

302. Development of the Person
(3)

A multi-disciplinary examination of the social, cultural, personal and psycho-physiological development of the human being. Examines how humans differ socially and psychologically from other species, and how the person develops. Shows how research and theories relate to and assist individuals in their own self-development. May be used for General Education credit, category E.

Growth Processes

Courses in this group assist a person in furthering his or her process of growth and change. Many of these courses provide specific tools that a person can use in facilitating personal development and improving interpersonal relationships.

311. Seminar in Myth, Dream, and Symbol
(4)

An exploration of the inner world of being human through a focus on symbol, dream and mythic image. In the process of personal growth and cultural change the diversities of experience in the dreaming and imaginal processes will be viewed in terms of their integrative potential as well as their individuation. Jung, Campbell, Murray, Hillman, Eliade and Wheelright will be among those studied.

319. Group Process
(1–4)

The use of the small group as a basis for understanding the individual, his/her relationship to others, and his/her role in group behavior. This class is normally conducted as an encounter group with supplementary readings and written work. Prerequisite: Consent of the instructor.

339. Seminar: Selected Topics in Self-exploration
(1–4)

Each semester one topic may be selected for study in depth. Consult class schedule for topic to be studied. May be repeated for credit.

350. Psychology of Health and Nutrition
(4)

A holistic approach to health must consider both mental and physical aspects of well being. This course will focus on basic nutrition, the psychology of eating and the psychological effects of ingestants. Prerequisite: Entrance by examination on the first day of class or consent of instructor.

352. Psychology of Yoga
(2–4)

Unification of mind and body through the practice of Yoga. An introduction to the literature and practice of Yoga. The course normally includes separate lecture and practice sessions. May be repeated once for credit.

354. Personal Awareness Through Sports
(4)

This course focuses on the integration of the mind-spirit-body. Students are encouraged to read, experience, and reflect and in so doing to come to know the various aspects of their body-spirit-mind through individual and team sports, and movement. May be repeated once for credit.

358. Seminar in the Psychology of the Body
(4)

A consideration of the works of Reich, Lowen, Feldenkrais, Selver, and others concerned with mind-body integration. In a given semester, the course may be an integrative one or may deal with particular topics. In the latter case, the class schedule will list the particular topic in parentheses.

Developmental and Social Psychology

406. Social Psychology
(4)

The formation and change of attitude and belief systems; interpersonal perception and dynamics; behavior in small groups; and contemporary problems of intergroup relationship. Cultural influences on these processes may be considered. (Cross-listed with Sociology 316)

406L. Social Psychology Laboratory
(2)

Application and concepts of social psychology to research and naturalistic settings. Prerequisite: Psych 406 (or co-requisite). Statistics recommended, but not required.

409. Developmental Psychology
(4)

An evolutionary view of human development from conception to adolescence which focuses on cognition, play, attachment, and social roles. Comparative data on the development of other primates will be presented. (Cross-listed with Anthro 318)

410. Child Development
(4)

The growth and development of the child from birth to adolescence.

412. Adolescent Psychology
(4)

An attempt to understand the world of adolescence through theory, research and personal interaction with adolescents.

414. Human Sexuality
(4)

Examines physical, intrapsychic, and interpersonal aspects of sexuality; also anatomical, physiological, and emotional aspects, sexual dysfunction, treatment, and legal questions. Presentations will be frank and explicit. Recommended background: one or more courses in the biological sciences.

416. Seminar in Marriage and Relationships
(2–4)

The psychological nature of significant interpersonal relationships will be studied both theoretically and experientially.

418. The Psychology of Family
(4)

A study of the family as a social-psychological group. Considers family of origin, present families and relationships, and parenting.

421. Psychology of Aging
(4)

Analysis of psychological development as a life-long process. Examination of patterns of adult learning and ways to facilitate it. Exploration of the role of memory for learning and psychological functioning. Study of issues in mental health in adulthood and later life.

422. Seminar in Living and Dying
(4)

A personal exploration of the importance of facing our own death as well as the death and separation from our loved ones. Other themes studied include: loneliness, anxiety, denial, anger, avoidance. Prerequisite: Consent of instructor.

Psychopathology and Change

425. Abnormal behavior
(4)

Troubled patterns of behavior and methods of coping with the world, and examination of variables that produce them. Review of major DSM III categories.

427. Advanced Group Processes
(4)

Advanced topics related to social dynamics and individual behavior in a group context. Limited to 15. Prerequisite: Psych 319.

428. Seminar Introduction to Counseling
(4)

An examination of the counseling process. Various approaches are considered and methods for the development of component skills presented.
Prerequisite: Consent of instructor.

429. Seminar in the Gestalt Process
(4)

An experiential-didactic approach to the Gestalt process as developed by Fritz Perls and his associates. Limited to 15.
Prerequisite: Group Process, Introduction to Counseling, or the equivalent, and consent of instructor. May be repeated for credit.

431. Introduction to Art Therapy
(4)

An overview of the field of art therapy, its varied schools of thought, and different possibilities of application—from public school settings to mental hospitals. Information on graduate and professional training in the field.

432. Psychopathology
(4)

Abnormal behavior from the perspectives of depth psychology. Psychodynamic theory and the "experience of madness" are explored through theoretical literature and case studies.

435. Seminar in Counseling Issues and Methods
(2–4)

Introduces the student to a variety of counseling issues and practices used in helping individuals with common concerns such as managing anxiety and conflict, understanding depression and alienation.
Prerequisite: Psych 428.

438. Psychology of Disability
(4)

This course is designed to give participants a better understanding of people with disabilities and an awareness of how society regards them. The disabilities addressed range from traumatic physical injuries through progressive diseases and conditions to mental retardation, alcoholism, and emotional disabilities. The class is appropriate for anyone interested in disability, whether for personal or professional reasons.

439. Introduction to Psychological Testing
(4)

A basic course in psychological testing. Basic underlying statistical concepts. Individual tests, tests for special populations, measuring multiple aptitudes, educational testing, occupational testing, clinical testing, self-report inventories, measures of interests, values and personal orientations, projective techniques, ethical principles of psychologists. Testing as a social enterprise. Relevant state and federal legislation and court decisions.

Experimental and Research Psychology

At least once a year, one section of the following course is taught by the Mathematics Department specifically for Psychology Majors. Consult the schedule of classes in the Psychology section for time and place.

Math 165. Elementary Statistics I
(4)

Discrete probability theory, sampling, conditional probability, random variables, special distributions, law of large numbers, central limit theorem, estimation, and tests of hypotheses.

440. Quantitative Methods in Psychology
(4)

The application of mathematical and statistical methods to experimental and non-experimental research in psychology.
Prerequisite: Math 165 or equivalent.

441A. Introduction to Psychological Research
(4)

Focus on the logic of psychological research and analysis. Selection and formulation of a research problem. Exploratory and descriptive studies, observational methods, questionnaires and interviews, projective and indirect methods will be used. Mathematical computation is not required.

441B. Introduction to Psychological Research
(4)

The principles of research design and analysis are taught by lecture, library exercises, computer simulation and direct experience. Working in small groups, students design and carry out an original research project, analyze the results and report them in APA format. A field trip to a research conference will be included if possible.
Prerequisite: Math 165 and Psy 441-A.
Corequisite: Psy 440

442. Seminar: Computer Applications in Psychology
(6)

An introduction to the use of computers in psychological research, testing, teaching, theory-building and clinical practice. The course will be project oriented. Students will learn to program several computers and calculators and will learn to use packaged programs on the CSU batch system.
Prerequisite: Psych 250 or equivalent and successful completion of the ELM.

444. Psychology of Learning
(2–4)

A study of the learning process, including a survey of major theories of learning and their application to an understanding of problem-solving behavior and developmental processes.

446. Behavior Change Processes
(1–4)

Reinforcement theory, operant and classical conditioning, social learning, and applied behavioral analysis. Applications of these processes to changing behavior.

449. Perception and Cognition
(4)

The phenomena and ways of knowing and experiencing the world through distinctively human processes. Modes of consciousness, visualization and imagination, and sensory awareness will be studied as appropriate. Physiological theory and research will be emphasized.

450. Physiological Psychology
(4)

A study of the relationship between physiological processes and behavior. Particular emphasis on the anatomy and physiology of the nervous system, the effects of metabolic processes, brain lesions and various drugs on behavior.

450L. Physiological Psychology Laboratory
(2)

Demonstrations and exercises which exemplify the methods and subject matter of physiological psychology.
Prerequisite or corequisite: Psych 450.

454. Biofeedback and Consciousness Research
(2–4)

Understanding and developing the self as a holistic organism by working with the various modalities of physiological response. Development of familiarity with the burgeoning research and technology related to human consciousness. Experimental studies will be undertaken by students.

Theoretical Psychology

461. Personality
(4)

Varied viewpoints are brought to bear in an attempt to conceptualize and understand the process and functioning of human personality.

462. Seminar in Humanistic Psychology
(4)

Studies the person centered unfolding and discovery of both values and facts in an existential yet critical context. The focus is on the whole individual, the balanced growth and change of the entire personality, and the integration of experiential and intellectual learning. Maslow, Rogers, Bugental, Jourard and May are among those studied.

464. Seminar: History and Theoretical Foundations of Psychology
(4)

An in-depth examination of the historical development of psychology and its theoretical foundations including: Structuralism, Functionalism, Behaviorism, Neobehaviorist theories, Gestalt, Psychoanalysis and its offshoots, and Phenomenology. These will be studied as they cast light upon human nature and as they have guided the development of psychology. The course will examine major topics influential in the development of psychology such as: Act-Content; Determinism-Free-Will; Idiographic-Nomothetic; Active-Passive Mind; differing views on the nature of science and theory in psychology. The course will provide the student with an appreciation of the fundamental underpinnings of experimental and applied psychology. Prerequisite: Passing the Psychology Department's Comprehensive Examination in Psychology or passing Psychology 250.

465. Seminar in Freud and Psychoanalysis
(4)

The theories and methods of Sigmund Freud and later psychoanalytical thinkers.

466. Seminar in Theoretical Psychology
(4)

Each semester the seminar will focus on a particular theorist or theoretical issue. The topic to be studied will be listed in the schedule of classes. May be repeated for credit.

Special Topics

360AB. Psychology Through TV and Film
(2)

Each week, students are shown a TV show or movie and there are brief explanations or comments by the instructor. The subject matter illustrates the psychology of perception, learning, physiology, society, and personality. This course is open to anyone interested in psychology. This is a two semester course; however, either semester may be taken independently.

368. Seminar in Interpersonal Behavior
(4)

Explorations of the ways in which people interact with each other on a one-to-one basis. Both experimental and phenomenological sources of information are used.

369. Psychology of Time
(4)

The meaning of time concepts and their influence on interpersonal relationships. Effects of peoples' time orientations on personality, learning, and social behavior. Psychological research, case studies, and personal experience provide source material.

390. Seminar: Special Topics in Psychology
(1–4)

Each semester a special topic in psychology will be selected to introduce the student to recent theory, research and practice in the discipline. Consult class schedule for topic to be studied and current unit offering. May be repeated for credit.

469. Psychology of Language
(4)

Examines the creative potential of language, its psychological implications, and evidence for the linguistic underpinnings of concept formation, acculturation, and ideas of reality. Mental illness is characterized as both an individual and group language problem.

471. Psychology of Religion
(4)

The human search for meaning, spiritual significance, and an integration of experience will be the focus in this course. Different modes of consciousness, varieties of experience, changing belief systems, and the diversity of ultimate values will be considered. Comparative aspects of traditions in both the East and the West will be examined. "Soul making" ("psyche" formation and transformation) as one dimension of psychology will be explored. Works of such authors as Buber, Hillman, Martin, and Tillich will be among those used. Critics of religion such as Marx and Freud will also be discussed.

472. Transpersonal Psychology
(4)

Explores transcending modes of consciousness and experience as they embrace and include psychological concerns of the healthy personality and the fully functioning person, in an extended and expanded identity. The farther reaches of human nature, spiritual emergence and significance, and the depths/heights of inner experiencing will be studied. Religious philosophers such as Teilhard de Chardin will be included.

479. Phenomenology of Boundary
(4)

Looks into the connective and differentiating processes disclosed in the betweennesses, transitions, and changes of experience. Considers the multifaceted nature of boundary as threshold, posture, place, kairos, meeting, healing, bridging, interface, limit and possibility.

483. Psychology of Metaphor
(4)

Explores the ways in which figurative imagery carries and transfers awareness and recognition between modes of meaning, expression, and apperception. Uses humor, poetry, story and indigenous colloquial expression to study changing perspectives and relationships.

484. Human Ethology
(4)

Ethological and sociobiological perspectives on human rituals, aggression, bonding, and bodily and behavioral displays of age, sex, status, and emotion. (Cross-listed with Anthro 302)

485. Seminar: Nature, Man and Woman
(4)

This course explores the relationship between humans and environments, utilizing historical and current perspectives. The focus will include theoretical studies of historical and evolutionary perspectives, the increasing alienation from natural processes, especially since the industrial revolution, and the psychological aspects of current environmental crises and various alternative solutions. Prerequisite: Consent of instructor.

486. The Experience of Wilderness
(2–8)

Since the dawn of civilization, humans have "returned to, retreated to, or avoided" the most natural wild places left on earth. This course will explore—theoretically and experientially—the psychological meaning of recreation inherent in the human wilderness encounter. Includes an off-campus wilderness trip. May be repeated for credit.

487. Interdisciplinary Seminar
(1–4)

Exploration of basic human problems as reflected in the Arts, Humanities, Social Sciences or Natural Sciences. Resource persons from other disciplines will participate. See Time Schedule for areas to be emphasized. May be repeated for credit.

490. Psychology Seminar
(1–4)

Each semester one psychological topic will be selected for study in depth. Consult class schedule for topic to be studied and current unit offering. May be repeated for credit.

Other

399. Student-instructed course
(1–4)

Each Student Instructed Course is designed by an advanced student under the guidance of a faculty sponsor. Each course proposal is carefully reviewed by the Department Executive Committee before approval is granted. Consult the class schedule for the topic studied. Only two SICs may be credited toward the Psychology major.

495. Special Study
(1–4)

The Psychology Department encourages independent study as preparation and practice for life-long self directed learning. Students should formulate plans for a project and present them to a faculty member for sponsorship. Special forms for this purpose are available in the department office. These should be completed and filed when you register. Twelve units of Special Study may be credited towards graduation. Prerequisite: Upper division psychology major or consent of instructor.

496. Psychology Tutorial
(1–16)

Individualized instruction, emphasizing dialogue with faculty and other students, designed to integrate and expand the student's knowledge of psychological issues and problems. Individual consultations between faculty and students as well as seminars and other dialogic experiences.

Field Work

395. Community Involvement Project
(1–4)

C.I.P. gives students an opportunity to "reality test" career possibilities while rendering much needed community service. Students may earn credit for volunteer service in a variety of human service settings which may serve as future employment possibilities for Psychology majors. Requirements are 30 hours of community service per unit, attendance at 3 seminars and a final paper. Up to 6 units of C.I.P. may be counted towards graduation. CR/NC Only.

493. Field Experience
(1–8)

3 hours per unit, per week. Course is designed to provide supervised field experiences to accompany other courses. Actual experience will coincide with another course such as Abnormal Psychology, Introduction to Clinical Methods or Adolescent Psychology or other appropriate courses. Concurrent enrollment in the basic course with the same instructor required. May be repeated for credit.

499. Internship
(1–8)

Supervised training and experience for advanced students in community agencies throughout the University service area. Special contracts are required and are obtainable either in the department office or the Center for Field Experience. Internship assignments may be paid.
Prerequisite: Psych 395 or equivalent and permission of the instructor.

Graduate Courses

510. Proseminar in Psychology
(2–4)

Consideration of important theoretical and methodological questions in the history and present evolution of psychology. Limited to M.A. candidates.

512. Seminar: Current Trends in Humanistic Psychology
(2–4)

Contemporary directions in methods and theories relevant to the individual, interpersonal, community, and transpersonal modes of growth. May be repeated for credit. Limited to M.A. candidates.

515. Psychological Writing Seminar: Advanced
(4)

Advanced instruction in the analysis, organization, style and content of psychological writing, including personal explorations, and presentation(s) and critique of thesis.
Prerequisite or corequisite: Psych 590.

520. Seminar: Tools for Self-Discovery
(2–4)

An intensive seminar integrating theory with tools of awareness, fantasy, and interpersonal facilitation that are useful to the individual in his or her growth process, with training in how to use these in the classroom and related situations. Limited to M.A. candidates.

525. Social and Psychological Issues in Aging
(4)

Analysis of experiencing the aging process and the social implications. Exploration of relationships between social supports and psychological status in later life. Examination of effects of social values and social policies on interactions of current theories, research and issues in aging.

530. Seminar in Interpersonal Process
(1–4)

Methods and theories for facilitating self-understanding and interpersonal contact in the dyadic or small-group situation. Course content varies from semester to semester.

535. Seminar in Archetypal Psychology
(4)

An advanced seminar based upon the work of Jung, Kereny, Hillman and others concerned with image, dreams, metaphor, pathology, and soul-making.
Prerequisite: Consent of instructor.

540. Seminar in Psychological Issues
(2–4)

Each semester a particular topic in individual, social, community, or organizational psychology is selected for study in depth. Consult class schedule for topic to be offered and current unit offering. May be repeated for credit.

542. Seminar in Psychodynamics
(4)

Inquiry into personality processes from a phenomenological or psychoanalytic perspective. Attention is given to methods of study. Recommended background: Personality and Abnormal Behavior.

545. Seminar in Interdisciplinary Study of Human Experience
(2–4)

A seminar exploring basic human problems as reflected in art, literature, philosophy, anthropology, and ecology. Faculty members from these disciplines will participate as resource persons. Consult class schedule for topic to be studied and current unit offering. May be repeated for credit.

554. Seminar: Behavior and Experience in Work Organizations
(4)

A study of human behavior and experiences in organizations. A goal of this course is to understand the interrelationship between key human experiences and organizational structure. Specific phenomena such as power, leadership, changing nature of work values, and group phenomena will be studied, while special topics will be selected based upon student interest.
Prerequisite: Consent of instructor.

556. Seminar: Quality of Working Life
(4)

A seminar in the design or re-design of work organizations and jobs to enhance the quality of working life or to humanize work. Classic and modern cases in Industrial Democracy and QWL will be studied. Value and practical issues in the design of work to enhance human aspects will be emphasized.
Prerequisites: Psych 554 and consent of instructor.

558. Human Systems and Social Change
(4)

The "human systems" perspective in the context of an information and communications society, as developed by general systems theory, organization development, and humanistic-transpersonal psychology. Organizational and societal leadership are explored from perspectives of values, organizational dynamics, and cultural/economic/ecological systems.

560. Professional Workshop
(1–4)

Each semester a particular problem or methodology will be selected for study in depth, such as Gestalt Therapy, Wilderness Leadership, etc., with the aim of developing professional capacity in the area studied. Consult time schedule for topic. May be repeated for credit.

561. Advanced Professional Workshop
(2–4)

Continuation of study begun in Psych 560 or other graduate seminar. Consult time schedule for topic. May be repeated for credit.

566. Biofeedback Practicum
(2–4)

Develops proficiency in the use of biofeedback equipment through simulated training sessions and supervised actual biofeedback training sessions. Case presentation format is used for discussion of issues that emerge in the student's clinical experience.

570. Directed Field Experience
(1–6)

Internship arranged at an approved college, school, hospital or clinic. Regularly scheduled individual and group meetings with Psychology Department faculty for consultation regarding field experiences.
Prerequisite: Consent of instructor.

580. Seminar in Teaching Psychology
(1–4)

Discussion of theory, methods, and materials of teaching psychology. Customary emphasis is on undergraduate college instruction, but may vary according to the needs and interests of participants.
Prerequisite: Consent of instructor.

582. Practicum: Teaching College Psychology
(1–4)

Practical experience of supervised teaching in a college Psychology classroom.
Prerequisite: Consent of instructor.

590. Master's Thesis/Project and Directed Reading
(1–3)

A research study or creative project developed by the student in consultation with the Psychology Department and approved by the department and the graduate study committee. A student may not register for the initial units of Psychology 590 until a "Thesis Prospectus Form" has been accepted by the student's committee. An acceptable rough draft is required in order to register for additional units.

595. Special Studies for Graduate Students
(1–4)

596. Graduate Tutorial
(1–4)

Individualized instruction, emphasizing dialogue with faculty and other students, designed to integrate and expand the student's knowledge of psychological issues and problems. Individual consultations between faculty and students as well as seminars and other dialogic experiences.

Master of Arts in Psychology—External Program

Goals of the Program

This program offers one year of deep and intense exploration. Students who have applied in the past have been those particularly concerned with personal meaning and growth, mature in their sense of self-direction and capability for devising and communicating their goals. The goal is learning which has relevance to basic human existence.

GENERAL DESCRIPTION

The program is designed for self-directed individuals who may already be in the professional workplace but are unable to attend a residential M. A. program. The Program provides an alternative approach to professional preparation in psychology. It provides the opportunity to develop a 30 semester-unit curriculum, primarily tutorial in nature, working closely with an advisor from the Sonoma State University Psychology faculty.

Particular areas of faculty expertise include:

- Art Therapy
- Biofeedback
- Couple and Family Relationships
- Humanistic Psychology
- Phenomenology
- Transpersonal Psychology
- Wilderness Leadership Training

The program requires a high level of individual initiative and knowledge of resources in the field. It is therefore most appropriate for those with background and work experience in psychology and knowledge of their professional and personal needs.

The external M. A. is equivalent to one earned in a conventional university setting with comparable academic standards. Students must be willing to commute to the SSU campus to attend regular weekly or bi-weekly meetings with their faculty advisors.

PREREQUISITES

The following must be met BEFORE a student can officially begin the M. A. program, although it is possible to apply while working to fulfill these prerequisites:

1. B.A. degree from an accredited college or university.
2. A 2.5 GPA for the last 60 units of academic work.
3. An undergraduate major in psychology or an approved equivalent.
4. One year of graduate-level experience (academic or practical) in humanistic psychology.
5. Psy 464, "History and Theoretical Foundations of Psychology", at Sonoma State University. This prerequisite may also be met by a challenge exam administered by the Psychology Department.
6. A minimum of four units of graduate level coursework (resident or extension) in addition to Psy 464, "History and Theoretical Foundations of Psychology", at Sonoma State University approved by the student's advisor. In certain instances additional background coursework in psychology may also be required.
7. The University requires the aptitude section of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) for all graduate applicants. The Psychology Department will use this for information but not as a primary criterion for selection.

FEES

Fees are paid on a per-unit basis. Student must enroll in a minimum of 8 units per semester while in the 30-unit program. These fees cover advising, administration, and up to 8 units of SSU coursework. It is understood that the student will be responsible for fees for any additional workshops or coursework, whether on or off campus. Fees are set by the Office of Extended Education.

EVALUATION

Within the first 15 units of coursework each student selects a M. A. committee in consultation with the advisor. The committee typically includes the advisor, a representative from the SSU Psychology Department faculty or another appropriate discipline, a qualified professional from the community (ordinarily field supervisor), and another student. The committee is responsible for evaluating the student's M. A. work. There are two phases to the evaluation. The first occurs after 15 units of coursework and involves advancement to candidacy; the second is at the end of the student's program and includes the presentation of a portfolio of completed work, a thesis project, and its defense.

APPLICATION PROCEDURES

Students may enter the program during the Fall or Spring semester. Completed applications must be received, evaluated, and the student admitted and registered by semester Census Date, the last Friday of September or February, respectively.

Step 1 Discuss the appropriateness of the external model for your academic and professional goals with Dr. Charles Merrill, program coordinator, and establish contact with a potential department advisor.

Step 2 Obtain an application package for the external degree program from the Department of Psychology, Sonoma State University, Rohnert Park, CA 94928.

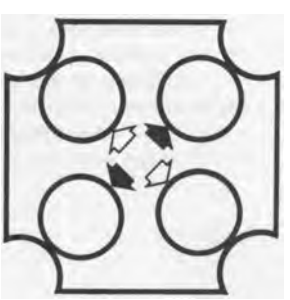
Step 3 Submit the completed application packet, including two letters of recommendation, transcripts, autobiographical statement, and statement of professional goals, to the Office of Extended Education, Sonoma State University, Rohnert Park, CA 94928.

Step 4 Students will be chosen by advisors from the pool of those persons considered eligible. For students selected by advisors, final application materials will include: final proposal of work to be done during the M.A. year, including statement of personal goals and designation of field placement supervisor. This final proposal will be developed in consultation with your advisor.

Step 5 Students will be notified by the External Degree Office of their formal acceptance into the program and will receive registration information from the Psychology Department.

For Further Information

Write to Admissions Coordinator, External Degree Program, M.A. in Psychology, Psychology Department, Sonoma State University, Rohnert Park, California 94928—(707) 664-2411.



Sociology

Sociology is a field with diverse areas of study. These range from the behavior of the individual as a social actor to the behavior of entire societies. Consequently, key topics include social psychology, socialization, deviant behavior, group behavior, organizations and institutions, power, inequality, and social change, among others. The major social institutions are also explored in detail, including the family, education, religion, social welfare, medicine, work, politics, leisure, the media, and so on. To develop skills for studying society, students are also introduced to such valuable techniques as survey research, sampling, observational methods, content analysis, experimentation, interviewing, and computer techniques.

Because sociology is a core subject for any liberal arts education, the Department offers a variety of courses of interest to non-majors. These concern such current social issues as the problems of the aged, drugs and society, sex role change, and futurology.

The Major has been designed to allow each student, in consultation with an advisor, to develop a personal program of study. The required courses ensure a solid grounding in sociological concepts, theories, and research approaches. To help students in additional course selections, the Department has developed a lengthy Career Guide that provides suggested plans for over twenty career paths. It also has a career development class to help students select their personal goals.

A set of business-oriented plans directs those with an interest in organizational consulting, human relations, union organization, industrial relations, communication consulting, marketing, personnel, and other applications of sociology to institutions, companies, and corporations.

The human services emphases are for those interested in supervision, program planning and development, proposal writing, community organization, and counseling in such agencies as halfway houses, alcohol rehabilitation homes, battered women's shelters, recreation departments, special schools, and so on. These plans develop the administrative, organizational, and research skills for these occupations, as well as appropriate sociological information about social needs in American society.

Other study plans provide direction for government jobs, self-employment, and teaching. Also, recommendations are made for those who wish to go on to graduate training in such fields as sociology, social work, counseling, public health administration, gerontology, business administration, urban planning, and law.

Regardless of one's career interest, the Department encourages students to gain practical on-the-job training through internships with major employers and social agencies in the area.

The Department also supports a Sociology Club to encourage student participation and has a chapter of the national sociology honor society, Alpha Kappa Delta.

Department Chair:

Susan Garfin

Faculty:

David Arnold, Kathleen Charmaz, Susan Garfin, Daniel Haytin, Clarice Stasz, John Steiner, Robert Tellander.

Department Office:

Stevenson 2084, phone (707) 664-2561

B.A. Degree

Minor also offered

Bachelor of Arts in Sociology

Major

	Units
General Education	48
Sociology Courses	40
Electives	36
Total	124

Course Requirements

	Units
Sociology 201—Introduction to Sociology	4
Sociology 300—Sociological Analysis	4
Sociology 375—Survey of Sociological Theory	4
Sociology 498—Senior Seminar	4
Upper Division Courses in Sociology	24
	40

Minor in Sociology

	Units
Sociology 201—Introduction to Sociology	4
Upper Division Courses in Sociology	16
	20

Human Services

To pursue a joint Sociology-Psychology program in Human Services consult the chair of either department for further information.

Elementary and Secondary Teaching Credential Preparation

A Major in Sociology is acceptable preparation for an elementary or secondary teaching credential. To meet the academic requirements for the elementary teaching credential, majors must pass the General Knowledge portion of the National Teacher's Examination. For the secondary teaching credential, majors must pass the National Teacher's Examination in Social Science, or complete the Single Subject Social Science Waiver program. Sociology majors seeking a teaching credential are encouraged to consult with the Department's credential advisor, and review the University's special bulletin on *Programs in Teacher Education.* For further information on credentials and professional education requirements see pp. 98 of this Catalog.

201. Introduction to Sociology
(4)

A general overview of the concepts, theories, research methods, and findings of sociology. The purpose is to train students to view the world through a sociological perspective. This course satisfies the G.E. Social Science requirement.

300. Sociological Analysis
(4)

Consideration of the ways in which sociological questions are formulated and answered. Examination of and practice in conceptualization, theory construction, deductive and inductive reasoning, and other elements of sociological analysis, with an emphasis upon sociological research methods. Required for majors.

301. Current Trends in Sociology
(4)

Each professor in the department presents an introduction and overview of the most recent developments in his or her area of specialization. Recommended to be taken during the student's first semester at Sonoma.

303. Computers and Society
(4)

The impact of computers on government and business, school and family, work and leisure, equality and inequality, crime and security, power and freedom, work roles and sex roles. An overview of computer applications in social research and social services (including education, criminal justice administration, and the helping professions).
Prerequisite: Soc. 300 or consent of instructor.

304. American Society
(4)

Study of the major values, institutions, and social organizations in the United States. The social sources of change and stability in U.S. society. Recommended for non-majors.

305. Lecture Series
(2)

Lectures, panel discussions, and films on a theme of current sociological interest. Contact the department at the start of the semester for complete program.

306. The Sociology of Career Planning
(4)

How to identify and locate social science jobs in government, business, private institutions, or self-employment. Choosing a career, job-hunting skills and techniques, and keeping a job. Study of such work-related issues as dual-career families, equal opportunity, and professionalism.

307. Documentary Photography
(2)

An introduction to basic photographic skills and the use of these skills to record and understand the social world.

308. Microcomputers—Social Science Applications
(4)

Applications of microcomputers for work in human service agencies, organizational consulting, survey or market research, and other social science careers.
Prerequisite: Soc. 300 or consent of instructor.

315. Socialization
(4)

Analysis of the social processes through which human beings are inducted into social groups, both in childhood and adulthood. Particular attention is given to the socializing effects of schools, work, family, and friends.

316. Social Psychology
(4)

An introduction to the study of social forces upon personality development, individual differences, and attitude formation. Topics include methods of persuasion, modeling and brainwashing, the origins of prejudice, the relationship between personality types and social characteristics such as nationality, class, and gender. Cross listed with Psychology 406.

318. Sociology of Mental Illness
(4)

Identifies the social sources of behavior defined as mental illness. Compares and contrasts psychological, biochemical, and sociological theories of insanity. Analyzes psychiatry and other forms of therapy, mental hospitals, the role of the mental patient, and mental health policy.

319. Aging and Society
(4) (cross listed as Gerontology 319)

Analysis of the implications of increasing longevity for society. Discussion of age-grading, age norms, and the social meanings of aging. Examination of the relationships between the aged and social institutions, with emphasis upon those aged who are poor, isolated, chronically ill, or minority group members.

330. Sociology of Leisure
(4)

An examination of leisure in the United States. Topics include the uses of uncommitted time by various groups, an examination of leisure subcultures, the relation of leisure patterns to other societal values and institutions, and social issues related to the increased leisure of our society.

331. Mass Media and Society
(4)

A critical analysis of the nature and functions of mass communications in contemporary society. Overview of the history, structure, function, and influence of the mass media. Development of critical and analytic skills necessary to determine when and how "truth" is manipulated to serve special parochial or cultural interests. This course is cross-listed with Media Studies 301—Mass Media and Society.

332. Death and American Culture
(4)

How cultural values are related to attitudes and beliefs about death in the United States. Relationships among widely held conceptions of death and the care of the dying, management of the dying process, new ways of dealing with dying, the meaning of death to the dying person, family, and friends.

333. Social Change and Social Planning
(4)

An examination of such social changes as technological invention, social innovation, political revolution, and modernization. Survey and critique of major theories and predictive schemes concerning the future course of human social life. Discussion of social planning ideas and techniques.

345. Family Systems
(4)

Explores family forms in other cultures, as well as variations in American (U.S.A.) society by race, class, and ethnicity. Analyzes the three primary familial systems: marital, parental, and kin. Critiques popular solutions to the problems families face.

347. American Class Structure
(4)

An overview of stratification in the United States. Analysis of the effects of this system on those who participate in it, through the study of theoretical, ethnographic, and community studies. Analysis of how class affects power, prestige, opportunity, culture, and consciousness, as well as the interaction of ethnicity, gender, and class.

348. Bureaucracies and Institutions
(4)

Political, economic, social, and psychological analyses of administrative structures. The role of formal and informal organization, ideology in bureaucracy, decision-making, morale, and conflict.

349. Sociology of Work
(4)

A theoretical and empirical analysis of work in American society, examining the types of jobs open to women and men today, the rewards and dissatisfactions of these jobs, and how work has changed historically or may evolve in the future.

362. Urban Sociology
(4)

Examines the social consequences of the transition from rural to urban forms of social organization. Special attention directed to the social structural, cultural, and social psychological characteristics of urban life. Beginning with the examination of classical approaches to the study of urban settlements, there will be a special concern with the sociological implications of recent conceptual developments and empirical findings.

363. Race and Ethnicity
(4)

The history and prevalence of racial and ethnic groups in the United States. Structure of multiracial and multiethnic societies. Race relations and race contacts. The sociology and social psychology of race prejudice and discrimination as it relates to social change.

364. Sex Roles
(4)

Critique of biological and psychological explanations for sex differences. Examination of gender stratification in all social institutions: the family, work, politics, religion. The consequences of gender labeling on such activities as crime, illness, leisure.

375. Survey of Sociological Theory
(4)

A critical examination of the writings of major sociological theorists (Marx, Weber, Durkheim, etc.). This course will involve the student in critical analysis of central sociological theories and offer her/him tools for understanding the development of sociological theory and its unique role in sociology.
Prerequisite: Sociology 300 or consent of instructor.

376. Research Design
(4)

Explores the many ways sociologists collect and analyze information to test a hypothesis: Experiments, historical archive work, field study, surveys, visual techniques. The goal of the course is to improve students' abilities as consumers of information, and provide a start toward their own research.

402. Visual Sociology
(4)

Training in the use of the still camera as a tool in exploratory, experimental, survey, and field research. Analysis of photography's place in and impact upon society. Examination of the role of the photographer, the subject, and the audience.

415. Deviant Behavior
(4)

The social bases of insanity, delinquency, criminality, addiction, social unconventionality, and other deviant behavior. Examines the conversion and commitment to deviant worldviews, and the social processes involved in the transformation to deviant identity.

416. Collective Behavior and Social Movements
(4)

Sociological analyses of the characteristics, causes, and consequences of collective actions such as fads, panics, crowds, riots. Survey of social movements, especially such U.S. ones as populism, feminism, radicalism, unionism.

418. Social Development of the Self
(4)

Examination of the social sources of self-concept, personal identity, and individual world views. Special attention will be given to the theories of Mead, Cooley, James and Schutz, as well as to research techniques for the study of social identity, its development and change.

419. Seminar: Sociology of Power
(4)

An analysis of the origin, development, dynamics, and application of power in human interaction, social organizations and institutions. Problems of ensuring a balance of power and fairness in the exchange of needed services, benefits, and rewards will be emphasized.

420. Drugs and Society
(4)

Examination of the socio-psychological, political, economic, ethnic, and legal factors relating to drug usage. Theories of causation and methods of rehabilitation will be critiqued.

431. Sociology of Religion
(4)

Study of world religions (Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism), tribal beliefs, American sects and denominations. Theories of religious development, change, and effects on society. Satisfies General Education requirement for Comparative Perspectives in Humanities.

434. Cinema and Society
(4)

Each semester the instructor will select films related to a theme to explore the role of cinema as propaganda, socialization, and social research. Examples of past themes include Documentary Film, A Vision of America, Ethnographic Film, and Images of Women and Men.

435. Seminar: Mass Media
(4)

Seminar provides an opportunity to gain new insights into social problems through an intensive analysis of the role and impact of mass communications in contemporary society. Emphasis is on exploring, through a major research project, social issues which should be, but are not, fully covered by the mass media.
Prerequisite: Sociology 331 or consent of instructor.

451. Sociology of Education
(4)

A survey of issues concerning the structure of education in contemporary society, such as the social organization of the classroom; grading practices; political influences on schools; the contribution of education to the maintenance of capitalist society; teacher unionization, and student rights.

452. Health Care and Illness
(4)

A dual focus on the social organization of health care and the social psychology of illness. Analyses of the structure of care, patient-practitioner relationships and treatment ideologies. Emphasis on the patient's experience of illness, intimate relationships and self-images. Cross listed as Gerontology 452.

460. Human Services Administration
(4)

Prepares for sociological practice in non-academic settings (government, nonprofit groups, self-employed consultation). Includes training in such skills as organization planning, grant writing, volunteer management, report writing, communication consulting, group dynamics. Discusses the ethics and professional responsibility of sociologists.

461. Social Work and Social Welfare
(4)

The history of social welfare and social services in modern society. Comparison of government social services with non-profit or private social services. Overview of major social service issues such as mental health, senior services, aid to families, etc. Recommended for anyone considering social work, counseling, or human service administration.

495. Special Studies
(1--4)

A supervised study of a particular problem or area of interest selected by the student in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations and a term paper will be submitted.

497. Interdisciplinary Seminar
(1--4 units)

Exploration of basic social problems. Resource persons from other disciplines may participate. Themes and topics will vary. May be repeated for credit.

498. Senior Seminar:
(4)

Each semester different topics are offered to allow advanced sociological analysis. Past examples include women and aging, the holocaust, and the male role. Check department for current offerings. Required for all majors. May be repeated for credit. Prerequisite: Open only to Sociology majors who have completed at least 20 upper division units in Sociology.

499. Internships
(1–4)



Theatre Arts (Dance/Drama)

Theatre is process and product, art and communication, a means of personal growth and a way to humanistic understanding. At Sonoma State University, the study of Theatre Arts within the liberal arts setting is approached primarily through direct participation in the making of theatre events. Productions include plays, dance concerts, experimental theatre pieces and other performance events. The Theatre Arts Program is intended to prepare the student for work in ensemble theatre or for further study at the graduate or professional level.

The B.A. Degree in Theatre Arts requires students to develop a broad background in the discipline and to demonstrate proficiency in drama, dance or design. Students may choose to emphasize either dance or drama in their studies. A 24-unit minor in Theatre Arts is also offered.

The Theatre Arts Department also participates in the Applied Arts Minor, which may be of particular interest to students seeking the Multiple Subjects Credential.

Course offerings for the major are divided into two stages and are designed to introduce students to the basic elements and techniques of drama, dance, theatre production and design. The first stage consists of 15 units of work considered basic to the discipline and prerequisite to more advanced technique and theory courses. The second stage consists of 30 units of advanced technique courses, ensemble production courses, and research and history courses leading toward independent work in ensemble theatre. As students progress through the two stages of the Theatre Arts Program, they work toward deepening involvement in ensemble theatre as well as increased proficiency in their particular areas of interest.

The culmination of the Sonoma State Theatre Arts experience is the senior project, which offers the student an opportunity for independent work within the framework of an ensemble theatre and with the assistance of a supportive faculty.

Students majoring in Theatre Arts may be interested in the Career Minor in Arts Management (see p. 69).

Beyond the Degree

Courses in Theatre Arts offer excellent preparation for careers in social services where communication between individuals is vitally important. Acting, dancing and performing help to develop self-assurance in working in front of large groups. Technical theatre courses, i.e., stagecraft, scenery, costume and lighting design lead to jobs in stage, film, television, and concert halls. Knowledge of drama and dance techniques is essential to the expanding areas of arts therapy, arts management, drama-in-education, dance-in-education, and arts in a leisure society.

Department Chair

Judy Navas

Faculty:

Nancy Lyons, Judy Navas, William Sherman, Ann Woodhead.

Part-Time Faculty:

Christopher Beck, Elizabeth Craven, Theresa Dickinson, Peter Masean, Brynar Mehl

Department Office:

Ives 206, phone (707) 664-2474

Bachelor of Arts Theatre Arts

Major

	Units
General Education	48
Theatre Arts	45
Electives	31
Total	124

Course Requirements

Drama Emphasis

Students are advised to complete Stage I before Stage II	Units
Stage I—Required	15
100 Introduction to the History of Theatre and Dance	3
120 Beginning Acting A	2
130 Beginning Design & Practice: Scenery	3
AND	
131 Beginning Design and Practice: Costume	3
OR	
132 Beginning Design & Practice: Lighting	3
135 Stagecrafts	2
145 Voice for the Actor	2
Stage II—Required	20
300 Theatre in Action: Performance Analysis & Criticism	3
302 Drama Ensemble Workshop (2 semesters)	6
320 Intermediate Acting	2
350 Directing Workshop	2
370 History of Theatre	3
390 Living and Working in Theatre (2 semesters)	
400 Senior Project Ensemble Workshop	3
Stage II—Electives	10
133 Beginning Design and Practice: Makeup	2
170 Mime	
325 Auditioning for the Theatre	1
380 Research	3
420 Advanced Acting	2
460 Drama for Children	2
English 339 Introduction to Shakespeare	3
or any other three unit course in dramatic literature.	

At least four units of electives need to be in dance classes from theatre arts offerings.

Courses from *Stage II—Required* including repeats may be considered for Stage II—Electives.

Total for Drama Emphasis:	Units
Stage I—Required	15
Stage II—Required	20
Stage II—Electives	10
	45

Dance Emphasis

Students are advised to complete Stage I before Stage II	Units
Stage I—Required	15
100 Introduction to the History of Theatre and Dance	3
110A Beginning Modern Dance A	
110B Beginning Modern Dance B	
131 Beginning Design and Practice: Costume	3
AND	
132 Beginning Design and Practice: Lighting	3
135 Stagecrafts	2
140 Rhythm Analysis	2
Stage II—Required	22
300 Theatre in Action: Performance Analysis & Criticism	3
301 Dance Ensemble Workshop (2 semesters)	6
310 Intermediate Modern Dance	2
340 Choreography I	2
371 History of Dance	3
390 Living and Working in Theatre (2 semesters)	
400 Senior Project Ensemble Workshop	3
440 Choregraphy II	2
Stage II—Electives	8
115 Dance Styles	
133 Beginning Design & Practice: Makeup	2
160A, 160B Beginning Ballet A or Beginning Ballet B	
210 Effort/shape	2
260 Intermediate Ballet	1
380 Research	3
410 Advanced Modern Dance	2
450 Teaching/Directing for Dancers	2
470 Dance for Children	2
Health 310 Kinesiology	4

At least four units of electives need to be in drama classes from Theatre Arts Department offerings.

Courses from *Stage II—Required* including repeats may be considered for Stage II—Electives.

Total For Dance Emphasis:	Units
Stage I—Required	15
Stage II—Required	22
Stage II—Electives	8
	45

Minor in Theatre Arts ..... 24 units

A student may emphasize either dance or drama in the Theatre Arts minor. Required courses include

	Units
100 Introduction to the History of Theatre and Dance	3
300 Theatre in Action: Performance and Criticism	3
301 Dance Ensemble Workshop	3
OR	
302 Drama Ensemble Workshop	
Electives	15
	24

(Six of the elective units must be upper division and Choreography I required for dance emphasis)

Students contemplating a minor in Theatre Arts should consult the Theatre Arts Department at the earliest possible date for approval and advising.

Theatre Arts Courses

100. Introduction to the History of Theatre and Dance
(3) Navas

A general introduction to the history of western theatre and dance to 1800. The relationship between developments in theatre and concurrent political, social and cultural events will be considered. Partially fulfills Humanities GE requirement.

110A. Beginning Modern Dance A
(1) Department Faculty

An introduction to the fundamentals of modern dance designed to develop body awareness, movement skills and aesthetic sensibilities. Includes improvisation, rhythm, motion and space exploration, and fundamentals of alignment. May be repeated for credit.

110B. Beginning Modern Dance B
(1) Department Faculty

Further work in the fundamentals of modern dance technique. Class work will emphasize movement skills and understanding of body mechanics, particularly alignment and muscular function.
Prerequisite: THAR 110A or consent of instructor. May be repeated for credit.

115. Dance Styles
(1) Department Faculty

Class may focus on a particular dance style, e.g., jazz or tap, or on dances of a particular era, e.g., social dance from 1935–1960. The emphasis will be on American dance styles. As some styles of dancing require more generalized dance background than others, consent of the instructor is required. May be repeated for credit.

120. Beginning Acting
(2) Navas

An exploration and appreciation of acting. Group and individual exercises in theatre games, improvisation and scene work, leading toward believability, physical action, relaxation, sense and emotional memory, and characterization. Class work is designed to stimulate the imagination, instill trust in the ensemble, and reach the emotional reservoir of the actor. May be repeated for credit.

130. Beginning Design & Practice: Scenery
(3) Department Faculty

Design principles are applied to designing scenery and properties for the stage. Includes advanced drafting and rendering techniques used to realize and execute designs for production. Participation in one Theatre Arts production crew is required. Class work may include designing for current performing arts productions. May be repeated for credit.
Prerequisites: THAR 135.

131. Beginning Design and Practice: Costume
(3) Department Faculty

An introductory course in the fundamentals of costume design and construction. Work in the class will contain experiences in sewing and may include designing for department productions. Course will include beginning drawing, rendering techniques and the fundamentals of design. Participation in one Theatre Arts production crew is required. May be repeated for credit.
Prerequisite: THAR 135. Usually offered Fall semester only.

132. Beginning Design and Practice: Lighting
(3) Department Faculty

Basic lighting design, including the drawing of lighting plots and the techniques of rigging and operating lighting systems. Work in the class will afford direct experience in designing lighting of departmental productions. Participation in one Theatre Arts production crew is required. May be repeated for credit.
Prerequisite: THAR 135.
Usually offered Spring semester only.

133. Beginning Design and Practice: Makeup
(2) Department Faculty

A beginning course in the fundamentals of design and application of makeup for the stage. Makeups and designs for exploration in class will be closely linked to the Theatre Arts Department's productions in dance and drama. Students will be required to work makeup crew for at least one production. May be repeated for credit. Usually offered Spring semester only.

135. Stagecrafts
(2) Maslan

The functions of technical theatre will be examined by means of lectures, demonstration and practical application. Areas of concentration will be: set construction, rigging and operation of stage lighting, costume construction, and drafting for the theatre. Two hours of lab work per week and participation in one Theatre Arts production crew are required. May be repeated for credit.

140. Rhythm Analysis
(2) Lyons, Woodhead

Rhythmic resources for dancers. Learning to read and write musical notation of dance rhythms. Experience in writing percussion compositions for dance and in accompanying dances with percussion instruments. May be repeated for credit. Usually offered Spring semester only.

145. Voice for the Actor
(2) Department Faculty

Work on awareness, freeing, and full use of the natural voice. Exercises in breath, relaxation and movement, resonance, power and sensitivity lead to reconditioning habitual vocal communication and discovering a direct, spontaneous expression of inner impulses. Plays, poems, prose, songs, jokes, character voices and dialects are studied and performed. May be repeated for credit.

160A. Beginning Ballet A
(1) Mehl, Dickinson

Fundamentals of classical ballet technique. Basic barre with emphasis on placement and alignment, allegro and adagio combinations. Emphasis is on developing ballet skills as supportive to modern dance curriculum. May be repeated for credit.

160B. Beginning Ballet B
(1) Mehl, Dickinson

Development of fundamental ballet skills, placement, alignment, increased strength, flexibility as supportive to modern dance curriculum.
Prerequisite: THAR 160A or consent of instructor. May be repeated for credit.

170. Mime
(1) Department Faculty

Experiences in both traditional and non-traditional forms of pantomime and mime. Emphasis will be on non-verbal communication with exercises including isolation of face and body parts, use of masks, makeup, props, music and possibly poetry and the spoken word. May be repeated for credit.

199. Student Instructed Course
(1–3)

210. Effort/Shape
(2) Department Faculty

An introduction to Effort/Shape, a systematic approach to understanding, analyzing and communicating about movement. The system is based in aesthetics as well as mechanics.

260. Intermediate Ballet
(1) Mehl, Dickinson

Further experience in the technique and discipline of classical ballet including barre exercises, allegro, adagio, turns and combinations.
Prerequisite: THAR 160B or consent of instructor. May be repeated for credit.

295. Community Involvment Program
(1-4) Department Faculty

300. Theatre in Action: Performance Analysis and Criticism
(3) Department Faculty

An investigation of techniques, form and content in drama and dance performances. Oral discussion and written critiques of ten departmental, local and/or Bay Area productions will develop articulate understanding of contemporary performance and its relation to theatre history, the arts, society and culture. Required of all Theatre Arts majors. Partially fulfills Upper-Division G.E. requirement.
Prerequisite: Must be of junior or senior status to receive G.E. credit. May be repeated for credit.

301. Dance Ensemble Workshop
(3,3) Department Faculty

A dance production course in which dances are choreographed and mounted for performance. Dances may be student or faculty choreographed and directed. May be repeated for credit.
Prerequisite: THAR 340 or consent of instructor.

302. Drama Ensemble Workshop
(3,3) Department Faculty

A production class in which students participate in plays directed by faculty members. Styles, periods and production approaches will vary from semester to semester. Students will receive credit for major participation in the areas of acting, designing and technical work. May be repeated for credit.
Prerequisite: THAR 300 or consent of instructor.

303. Readers' Theatre
(3) Department Faculty

The emphasis of the course is on traditional and innovative approaches to group oral reading of plays and other literary works for public performance. Vocal and body movement skills are developed for greater effectiveness of communication and expression. Techniques of presentation are applicable to many majors and occasions. Experience is gained in three or four public performances.

305. Experiments in New Theatre
(3) Department Faculty

Participants create and perform an experimental theatre piece based on improvisational work. Intensive physical and vocal exercises are used to break through blocks that inhibit free expression. Acting, directing and writing skills are developed in the process of collective creation. May be repeated for credit. Enrollment by consent of instructor.

310. Intermediate Modern Dance
(2) Department Faculty

Extension of modern dance skills. Emphasis on alignment, strength, flexibility and speed, with employment of more challenging movement combinations.
Prerequisite: THAR 110B or consent of instructor. May be repeated for credit.

311. Anatomy for Dancers
(1) Lyons

Study of the neuro-muscular skeletal systems through lecture and movement. Includes location of bones, muscles and major organs; alignment of bones for efficient walking, standing, sitting, dancing; principles of ideo-kinesis, and constructive rest. Emphasis will be on how the neuro-muscular skeletal and organ systems carry out the human organism's intent to move. Intended for dance majors only.
Prerequisite: THAR 110A & 110B.

312. Principles of Arts Management
(3) Department Faculty

A survey of the social, historical, legal and economic aspects of the arts in the U.S., including evolution of U.S. and California cultural policy, rights and responsibilities of administrators and artists, non-profit law and taxation, agreements and contracts, current legal issues, and fundraising and grantsmanship and marketing. Offered in Spring semester. Cross-listed with Art 312 and Music 312.

320. Intermediate Acting
(2) Department Faculty

An in-depth study of acting, integrating basic skills through extensive scene work and improvisation. Character analysis, physical and vocal exercises are used to channel personal impulses into the portrayal of a wide range of roles.
Prerequisite: THAR 120. May be repeated for credit.

325. Auditioning for the Theatre
(1) Navas

This course is designed to cover the practical aspects of auditioning for the theatre, including 1) selecting appropriate material i.e., classic/modern; dramatic/comic; musical/revue, 2) preparing the audition piece, 3) giving a winning audition, 4) evaluating performance for future guidance. The text for the course will be *Audition* by Michael Shurtleft, a well-known casting director of theatre and film. May be repeated for credit.

340. Choreography I
(2) Lyons, Woodhead

Fundamentals of choreography through a problem solving approach. Studies deal with aspects of time, space, dynamics and movement with an emphasis on extending the communication skills of the body. Class meets for two hours with an additional two-hour lab session.
Prerequisite: THAR 110B or consent of instructor. May be repeated for credit. Usually offered Fall semester only.

350. Directing Workshop
(2) Navas

A workshop in directing scenes and one-act plays which are performed before an audience. Auditions, casting, rehearsal procedures, relationship to actors, designers and technicians, and fundamental skills in composition, blocking, characterization, style and script analysis are explored. Approaches of significant directors are examined. This class should be taken in the junior year prior to work on a senior project.
Prerequisite: THAR 120, THAR 300 or consent of instructor and a Beginning Design & Practice class (Lighting recommended). May be repeated for credit.

370. History of Theatre
(3) Navas

The history of theatre since 1800. A selected survey of important developments in the theatre of the Western World. May include an in-depth study of a particular period or genre.
Prerequisite: THAR 100 or consent of instructor. Usually offered Spring Semester only.

371. History of Dance
(3) Lyons, Dickinson

A selected survey of the history of Western theatrical dance from 1800 to the present. May emphasize a specific period or topic. Usually offered in Spring Semester only.
Prerequisite: THAR 100 or consent of instructor.

380. Research
(3) Department Faculty

Development of research skills, with practical application to programs for theatre arts productions. Students are encouraged to investigate topics of personal interest. The final research project may consist of an exploration of a particular era or phenomenon, or may be groundwork for a major creative project.
Prerequisite: THAR 100, 300, and 370 may be repeated for credit.

390. Living and Working In Theatre
(1) Department Faculty

A seminar which will deal with the relevance and realities of life of a theatre artist in contemporary society, and the practical aspects of personal survival and growth in theatre after graduation. For junior or senior year. This is a one year course for which the students will receive a satisfactory progress (SP) grade the first semester and credit on completion of the second semester. For majors only.

395. Community Involvement Program
(1-4) Department Faculty

400. Senior Project Ensemble Workshop
(3) Department Faculty

The senior student, under faculty supervision, is engaged in a production process in which all the production members while participating in the area of their main interest also support the entire production. The group is a self contained unit producing both dance and drama senior projects.
Prerequisite: for Drama, THAR 300, THAR 350. For Dance, THAR 300, THAR 440.

410. Advanced Modern Dance
(2) Department Faculty

Advanced modern dance technique with greater emphasis on longer movement combinations, phrasing, clarity and performance.
Prerequisite: Consent of instructor. May be repeated for credit.

420. Advanced Acting
(2) Department Faculty

Integration and refinement of acting skills in the performance of scenes, one act plays and experimental pieces. Classical and modern styles will be investigated and performed. Auditions, rehearsal procedures and theatre ethics will be considered.
Prerequisite: THAR 320, and consent of instructor. May be repeated for credit.

440. Choreography II
(2) Lyons, Woodhead

Further development of choreography skills and artistry. Studies may include problems relating movement to sound or music and group choreography. The emphasis will be on deepening the student's personal involvement and extending his/her range of choreographic possibilities. Class meets for two hours with an additional two hour lab session.
Prerequisite: THAR 340. Usually offered in Spring semester only.

450. Teaching/Directing for Dancers
(2) Lyons, Woodhead

Seminar and practical experience in organization and communication about movement for choreography, teaching and directing. Class includes student teaching and evaluations. Recommended as preparatory experience for the senior project in dance.
Prerequisite: Consent of instructor.

460. Drama for Children
(2) Navas

Developing skills and resources for working with children including creative dramatics, mime, storytelling and scripted drama. Practical experience in working with children will be gained through master teacher observation and student teaching. May be repeated for credit. Usually offered Fall semester only.

463. Theatre Management
(3) Department Faculty

The study of scheduling, promotion, ticketing, house and stage management, booking, budgeting and technical theatre in terms of budgeting and marketing theatrical productions. Practical application is gained by participation in the evening performances of the Center for Performing Arts. Offered in Fall semester.

470. Dance for Children
(2) Lyons

Developing resources and skills for working with children in creative movement. Class includes participation in rhythmic activities and movement exploration, with observation and student teaching of children's dance classes. Usually offered Fall semester only. May be repeated for credit.

480. Coordinated Projects
(1–3) Department Faculty

Involvement in on-campus and off-campus dance or drama projects with student directors, actors, designers, technicians and under faculty supervision. May be repeated for credit.
Prerequisite: Consent of faculty supervisor.

490. Theatre Practicum
(1–3) Department Faculty

The use and development of a theatre skill; acting, dancing, designing, lighting, constructing, sewing, in a commercial environment where the evaluation of the work is under professional rather than faculty supervision. May be repeated for credit.
Prerequisite: Consent of faculty advisor.

499. Internship: Theatre Management
(1–4)

The student will gain practical experience in various management areas of theatre. Individual internships may include public relations, publicity, programming, scheduling, box office management, funding, sales, budgeting, etc. The unit value will be determined by each internship. May be repeated for credit.



Women's Studies

The Women's Studies Program at SSU began in the early 1970's as part of a women's movement that led to the establishment of such programs at more than 300 universities. The Women's Studies Program has the following goals:

- To balance the "male-oriented" liberal arts and sciences curricula by offering courses which document women's lives and critically examine gender ideologies.
- To encourage other academic units to incorporate significant content on women into their courses.
- To provide understanding about, and help bridge, differences between women based on race, ethnicity, social class, age, sexual preference, etc.
- To maintain a supportive, non-hierarchical structure which ensures that both students and faculty participate in policy decisions and teaching.
- To provide a model for interdisciplinary teaching and pedagogical experimentation.
- To generate and disseminate new research on women.
- To work with other university and community women's organizations to effect social change that will mean greater equality, freedom and fuller lives for both women and men.

Considering the permanent increase of women of all ages in all areas of the work force, it can be argued that Women's Studies is essential preparation for the real world of work.

Women's Studies helps women and men examine alternative institutional arrangements that will help them plan for more varied roles and activities such as shared parenting and shared work.

Women's Studies graduates hold tools—knowledge, self-awareness and breadth of perspective—which public service organizations, the media, private industry, government and graduate schools want and need.

Students may choose elective courses in Women's Studies, a Minor in Women's Studies, a career minor in Women's Health (see description on page 70) or an interdisciplinary major in some aspect of Women's Studies. (See further information on the special major elsewhere in this catalogue.) Men as well as women enroll in Women's Studies classes and Women's Studies sometimes offers classes focused on men's lives.

Each semester the Women's Studies Program publishes a brochure listing all program offerings and courses on women in other departments. Copies of the brochure may be obtained in the Women's Studies office.

Coordinator:

E. Kay Trimberger

Department Office:

Cluster Schools 31, phone (707) 664-2840, 664-2561
Office hours: Monday–Thursday from 10:00 a.m.-4:00 p.m. during the academic year

Campus and Community Services

The Women's Studies Office and Lounge provide many services to women and men on the campus and in the community:

- Information on all the courses on campus which focus on women.

A library of contemporary books, pamphlets, magazines and tapes on women's issues.
Phone referrals to women's organizations and services on campus and in the community.
A bi-weekly bulletin with announcements on campus, community and national events.
Referrals for Internships in Women's Organizations.
Non-credit workshops and support groups on topics of interest to women.
Semester lecture series on a special topic (e.g. Careers for Feminists, Women in International Perspective). These lectures are open to the public and childcare is provided.
Women's films, speakers, concerts and theater on campus.
Special classes, speakers and events for Women's History Week in March.

Minor in Women's Studies

The Minor in Women's Studies is an interdisciplinary curriculum which applies feminist perspectives to the study of women. It draws both upon courses offered through the Women's Studies Program (e.g., WOMS 300) and courses on women offered through various departments on a regular and occasional "Special Topics" basis. The Women's Studies brochure published each semester details all current offerings acceptable toward the minor in Women's Studies.

The Coordinator of the Women's Studies Program serves as the minor advisor. In addition, students have the option of requesting joint advising with their major advisor to allow individual planning and tailoring of the student's supporting courses in the minor to enhance specific educational, professional and career goals.

The Minor in Women's Studies is composed of 12 units of core courses and at least 9 units of supporting courses, for a minimum total of 21 units. At least 17 of these units must be upper division.

Core Courses:

The CORE courses provide an organized framework for understanding women's lives and experiences individually, within cultural groups, and as a whole. It is recommended that students enroll in the CORE courses in their *numerical* order.

(1) One of the following:

	Units
WOMS 300 Introduction to Women's Studies	4
or	
WOMS 350 Gender, Sexuality and Family (4)	
(2) WOMS 446 Women in American History (4) (HIST 446)	4
(3) *One* of the following:	
WOMS 470 Race, Sex and Class (4) (AMCS 420)	4
or	
WOMS 475 Feminist Theory (4)	
Total CORE	12

Supporting Courses

Minors in Women's Studies must complete at least three courses from the following categories, for a total of 9 to 12 units.

I. Women in American Society
II. Women in the Humanities
III. Biological and Psychological Perspectives on Women
IV. Women in International and Cross-Cultural Perspective
V. Special Topics on Women

Minors must take one course with a *multi-cultural* focus. Minors may count no more than one course from any of the categories. See the current semester Brochure of the Women's Studies Program for courses offered in each category.

Women's Studies Courses

WOMS 199/399. Student Instructed Course
(1–4)

An introductory or advanced course designed by a senior or graduate student and taught under the supervision of faculty sponsor(s). Consult the Women's Studies Brochure for the current semester for descriptions of course offerings.

300. Introduction to Women's Studies
(4)

Examines the situations, experiences, struggles and achievements of women in American society, delineating differences in race and ethnicity, class and age. Analyzes major issues of concern today including personal and social change, women and employment, health care, education, law, motherhood, media images and violence against women.

301. Feminist Lecture Series
(1–4)

A weekly lecture series (or occasional workshops) offering presentations and discussions of current women's issues through feminist perspectives. There is usually a semester-long focus on a particular topic. The lectures are open to the community.

311. Special Problems of Women
(2–4)

A variable topics seminar focusing upon intensive study of specific problems of women in society. Course may be repeated for credit.

325. Feminist Perspectives on Women's Health
(4)

An introductory course on contemporary issues in women's health from feminist and women's health movement perspectives of enhancing control of our bodies ourselves. Examines the female life cycle from pre-puberty through aging including basic anatomy. Analyzes women's issues as patients and in healing roles, body-image/self-image, sexuality, contraception, pregnancy, childbirth, hysterectomy, and other topics. Includes optional self-help and breast exam (see the Women's Studies Brochure for details).

350. Gender, Sexuality and Family
(4)

An exploration of changing ideals and practices of gender, sexuality and family life in the U.S. over the past 100 years drawing especially on recent feminist scholarship. Topics for reading and discussion will focus on both women and men and will include: the feminist critique of biological explanations of gender, sexuality and family; alternative arguments for their social construction; analysis of sources of gender inequality; historical changes in personal life in the U.S.; and contemporary conflicts and controversies. Fulfills the requirement for an upper division "integrated person" G.E. course.
Prerequsites: English 101 or Philosophy 101 and one course in Sociology, Psychology, American History or Women's Studies or consent of the instructor.

395. Community Involvement Program
(1–4)

The purpose of CIP is to encourage student involvement in the community. Projects sponsored by Women's Studies focus upon women's needs and organizations.

446. Women in U.S. History
(4)

Study of women's oppression, resistance and change from colonial times to the present. Focuses on the impact of slavery on black and white women, industrial capitalism and women's work, and the rise and demise of "domesticity." Analysis of the lives and ideas of significant feminists as well as those of "unknown" women in different social, racial and class situations.
NOTE: Cross-listed as History 446.

470. Race, Sex and Class
(4)

An overview of the interaction of race, sex and class oppression and resistance in the historical and contemporary experience of Native-American, Asian-American, Afro-American, and Latin people. The course seeks to enhance understanding of how racism and sexism function in the political, social and economic systems of the U.S.
Note: Cross-listed as AMCS 420

475. Feminist Theory
(4)

An analysis of some of the classical and contemporary works in feminist theory and their relationship to other bodies of theory (philosophical, political, economic, social and psychological). An exploration of how feminist theory relates to the historical and social conditions of women and to the development of the women's movement. An emphasis on the diversities within Feminism. Often this course focuses on a particular topic (e.g., politics of the family, women's work) as a way to demonstrate how theory helps illuminate women's worlds.

485. Advanced Women's Studies Seminar
(2–4)

Seminar which addresses emerging issues in the study of women and usually involves intensive student research projects.
Prerequisite: WOMS 300 or consent of instructor.

491. Teaching Adults: Pedagogies for Social Change
(4)

A practical seminar oriented to student teachers and T.A.'s at the University and to students contemplating careers involving adult education in community, organizational or university settings. Students will read recent literature on innovations in the structure, process and content of teaching adults. This includes literature on pedagogy generated by movements in Women's Studies, Ethnic Studies, adult education, radical teaching and followers of Paolo Freire. Students will design a course or evaluate one they are currently teaching. Problem solving sessions are an important part of the course.
NOTE: Cross-listed as Education 490.

495. Special Studies
(1–4)

Upper division students may elect to do an independent research or action project under the direction of a Women's Studies faculty member. Student teaching is another form of special study. At present we offer credit (and not a grade) for student teaching and off-campus projects.

499. Internship
(1–4)

Supervised training and experience for advanced students in community agencies concerned with women. Special contracts are required and are obtainable either in the department office or the Center for Field Experience. Internships may be paid.
Prerequisite: WOMS 395 or equivalent and permission of the instructor.

WOMS 500. Seminar in Feminist Theory & Method in the Social Sciences
(2–4)

A survey of feminist critiques of social science theory and methodology in various disciplines—anthropology, history, political science, psychology, and sociology—(depending on student interest). A survey of feminist attempts to reformulate and transform social science theory and methods, including debates and disagreements among feminist scholars. Requirements will include an individual research project and analysis.
Prerequisite: At least one course in a social science and at least one course that focused on women or gender (course may be at graduate or undergraduate level).



Special Programs

Community Involvement Program

The Community Involvement Program is a student volunteer program designed to facilitate experiential learning and service to the community. Students work an average of 4 to 8 hours each week in a variety of placements including schools, hospitals, recreation programs, day care centers, and various social service agencies. The Field Experience Office within the Career Development Center maintains listings of more than 200 volunteer requests from community agencies.

Elective credit of 1–4 units a semester is granted after the requirements of the program have been satisfactorily met and the necessary documentation has been submitted to the student's faculty sponsor. A total of 6 units of C.I.P. credit may be applied toward an undergraduate degree. C.I.P. credit is now offered in 18 different departments, and each of these departments provides a faculty sponsor who coordinates seminars and evaluates each student's work.

University-Wide Courses

UNIVERSITY 98A. Writing Skills
(3)

The course will focus on developmental and learning skills in writing, including language mechanics, sentence patterns, paragraph patterns, spelling, vocabulary, in preparation for English 99. Students will receive guidance on the completion of written assignments that meet university level standards. Pla ement in this course is based on the score on the English Placement Test (EPT). Must be taken in conjunction with University 98B (Reading Skills). Course credit is not applicable toward graduation.

UNIVERSITY 98B. Reading Skills
(3)

The course will focus on developmental and learning skills in reading, including increasing reading rate, comprehension, skimming and scanning, vocabulary, and paragraph comprehension in preparation for English 99. Placement in this course is based on the score on the English Placement Test (EPT). Must be taken in conjunction with University 98A (Writing Skills). Course credit is not applicable toward graduation.

UNIVERSITY 98C. Mathematics Skills
(3)

The course will focus on developmental and learning strategies in mathematics, providing activities that will develop students' arithmetic abilities and introduce them to beginning concepts of algebra and geometry. This course prepares students for Mathematics 99 (which develops algebraic and geometric skills essential to passing the ELM). Placement in this course is based on the score on the Entry-Level Mathematics (ELM) test. Course credit is not applicable toward graduation.

Internships

Internships are educational programs that allow students to gain practical work experience and academic credit at the same time. These are supervised programs of work and study which involve students working in governmental, organizational, or business settings for an average of 12 to 20 hours each week; approximately 3 hours of work per week are required per unit of credit. Internships usually involve advanced undergraduate or graduate students working as pre-professionals or para-professionals in fields that relate directly to their career or academic interests.

There must be a clear and specified relationship to an academic program (major, minor, or certificate) and therefore placements must be at a professional level of responsibility appropriate for university credit.

Internships are required in some academic departments while they are optional in others. Internship placements can be arranged through the Field Experience Office where there are many listings available, while supervision and evaluation are handled by faculty sponsors in the departments where the academic credit is generated. Internships sometimes involve regularly scheduled classroom meetings that expand upon the supervised work experience and they result in a substantial paper which demonstrates the connections between the theoretical and the applied. Departments may make further limitations regarding the relationship between Internships and the major requirements.

Internships may be either both paid and non-paid, and they may extend a semester, a year, or a summer. Many students begin as volunteers through the Community Involvement Program and then develop a more highly structured placement as an intern. This continuum of experience often provides the skills and background necessary to gain meaningful employment upon graduation.

Students must check with their individual departments for academic requirements and limitations pertaining to internships.

Prior Learning Assessment (Faculty-Evaluated Prior Learning)

Sonoma State University subscribes to the principles recognized by the California State University and by the Western Association of Schools and Colleges as follows:

> undergraduate learning takes place in a variety of ways and settings and covers a broad spectrum of ages and experience.
>
> college level learning, judged by recognized academic criteria, but based on experiences other than those that occur in an academic setting, may be educationally creditable. Appropriate past learning from specific experiences can be used to undergird or supplement present and future learning beyond the secondary school, provided that such learning is relevant to the goals of the student's education and compatible with the purposes and stated objectives of the institution and its specific programs and curricula. (Western Association of Schools and Colleges, *Handbook of Accreditation,* March, 1982, p. 114.)

In the spirit of these principles, Sonoma State University offers its Faculty-Evaluated Prior Learning Program (FEPL) in order to serve highly motivated students with substantial prior learning experience. For the student who decides to apply for FEPL, the preliminary advising, the portfolio workshop, and the subsequent stages of the actual assessment will be in themselves educational. The portfolio product will, in addition, be useful in future educational and career planning.

In defining creditable prior learning, it is perhaps easier to begin with what it is not. It is not giving credit for "living." Everyone has lived and has had experience, but not everyone's life and experience produces learning equivalent to portions of a prescribed college curriculum. The credit is not awarded for raw experience, but rather for significant learning experiences which result in a blend of practical and theoretical understanding applicable to other situations. The learning must be demonstrable and demonstrated, according to the policies and procedures outlined below (and in more detail in the handbooks available from the FEPL Coordinator).

Policies and Procedures

In order to apply for FEPL, the student must:
1) be matriculated at Sonoma State University;
2) be in the undergraduate program (credit for prior learning is not presently awarded on the graduate level at Sonoma State University);
3) be applying for college-level credit in areas where Sonoma State University has degree-based programs and faculty expertise;
4) be applying for credit relevant to an approved academic course of study; and
5) be willing to follow the procedures outlined below.

Outline of Procedures

Preliminary Advising: This step may be accomplished before formal enrollment at Sonoma State University. (A brochure listing FEPL advisors and faculty may be obtained from the Advising Center.) A FEPL advisor will help the student assess the appropriateness of the prior-learning experience through the use of a pre-evaluation form. On the basis of this assessment, the student will be advised as to whether such experience could better be evaluated through one of the other methods available, such as CLEP, CSU equivalency examinations, or challenge exams. At this point also the questions of duplication of units already transcripted or planned will be taken into consideration. The next step is to discuss enrollment in the Portfolio Workshop with the FEPL Coordinator.

Portfolio Workshop: (See current Schedule of Classes for description.) This course, if all requirements are completed satisfactorily, will result in a portfolio which is used as a source of information in the evaluation process and *not* as final evidence that evaluation has been completed.

Payment of User Fee: If the student, the workshop instructor, and the FEPL Coordinator agree that the portfolio warrants formal application for award of credit, the next step is payment of a one-time non-refundable fee, based partly upon the complexity of the portfolio. (See FEPL brochure for details.) The fee is charged whether or not units of credit are granted.

Faculty Evaluation: The FEPL Coordinator will forward the completed portfolio to appropriate departments, where the department chairs will assign faculty evaluators who consider whether the learning demonstrated in the portfolio meets the criteria for college-level learning in their disciplines, whether it is upper- or lower-division level, and whether it is appropriate for credit in general education, electives, or the major. (Award of credit for general education would also have be to petitioned according to standard university procedures.) The evaluators also recommend the exact titling of the credit to be awarded and the number of units to be awarded in each category. The evaluator's recommendations and the portfolio are then returned to the FEPL Coordinator within the time prescribed.

FEPL Review Panel: The Review Panel consists of full-time faculty members representing each of the three Schools, the General Education Committee, and the FEPL Coordinator. The Panel monitors the recommended awards for consistency of standards, possible duplication or overlap of units, and overall quality, before giving final approval to the documentation of prior learning and to the recommendations for award of credit.

Appeals Procedures: Any appeal would be initiated by the student through the FEPL Coordinator. The appeal would be considered first by the FEPL Review Panel, and then, if further action is necessary, would follow standard University procedures.

Registrar's Office: The final recommendations are forwarded by the FEPL Coordinator along with the summary page of the portfolio and the faculty evaluations to the Registrar's Office for transcription. (Costs for duplication of documentary material are borne by the individual student.) The units will appear on the transcript on a credit/no-credit basis only, under a special FEPL designation, with the descriptive titles as awarded.
In accordance with WASC guidelines, these units will not be officially transcripted until the student has completed 30 units of work at Sonoma State University, and has established evidence of a satisfactory learning pattern. Should the student transfer to another institution before that time, the units will not be included on the transcript, nor will FEPL fees be refunded. Transfer of FEPL units, even after official transcription, is up to the recipient institution and cannot be guaranteed by Sonoma State University. However, the FEPL Coordinator will, at the request of any institution or agency, furnish full documentation showing how such learning was evaluated and the basis upon which units were awarded.

Time Line: The procedures which follow the successful completion of the Portfolio Workshop and the payment of fees are designed to be completed within one semester, unless delays occur because of an appeal.

Special Studies Courses

Sonoma State University makes arrangements through Special Studies 495 and 595 for superior students who want to pursue academic interests beyond the scope of the regular curriculum. Such courses are subject to the following conditions:

1. A maximum of 4 units per course.
2. No more than 12 units of Special Studies may count toward the baccalaureate.
3. The course may be included in a major pattern as a requirement, or it may be an elective.
4. Special Studies may not duplicate a course which is listed in the Catalog and which is normally offered within a two-year period.
5. Meetings between instructor and student should be scheduled at intervals appropriate to the topic and the number of units assigned; each unit of credit requires a minimum of 45 hours of work.
6. Approval for registration must be obtained from the advisor, instructor and department chairman.
7. Special Studies courses are intended for upper-division students who have a cumulative GPA of 3.0 or better (exceptions granted by consent of instructor *and* advisor), and who have an appropriate background for undertaking the proposed topic.

Intercollegiate Athletics

Sonoma State University sponsors 15 intercollegiate programs, seven sports for men and eight sports for women. The philosophy of the institution and, specifically, of the Athletic Department, is to provide the maximum opportunity for student participation in intercollegiate athletics that staff and resources will allow. SSU men's and women's athletes participate in the Nortern California Athletic Conference (NCAC) formed in September of 1982 and includes members of the old Golden State Conference (women) and Far Western Conference (men). Member institutions include: Hayward, San Francisco, Humboldt, Chico, Sacramento, and Stanislaus of the California State University system and U.C. Davis. The athletic program has been classified Division II by the NCAA effective September 1983 to coincide with SSU's admission to the NCAC. The athletic program was formerly an NCAA Division III member.

The athletic facilities and programs at Sonoma are expanding to provide students with many more opportunities to become physically active through individual and organized sports programs.

This year the Men's Intercollegiate Athletics Program will compete in the following sports: basketball, baeball, cross country, football, soccer, tennis, and track and field.

The Women's Intercollegiate Athletics Program offers competition in the following sports: basketball, cross country, gymnastics, softball, tennis, volleyball, and track, field and soccer.

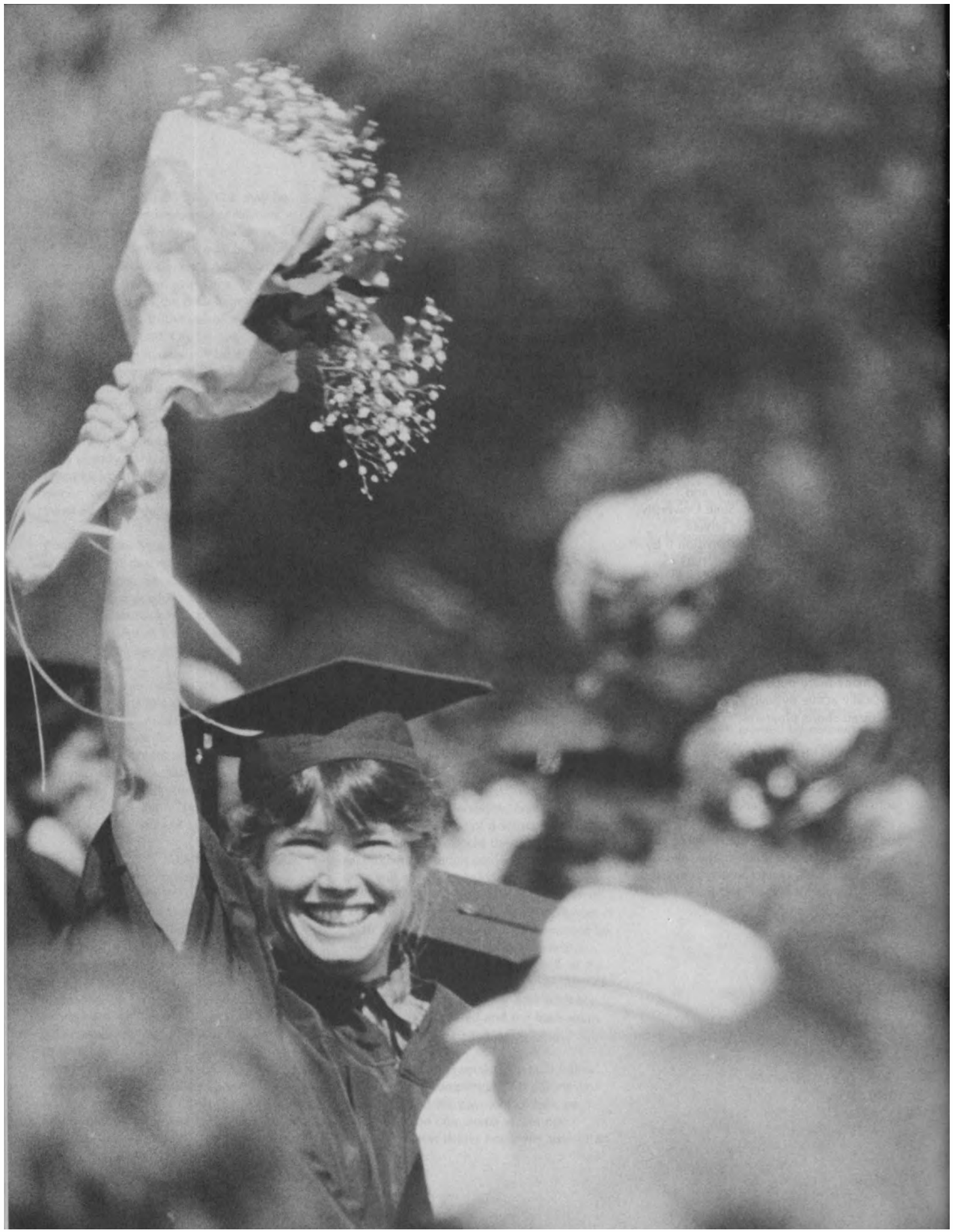


Photo by Edmond Bridant



Admissions

Admissions Policies

Requirements for Admissions to Sonoma State University are in accordance with Title 5, Chapter 1, Subchapter 3, of the *California Administrative Code*. If you are not sure of these requirements you should consult a high school or community college counselor or the admissions office. Applications may be obtained from the admissions office at any of the campuses of the California State University or at any California high school or community college.

Importance of Filing Complete, Accurate, and Authentic Application for Admission Documents

The CSU advises prospective students that they must supply complete and accurate information on the application for admission, residence questionnaire, and financial aid forms. Further, applicants must submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1, Title 5, *California Administrative Code*).

ADMISSION REQUIREMENTS

UNDERGRADUATE REQUIREMENTS

I. FIRST-TIME FRESHMAN APPLICANTS

First-time freshman eligibility is determined by (1) high school grade point average, (2) scores on either the ACT or SAT tests, (3) whether the applicant is a resident of California, and (4) whether four years of college preparatory English and two years of college preparatory mathematics have been completed.

Fall 1988 Admission Requirements

First-time freshman applicants for admission to Sonoma State University Fall 1988 and later will be required to have completed the following comprehensive pattern of collegiate preparatory studies with grades of C or better:

- 4 years of English
- 3 years of mathematics
- 1 year of U.S. history or U.S. history and government
- 1 year of laboratory science
- 2 years of foreign language
- 1 year in the visual and performing arts
- 3 years of electives selected from English, advanced mathematics, social studies, history, laboratory science, agriculture, foreign language, and the visual and performing arts

Test Requirements

Applicants must submit scores for either the Scholastic Aptitude Test of the College Board (SAT) or the American College Test Program (ACT). Registration forms and test dates for either test may be obtained from school or college counselors or from a campus Testing Office. Or, you may write to the following addresses:

The College Board (SAT)
Registration Unit, Box 592
Princeton, New Jersey 08541

American College Testing Program (ACT)
Registration Unit, P.O. Box 168
Iowa City, Iowa 52240

Grade Point Average and Test Score Requirement

The high school grade point average (for the final three years of high school, not counting physical education or military science), and either the total score from either the Scholastic Aptitude Test (SAT) or the composite score from the American College Test (ACT) are used to compute an eligibility index. Applicants can calculate their index by multiplying their grade point average by 800 and adding their SAT total score. Or, if they took the ACT, multiply their grade point average by 200 and add 10 times their ACT composite score. If their high school GPA is above 3.1 (3.6 for nonresidents) they are exempt from the test requirement.

Residents—If the applicant graduated from a California high school or is a legal resident of California for tuition purposes, he or she needs a minimum eligibility index of 2994 using the SAT, or 722 using the ACT. The following table shows the grade point averages and test scores needed.

Nonresidents—If the applicant is neither a graduate of a California high school nor a legal resident for tuition purposes, he or she needs a minimum eligibility index of 3402 (SAT) or 826 (ACT).

Honors Courses

Grades in up to eight semester courses, taken in the last two years of high school, that are designated honors in approved subjects receive additional points in grade point average calculations. Each unit of A in approved courses will receive a total of 5 points; B, 4 points; C, 3 points; D, 1 point; and none for F grades.

Subject Requirements

The California State University requires that all undergraduate applicants for admission complete (with a grade of C or better) four years of college preparatory study in English and two years of college preparatory mathematics, or their equivalent. California secondary school courses that meet the subject requirements are listed on "Courses to Meet Requirements for Admission to the University of California," published for, and available at, each high school.

English—Regular English courses in the 9th and 10th grades that integrate reading and writing will be considered college preparatory. English courses in the 11th and 12th grades will be considered college preparatory if (1) they include writing

EXCERPTS FROM ADMISSIONS ELIGIBILITY TABLE FOR CALIFORNIA HIGH SCHOOL GRADUATES [1]

GPA	2.00	2.20	2.40	2.60	2.80	3.00
ACT Score	33	29	25	21	17	13
SAT Score	1400	1240	1080	920	760	600

[1] See p. 370 for complete table

instruction and evaluation, and require substantial amounts of writing of extensive, structured papers, expressive and analytical, demanding a high level of thinking skills; and (2) they are integrated with challenging, in-depth reading of significant literature.

Courses in speech, drama, or journalism will be considered college preparatory if they meet the criteria for 11th and 12th grade courses. Two consecutive semesters of advanced English as a Second Language may be substituted for two semesters of college preparatory English. Remedial reading and writing courses at any level will not be accepted nor will courses in beginning or intermediate English as a Second Language.

Mathematics—College preparatory courses in mathematics include algebra, geometry, trigonometry, calculus, and mathematical analysis. Most students will have taken at least algebra and geometry or two years of algebra. Business or technical mathematics, arithmetic, or prealgebra are not considered college preparatory.

Additional College Preparatory Courses Recommended

Most academic advisers agree that preparation for university study includes preparation in subjects beyond four years of English and two years of mathematics. Bachelor's degree curricula build upon previous study in the natural sciences, social sciences, visual and performing arts, foreign languages, and the humanities. Students planning to major in mathematics, the sciences (including computer science), engineering, premedicine, or the science-related fields, business, or economics should complete four years of college preparatory mathematics. Students in the social sciences and preprofessional fields of study should include at least three years of mathematics in the preparatory studies. Further, all students should include English and mathematics in the final year of high school. Please note prior section on Fall 1988 Admission Requirements.

II. UNDERGRADUATE TRANSFER APPLICANTS (RESIDENT AND NONRESIDENT)

Grade Point Average and Subject Requirements

If in good standing at the last college or university attended, applicants can qualify for admission if they:

(a) were eligible as a freshman, or
(b) were eligible as a freshman except for the college preparatory subjects in English and mathematics and have satisfied the subject deficiencies, or
(c) have completed at least 56 transferable semester (84 quarter) units and have satisified any deficiencies in college preparatory English and mathematics. (Nonresidents must have a 2.4 grade point average or better.)

For these requirements, transferable courses are those designated for that purpose by the college or university offering the courses.

Test Requirements

Applicants with fewer than 56 semester units of transferable college work must submit scores for either the Scholastic Aptitude Test of the College Board (SAT) or the American College Test Program (ACT). Registration forms and test dates for either test may be obtained from school or college counselors or from a campus Testing Office. Or, you may write to the following addresses:

The College Board (SAT)
Registration Unit, Box 592
Princeton, New Jersey 08541

American College Testing Program (ACT)
Registration Unit, P.O. Box 168
Iowa City, Iowa 52240

III. ADULT STUDENTS

As an alternative to regular admission criteria, an applicant who is twenty-five years of age or older may be considered for admission as an adult student if he or she meets the following conditions:

1. Possesses a high school diploma (or has established equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination).

2. Has not been enrolled in college as a full-time student for more than one term during the past five years.

3. If there has been any college attendance in the past five years, has earned a C average or better.

Consideration will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer and will include an assessment of basic skills in the English language and mathematical computation.

IV. OTHER APPLICANTS

Applicants not admissable 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 University. Permission is granted only by special action.

Postbaccalaureate and Graduate Students Admission Requirements

Postbaccalaureate Standing, Unclassified

For admission to unclassified postbaccalaureate standing, a student must: (1) hold an acceptable baccalaurate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority; (2) have attained a grade point of at least 2.5 (A = 4.0) in the last 60 semester (90 quarter) units attempted; and (3) have been in good standing at the last college attended. Admission to a California State University with postbaccalaureate unclassified standing does not constitute admission to graduate degree curricula.

Postbaccalaureate Standing, Classified (Credential/Certificate)

A student who is eligible for admission to a California State University campus 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 such additional professional, personal, scholastic and other standards, including qualifying examinations, as may be prescribed for the particular program by the appropriate campus authority, are satisfied.

Graduate Standing, Conditionally Classified

A student eligible for admission to a California State University campus under the unclassified postbaccalaureate standards above, but who has deficiencies in prerequisite preparation which in the opinion of the appropriate campus authority can be remedied by specified additional preparation, including qualifying examinations, may be admitted to an authorized graduate degree curriculum with conditionally classified graduate standing.

Graduate Standing, Classified

A student eligible for admission to a California State University campus in unclassified or conditionally classified standing may be admitted to an authorized graduate degree curriculum of the campus as a classified graduate student if he or she satisfactorily meets the professional, personal, scholastic, or other standards for admission to the graduate degree curriculum, including qualifying examinations, as the appropriate campus authority may prescribe. Only those applicants who show promise of success and fitness will be admitted to graduate degree curricula, and only those who continue to demonstrate a satisfactory level of scholastic competence and fitness shall be eligible to proceed in such curricula.

Admission Requirements for Students From Other Countries

General

The University has established its International Student program under both the Foreign Student program (F-visa) as authorized by the U.S. Immigration and Naturalization Service and the Exchange-Visitor (J-visa) program as designated by the U.S. International Communication Agency. Permanent resident applicants possessing an Alien Registration Card must use the regular California State University application form booklet and comply with all test requirements and deadlines. The University will consider applications for admission from those applying from another country or from those having completed a program of study in the U.S. and desire to transfer to SSU. Such a program of study might be an English as a Second Language program at a U.S. institution, including SSU, or a two year program at a community college or four year college or university.

All official documents submitted become the property of the University. The acceptability of any foreign work will be determined by the University. The U.S. Immigration Services requires F-1 foreign visa undergraduates to carry a minimum study load of 12 semester units; graduate students may carry a minimum study load of 8 semester units of 500 level courses and must have a 3.0 GPA for admission to graduate school. International students must comply with all University and U.S. immigration regulations.

Application Deadlines

The University has established deadlines to insure the timely processing of all application materials, receipt of academic records, test scores, financial affidavits and other documents so that there will be adequate time for the admitted applicant to make the necessary passport, visa, and travel arrangements to reach the U.S. and the campus prior to the start of each semester. These deadline dates are: Fall Semester, June 1; Spring Semester, November 1.

SSU requires that all documents needed to complete the admission file be on hand in the Office of Admissions and Records no later than 45 days after the above deadlines.

SSU has no financial aid for international students. For this reason applicants must set forth in adequate detail precisely how they intend to finance their studies at SSU, and obtain a bank certification that funds are available to cover expenses. If they expect to receive financial support from their government or other sponsoring agencies, they must fully document these facts. Furthermore, part-time employment opportunities are rare on campus, and the immigration and naturalization laws prohibit employment of foreign students in the U.S.

The following is an estimate of the current annual expenses that international students must meet:

Tuition * ($141.00 per unit)	$4,230.00
Registration Fees *	679.00
Health Insurance	132.00
Books and Supplies (variable)	360.00
Room and Board (variable)	3,858.00
Personal Expenses (variable)	1,285.00
Total	$10,544.00

* Registration and tuition fees are to be paid at time of registration. Tuition and fees are subject to change by the Trustees of The California State University without prior notice and are usually increased each academic year.

Educational Materials/Admissions Materials

Undergraduate and graduate applicants must furnish official documents covering their secondary education including matriculation examination results, General Certification of Education examination results and results of similar examinations as applicable. Applicants who have attended institutions of higher education overseas must furnish transcripts, and other appropriate records of all college work undertaken.

If these documents are not in English, certified translations must accompany them. Evaluation of these documents is made in the Office of Admissions and Records to determine that applicants have had an education comparable to that required of California high school graduates or students transferring to the University from other institutions of higher education in the United States.

English Language Proficiency

TOEFL Required of Applicants Who Attend Foreign Institutions

All undergraduate applicants, regardless of citizenship, who have not attended for at least three years schools at the secondary level or beyond where English is the principal language of instruction are required to earn a minimum score of 500 on the Test of English as a Foreign Language (TOEFL); graduate students must earn a minimum score of 550. Those transferring from two year programs in U.S. institutions are required to furnish scores for the TOEFL prior to admission. For a description of the English as Second Language courses offered at SSU, refer to the Foreign Languages section of the Catalog.

Readmission

Returning Students

A student previously enrolled at Sonoma State University who has not registered for two or more semesters must file an application for readmission with the Office of Admissions and Records. A student who has missed only one semester need not reapply for admission unless other college or university work was attempted during the semester missed. If coursework was attempted, application for readmission along with two official transcripts reflecting this work must be filed with the Office of Admissions and Records. Previously enrolled students who are reapplying are subject to the same application dates and fees as new applicants.

Former Students Who Were on Probation or Disqualified

Students who were on probation or disqualified at the end of their last enrollment may be readmitted on probation subject to such conditions as the appropriate University officials may prescribe, provided any intervening work is satisfactory.

Admissions Procedures

Applicants seeking admission to SSU should follow the procedures outlined below:

1. Application
   Submit a completed application for admission accompanied by the required application fee, to:
   Office of Admissions and Records
   Sonoma State University
   Rohnert Park, California 94928
2. Transcripts
   It is the applicant's responsibility to see that two (2) copies of all official and complete transcripts, including in-progress transcripts, are filed with the Office of Admissions and Records in time to be considered for admission. For freshman and sophomores transcripts of high school work, ACT or SAT scores, as well as any college work completed are required. For juniors, seniors and post-baccalaureate students only duplicate copies of college work are needed. The University reserves the right to determine whether a transcript can be accepted as official. All transcripts and records submitted for admission to Sonoma State University become the property of the University and cannot be returned to the applicant.
3. Tests
   All *undergraduate* applicants who will not have completed 56 semester or 84 quarter units of transferable college work by the semester for which admission is sought are required to submit scores from either the SAT or ACT before eligibility for admission to the University can be determined. This requirement does not affect undergraduate students who have previously attended SSU and who submitted ACT or SAT scores at the time of their first admission.

   Graduate applicants must submit the scores of any qualifying examinations required in their prospective programs of study. Applicants should consult the appropriate SSU academic department for further information.

UNDERGRADUATE APPLICATION PROCEDURES

Prospective students, applying for part-time or full-time programs of study, in day or evening classes, must file a complete application as described in the application booklet. The $35 nonrefundable application fee should be in the form of a check or money order payable to The California State University and may not be transferred or used to apply to another term. Applicants need file only at their first choice campus. An alternative choice campus and major may be indicated on the application, but applicants should list as alternative campus only that campus of The California State University that they can attend. Generally, an alternative degree major will be considered at the first choice campus before an application is redirected to an alternative choice campus. Applicants will be considered automatically at the alternative choice campus if the first choice campus cannot accommodate them.

GRADUATE AND POSTBACCALAUREATE APPLICATION PROCEDURES

All graduate and postbaccalaureate applicants (e.g., master's degree applicants, those seeking credentials, and those interested in taking courses for personal or professional growth) must file a complete application as described in the admissions booklet. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the $35 nonrefundable application 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. To be assured of initial consideration by more than one campus, it will be necessary for any applicant to submit separate applications (including fees) to each. Applications may be obtained from the Graduate Studies Office of any California State University campus in addition to the sources noted for undergraduate applicants.

Impacted Programs

The CSU designates programs to be impacted when more applications are received in the first month of the filing period than the spaces available. Some programs are impacted at every campus where they are offered; others are impacted at some campuses but not all. You must meet supplementary admissions criteria if applying to an impacted program.

The CSU will announce before the opening of the fall filing period which programs are impacted and the supplementary criteria campuses will use. That announcement will be published in the *CSU School and College Review,* distributed to high school and college counselors. We will also give information about the supplementary criteria to program applicants.

You must file your application for admission to an impacted program during the first month of the filing period. Further, if you wish to be considered in impacted programs at two or more campuses, you must file an application to each. Nonresident applicants are rarely admitted to impacted programs.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include ranking on the freshman eligibility index, the overall transfer grade point average, and a combination of campus-developed criteria. If you are required to submit scores on either the SAT or the ACT, you should take the test no later than December if applying for fall admission.

The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the *CSU School and College Review* and are sent by the campuses to all applicants seeking admission to an impacted program.

Unlike unaccommodated applicants to locally impacted programs, who may be redirected to another campus in the same major, unaccommodated applicants to

systemwide impacted programs may not be redirected in the same major but may choose an alternative major either at the the first choice campus or another campus.

HARDSHIP PETITIONS

There are established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Prospective hardship petitioners should write the Admissions Office regarding specific policies governing hardship admission.

General Admissions Information

Space Reservation Notices

Normally, you may expect to receive some form of space reservation notice from your first choice campus within two months of filing the application. A notice that space has been reserved is also a request for records necessary to make the final admission decision. It is an assurance of admission *only* if evaluation of the applicant's previous academic record indicates that admission requirements have been met. Such a notice is not transferable to another term or to another campus.

Use of Social Security Number

Applicants are required to include their social security number in designated places on applications for admission pursuant to the authority contained in Title 5, California Administrative Code, Section 41201. The social security number is used as a means of identifying records pertaining to the student as well as identifying the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution.

Determination of Residence for Nonresident Tuition Fee

New and returning students of the CSU are classified for the purpose of determining the residence of each student for nonresident tuition purposes. The "Residence Questionnaire", if necessary, and other evidence furnished by students are used in making these determinations. Further details regarding residency are contained in the Appendix page 368 of this catalog.

Application Filing Periods

Terms in 1986–88	*Applications First Accepted*	*Filing Period Duration*	*Application Acknowledgment Begins*
Fall Sem. 1986	Nov. 1, 1985	Each campus accepts applications until capacities are reached. Most campuses accept applications up to a month prior to the opening day of the term. Some campuses will close individual programs as they reach capacity.	Nov. 1985
Spring Sem. 1987	Aug. 1, 1986		Aug. 1986
Fall Sem. 1987	Nov. 1, 1986		Nov., 1986
Spring Sem. 1988	Aug. 1, 1987		Aug., 1987

Determination and Notification of Admission

After applications for admission have been received in the Office of Admissions and Records, they are processed and matched with required transcripts and test scores. Evaluation of the records is made to determine whether applicants meet the admission requirements. Applicants who have submitted all of the required admission materials will receive notification of their acceptance or denial from the Office of Admissions and Records for the fall semester beginning on or about March 15 and for the spring semester on or about November 1.

Change in Choice of Campus

Applicants who wish to change the choice of CSU campus after the application has been filed should obtain a Request for Transfer of Admission application to Alternative Choice Campus form from the Office of Admissions and Records and follow the instructions contained therein. A change in choice of campus can only be made for the same term or semester for which the applicant originally applied. There is no fee for this service.

Re-application for Subsequent Semesters

Students who have been admitted to the University for a given semester but do not register will have their admission automatically cancelled. Should they later wish to undertake work at the University, they must file a new application, pay a new application fee and meet all of the current requirements for admission. Materials supporting an application for admission, such as transcripts and entrance examination scores, will be held for one year only and may be used during this time to meet the requirements for admission.

High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is for only a given program and does not constitute the right to continued enrollment. For more information, contact the Admissions Coordinator at (707) 664-2745.

Early Admission Program

Sonoma State University will recognize outstanding academic achievement (3.40 GPA or higher) of high school students by issuing an early admissions commitment to such applicants contingent upon the earning of the high school diploma or its equivalent.

Details about the Early Admission program may be obtained from Office of Admissions.

Provisional Admission

Beginning with fall terms 1987, campuses may provisionally admit first-time freshmen applicants based on their academic performance through the junior year of high school. Sonoma State University will monitor the senior year of study of those provisionally admitted to ensure that those so admitted complete their senior year of studies satisfactorily, including the required college preparatory subjects, and graduate from high school.

PLACEMENT TESTS

The California State University system requires new students to be tested in English and mathematics after they are admitted. These are not admission tests, but rather a way to determine whether a student is prepared for college work, and if not, to determine the best ways to strengthen preparation. A student might be exempted from one or both of the tests if he or she has scored well on other specified tests or completed appropriate courses.

Failure to take either of these tests, as required, at the earliest opportunity after admission may lead to administrative probation, which, according to Section 41300.1 of Title 5, *California Administrative Code,* and CSU Executive Order 393, may lead to disqualification from future attendance. For more information, contact the Admissions Office.

English Placement Test (EPT)—The CSU English Placement Test must be completed by all new undergraduates* with the exception of those who present proof of one of the following:

- a score of 3, 4, or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Advanced Placement Program
- a satisfactory score on the CSU English Equivalency Examination
- a score of 510 or above on the Verbal section of the College Board Scholastic Aptitude Test (SAT-Verbal)
- a score of 23 or above on the ACT English Usage Test
- a score of 600 or above on the College Board Achievement Test in English Composition *with essay*
- completion of an acceptable college course in English composition of four quarter or three semester units with a grade of C or better.

Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirements. The materials may also be obtained from the Office of Admissions and Records.

Students required to take this examination should do so before registration since the score results are required for placement in University 98, English 99 and 101 courses. Failure to comply by the end of the first semester of enrollment will result in administrative-academic probation.

Entry Level Mathematics (ELM) Test—All new undergraduate students must take the test and *pass it* before enrolling in a course that satisfies the college level mathematics requirement of the General Education-Breadth program. Exemptions from the test are given only to those students who can present proof of one of the following:

- a score of 3 or above on the College Board Advanced Placement Mathematics examination (AB or BC)
- a score of 530 or above on the Mathematics section of the Scholastic Aptitude Test (SAT-Math)
- a score of 23 or above on the ACT Mathematics Test
- a score of 520 or above on the College Board Math Achievement Test, Level 1
- a score of 540 or above on the College Board Math Achievement Test, Level 2
- completion of a college course that satisfies the General Education-Breadth Requirement in Quantitative Reasoning provided it is at the level of intermediate algebra or above with a grade of C or better.

Students required to take this examination should do so before registration. Taking the ELM is a prerequisite to University 98 and Math 99. Passing the ELM is a prerequisite to Math 106, 107, 121, 165, and 300. Failure to comply with the requirement to take the examination by the end of the first semester of enrollment will result in administrative-academic probation.

NON-BACCALAUREATE COURSES (98–99) IN ENGLISH AND MATH

The University offers 98 and 99-level courses in English and Mathematics for students who need to improve their proficiency in these areas. These classes carry units of credit which apply to students' unit load for a given semester, but which do not apply toward graduation. Courses are graded Credit/No Credit, and successful completion is determined by the instructor based on objective tests and essay writing.

Students who fail the Entry-Level Math or English Proficiency Test, or both, shall be placed on administrative-academic probation. Enrollment in University 98A and B or in English 99 and/or in University 98C or in Math 99, as appropriate, is then required during the first semester of enrollment. Students who fail any of these courses must repeat them in the next semester of enrollment. Failure to pass after the second attempt will result in disqualification. Students who are disqualified may petition the Standards Committee to take a course for a third semester.

Students who pass these courses *must* take the next appropriate course in their next semester of enrollment. (For University 98A and B, it is English 99; for University 98C, it is Math 99.)

* This applies to all non-exempt students with fewer than 56 transferable semester units. It also applies to those non-exempt students with 56 or more transferable units who are subject to the 1986-87 or later campus catalog or bulletin.

Evaluation of Transfer Credit

Community College Credit

A maximum of 70 semester units of community college credit can be credited toward the 124 units required for a Baccalaureate Degree. However, excess units of transferable work will be computed in the Grade Point Average and credited toward satisfaction of specific requirements such as General Education-Breadth Requirements.

Credit Earned at Accredited Colleges

Credit toward fulfillment of graduation requirements will be allowed only insofar as courses satisfactorily completed meet the standards and requirements of Sonoma State University.

Credit for Extension and Correspondence Courses

A maximum of 24 units of credit earned in correspondence and extension courses may be allowed for the bachelor's degree. Nine units may be applied towards the Master's Degree. Such course credit does not apply toward the residence requirements at Sonoma State University.

Credit for Military Service

Students who have completed one year or more of active military service will be granted 6 units of lower division elective credit. To be eligible for such credit, the student must submit a copy of the DD 214 Form. Credit for service schools will be allowed only insofar as such training is recommended by the American Council on Education Guide and the courses are comparable to courses offered on most CSU campuses.

Credit for Instruction in Non-Collegiate Settings

Sonoma State University grants undergraduate degree credit for successful completion of formal instruction appropriate to the baccalaureate in non-college settings, either military or civilian, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the *Guide to the Evaluation of Educational Experience in the Armed Services* and the *National Guide to Educational Credit for Training Programs.*

Credit for Prior Learning

Sonoma State University grants credit for learning, knowledge, or skills-based experience that has been documented and evaluated according to campus policy. Students should be aware, however, that policies for earning credit for prior learning vary from campus to campus in the California State University system.

See p. 301 for further information about Faculty-Evaluated Prior Learning at SSU.

Credit by Examination

Sonoma State University grants credit to those students who pass examinations that have been approved for credit systemwide. These include the Advanced Placement Test, the CSU English Equivalency Examination and CLEP. Students may also challenge courses and receive credit by passing examinations developed at the campus.

Advanced Placement

Sonoma State University grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of three or better will be granted six semester units (nine quarter units) of university credit with the following provisions:

1. Such credit is allowed as advanced standing for first-time freshman.
2. Credit is used to meet General Education requirements, as evaluated by the Admissions Office at the time of the students admission.
3. Advanced Placement credit is to apply to major requirements at the discretion of the major department.

CSU English Equivalency Examination

In addition to units gained through the College Level Examination Program, students may earn credit toward the baccalaureate degree by passing the California State University English Equivalency Examination (EEE). Students passing the EEE earn up to 6 units of course credit toward basic composition.
Inquire at the University Testing Office for registration fees and deadlines. During the Spring semester, registration materials are available in California high schools.

Challenge Examinations

A student may earn unit credit for a SSU course which he successfully challenges by examination, rather than pursue the usual arrangement. The University, in the interest of accelerating the academic progress of capable students with special interests and experience, encourages the earning of such credit. The following regulations govern the challenging of courses:

1. Students may challenge only those courses which are listed in the Sonoma State University Catalog and for which the challenger has not otherwise received credit. A course may be challenged only during the semester in which it is regularly offered.
2. Only students in resident study may challenge a course.
3. Examinations are set and administered by the Instructor of the course challenged or

by a faculty designee of the appropriate department chairman. Completed examinations are filed in the department offices.

4. Application for Unit Credit by Challenge Examination must be approved by the appropriate department chairman.
5. For summer sessions only, challenge examinations must be taken within the first two weeks of the Six Week Summer Session.
6. When a student passes the examination for credit, a "CR" will be recorded on his permanent record but will not be posted to the student's record until 30 units have been earned in residence. No resident credit is earned, and units graded "CR" do not affect the grade point average.
7. Forms for "Application for Unit Credit by Challenge Examination" are available in department offices.

College Level Examination Program

The University allows students to earn credit toward the bacclaureate degree through the College Level Examination Program (CLEP). Students may earn up to six units per examination passed and up to a maximum of thirty units. Passing scores for the CLEP exams are established by the participating academic departments and the California University and College System. Students may not be credited for CLEP results which duplicate course work previously noted on their transcript nor will they receive credit for CLEP examinations repeated within a 12-month period. CLEP credit may be applied toward major requirements at the discretion of the department. CLEP tests are administered on a regularly scheduled basis. Interested students are advised to consult with the Office of Testing Services. See the next page for course equivalencies.

CLEP Examinations Approved at Sonoma State University

The following CLEP exams have been approved by the appropriate departments and divisions:

Examination	Amount of Credit Approved	Course Equivalent—CLEP
Natural Sciences General Examination	Total of 6 (fulfills 3 units of General Education requirements in *Biological Sciences* and 3 units general education in *Physical Sciences*). Students passing the CLEP Examination will still be required to take a laboratory course in Natural Sciences.	Biology 115 Physical Science 100
Mathematics General Examination	3 (fulfills 3 units of course credit towards Intermediate Algebra).	Mathematics 106
Social Sciences General Examination	4 (fulfills 4 units of general education requirements in Social structure).	Social Science 100
Algebra and Trigonometry Subject Examination	3 (fulfills 3 units course credit toward *Algebra and Trigonometry.*)	Mathematics 107
American Government Subject Examination	3 (fulfills 3 units of course credit in American Political Systems. Satisfies State Code requirement in U.S. Constitution. This requirement may also be satisfied by passing the examination in American Government offered by the Department of Politics. Students must take department exam to fulfill Code requirement in State and Local Gov't. (1 unit)	Political Science 200
American History Part I (with essay) Colonization to 1865	3 (fulfills 3 units of course credit in U.S. History). Satisfies State Code in U.S. History.	History 251
American History Part II (with essay) 1865 to present	3 (fulfills 3 units of course credit in U.S. History). Satisfies State Code requirement in U.S. History.	History 252
American Literature Subject Examination	6 (fulfills 6 units course credit toward *Survey of American Literature*).	English 237, 238
Analysis and Interpretation of Literature Subject Examination and Departmental Essay	6 (fulfills 6 units of credit) toward *Basic Composition* (Freshman English).	English 101 and 214
English Literature Subject Examination	6 (fulfills 6 units of course credit in *Survey of English Literature*).	English 239, 240
Biology Subject Examination and Essay	Up to 6 units (fulfills 6 units of course credit toward Basic Biology course sequence and *waives* up to 12 units of major requirement).	Biology 116, 117, 215
Calculus with Elementary Functions Subject Exam	3 (fulfills 3 units of General Education credit in Calculus).	Mathematics 161
General Chemistry Subject Examination	3 (fulfills up to 3 units of course credit in General Chemistry).	Chemistry 115A and/or B
Educational Psychology Subject Examination	4 (fulfills 4 units of course credit in *Educational Psychology*).	Psychology 490
General Psychology Subject Examination	4 (fulfills 4 units of course credit in *General Psychology*).	Psychology 250
Human Growth and Development Subject Examination	3 (fulfills 3 units of course credit in *Human Growth and Development,* similar to Child Psychology or Child Development).	Psychology 410
Introductory Accounting Subject Examination	4 (fulfills 4 units of course credit in *Financial Accounting Fundamentals*).	Management 230
Introductory Business Law Subject Examination	4 (fulfills 4 units of course credit in *Law and Society*).	Management 225
Introductory Macroeconomics Subject Examination	4 (fulfills 4 units of course credit in *Introduction to Macroeconomics*).	Economics 201A
Introductory Microeconomics Subject Examination	4 (fulfills 4 units of course credit in *Introduction to Microeconomics*).	Economics 201B

Introductory Marketing Subject Examination	4 (fulfills 4 units of course credit in *Marketing Environment*).	Management 360
Introductory Sociology Subject Examination	4 (fulfills 4 units of course credit in *Introductory Sociology*).	Sociology 201

Students may earn up to six units per examination passed and up to a maximum of thirty units.



Photo by Duane Strawser



Enrollment Regulations

Registration

The University offers two opportunities for registration. Regular registration is held prior to the start of classes. Late registration, which requires payment of an additional $25 fee, is available during the first four weeks of instruction. Students are encouraged to participate in regular registration if at all possible.

All eligible continuing students and all admitted applicants will be mailed registration information approximately two weeks prior to regular registration. This material will include information about mandatory advising, registration appointment times, and procedures for registering. Applicants admitted too late to participate in regular registration will also receive registration information by mail, but must register late.

The best source for registration information is the Schedule of Classes which is published each semester and can be purchased in the Campus Bookstore approximately one month before regular registration. It provides a detailed description of registration procedures, course offerings, fees and other basic information.

Registration is not complete until a student files all materials and pays fees with the Accounting Office. The filing of registration materials and payment of fees by a student, and their acceptance by the University, is evidence of the student's and the University's commitment to fulfill the educational objectives of each course in the student's schedule. Students will not receive credit in any course unless they are registered. "Unofficial" attendance is not allowed.

Categories of Enrollment

Undergraduate students are classified according to the number of units completed, calculated as follows:

Status	*Units Completed*
Freshman	0–29
Sophomore	30–59
Junior	60–89
Senior	90+

Academic Load

The maximum academic load recommended by the University for undergraduate students is 16 units. However, students may register for up to 19 units without special approval.

A minimum of two hours preparation for each hour of regular class work should be expected; in upper division and graduate level courses additional time may be required.

New students having a 3.0 grade point average for all transfer work or continuing students with a 3.0 grade point average for work at the University may enroll for up to 24 units by securing their advisor's signature on the appropriate enrollment form. Any student wanting to enroll for over 24 units, or a student with less than a 3.0 grade point average wanting over 19 units, must submit a petition to the Office of Admissions and Records and receive approval before they may enroll for more than the authorized unit load limits.

The maximum academic load recommended for graduate students is 12 units, but a student may register for up to 15 units. A

unit load above 15 units requires the advisor's signature; above 19 units requires approval of the Graduate Dean.

Students who need to be registered full-time should note that 12 units is the minimum load to qualify for undergraduate students. Some additional allowance is made for graduate students officialy accepted into master's degree programs who are taking classes which are part of their approved Plan of Study.

Continuing Student Status

Once a student enrolls and pays fees at Sonoma State University, (s)he will be in "continuing student status" for the current and subsequent semester. Reapplication to attend SSU is required if a student has attended another educational institution during a one semester leave from SSU, has taken a leave of more than one semester, or has graduated with a Baccalaureate Degree from this or any other institution. Academically disqualified students are eligible to petition for reinstatement to register provided that they have not been absent for more than one semester following disqualification. Disqualified students absent for two or more semesters must reapply for admission and petition for reinstatement.

Auditors

Enrollment as an auditor is limited to regularly matriculated students and is subject to the permission of the instructor. 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. Auditors are subject to the same fee structure as credit students and regular class attendance is expected. Once enrolled as an auditor, a student may not change to credit status unless such a change is requested prior to the end of the fourth week of classes. Students may not enroll for audit during regular registration. Students who wish to enroll on an audit basis, or who wish to change a class to an audit basis, must secure the instructor's approval on a Change of Program form during the first four weeks of instruction, and file all appropriate fees and materials with the Office of Admissions and Records, Stevenson Hall 1088, no later than the end of the fourth week of instruction.

Concurrent Enrollment—Other Institutions

Sonoma State University students may register concurrently at SSU and other campuses of the California State University with no further application fee. Applications are available from the Office of Admissions and Records, Stevenson Hall 1088. Such concurrent enrollment is valid for one term only.

Concurrent enrollment at SSU and a non-CSU institution is permitted with the approval of the student's advisor. Students enrolling concurrently should be aware of the policies governing acceptance of transfer credits as described elsewhere in the catalog.

Concurrent Enrollment—SSU Extension

Extension students admitted in resident classes shall follow the same registration procedures and shall receive the same credit as they would receive in an extension class.

Concurrent enrollment of extension students in regular classes does not constitute admission to the university; neither does it entitle them to student services available to regular students with the exception of library privileges. (Additional information is available at the Office of Extended Education.)

Intrasystem visitors

(Temporary enrollment at another CSU institution.) Students wishing to apply as intrasystem visitors must be in continuing student status with SSU. Temporary leave from SSU to enroll in another California State University or College for one term may be arranged with the SSU Office of Admissions and Records within the application deadlines outlined by the campus at which the student wishes to enroll. Both registration at the other CSU campus and return to SSU will be arranged by the Office of Admissions and Records without further application by the student. Contact the Office of Admissions and Records, Stevenson Hall 1088, for details concerning regulations and procedures.

Change of Major

Enrolled SSU undergraduate students in good standing may, with prior departmental approval, change their major without fee when they consider it to be in their best educational interest. A request for a change of major cannot be officially recognized without departmental approval and submission of the Request for Change of Undergraduate Major form to the Office of Admissions and Records.

The Request for Change of Undergraduate Major form and information concerning

procedures to be followed to effect a change in major is available at the Office of Admissions and Records, Stevenson Hall 1088.

Changes of Class Enrollment

Change of Program

Students are permitted to change their initial enrollment by following the University's Change of Program procedure. Ordinarily a student may add, drop or change to Audit in a class by filing a change of program form. The approvals and time periods for the Fall and Spring semesters are indicated below. Students should also consult the Fee Section of the Catalog or Schedule of Classes for applicable fees. Additional information on Change of Program is available in the current Schedule of Classes.

Adding. The last day to add a class is the end of the fourth week of instruction. Approval of the course instructor on the Change of Program form is required.

Auditing. Changing the basis of grade to Audit or conversely, from Audit to grade may be accomplished only during the first four weeks of instruction with the instructor's approval on the Change of Program form.

Dropping. Students are responsible for attending all courses in which they have registered. During the first four weeks of instruction the student may withdraw without penalty by obtaining the Change of Program form and following instructions for dropping a class according to the current Schedule of Classes. Each class dropped must be listed on the Change of Program form. Non-attendance does not constitute withdrawal. Students who must withdraw after the fourth week of instruction and prior to the last three weeks of instruction for reasons clearly beyond their control, and who can justify extenuating circumstances, may withdraw without academic penalty by securing the approval of the instructor and the chair of the department in which the course is taught, and permission of the University Standards Committee. Regulations for withdrawal are described in the Schedule of Classes. (See also Refund of Fees in the Fees section.)

Dropping individual classes is not permitted during the final three weeks of instruction or thereafter except in cases such as accident or serious illness where the cause of the withdrawal is clearly beyond the student's control and the assignment of an incomplete is not practicable. Students wishing to withdraw under these circumstances must obtain the approval of the appropriate instructor, the course department chair and permission of the University Standards Committee.

COMPLETE WITHDRAWAL FROM THE UNIVERSITY

Students wishing to withdraw completely from the University at any time during the semester must secure the appropriate approvals. (See "dropping" in this section, above, or in the Schedule of Classes for additional details.)

Students may completely withdraw from the University by filing a Change of Program form.

Students withdrawing must also submit their Permit-ID at the Office of Admissions and Records. Clearances from the Financial Aid Accounting Office, and the Library are mandatory. Under some circumstances additional clearances may be required from the PE Equipment Room, the Veterans Office and other appropriate campus offices. Students who are eligible for a refund must file a separate application for refund with the Accounting Office. Students completely withdrawing will be considered continuing students for the next semester.

Under no circumstances does non-attendance nor the stopping of payment of a check constitute a withdrawal from the University.

Grading

IDENTIFICATION OF GRADES

The University uses a combination of traditional and non-traditional grading options as follows:

Traditional Grades: A, B, C, D, F. Letters A, B, C and D indicate passing grades; F indicates failure. Additional + (plus), − (minus) supplements add or subtract .3 grade points per unit. These apply to the A, B, C and D grades except there is no A+.

Non-Traditional Grades: CR, NC Credit (CR) may be awarded in undergraduate classes (499 and below) for work equivalent to a letter grade of C− or better and for graduate level classes (500) for work equivalent to a B− or better. NC, indicating "No Credit" will be given for work equivalent to D+ and below for undergraduate classes and C+ and below for graduate level classes.

In classes where there is an option between traditional and non-traditional grading modes, the mode must be declared, using the Change of Program form, by the end of the sixth week of classes.

Students at Sonoma State University may count no more than 40 units of non-traditional grades toward their total baccalaureate degree programs. Non-traditional grades are CR/NC. Departments may allow their majors to take no more than one-third of the total units required for the major by non-traditional grades. Within the aforementioned limitation, departments are free to determine the extent to which non-traditional grades will be used. Graduate students at Sonoma State University may, at the discretion of the Department, take up to ⅓ of the total units applied to their master's degree in a non-traditional grading mode. Each school and department will designate those courses which may be graded only in the CR/NC mode.

Definitions of Grading Symbols

The chart below indicates grade symbols and their numerical equivalents for evaluating course work. In addition, more complete definitions of administrative grades are provided.

Incomplete (I). The symbol "I" indicates 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 attention of the instructor and to determine from the instructor the remaining course requirements which must be satisfied to remove the incomplete. An "I" grade must be requested by the student. Request for Incomplete forms are available in department offices. A final grade is assigned when the work agreed upon has been completed and evaluated.

An "I" must normally be made up within a period of time designated by the instructor, not to exceed one calendar year immediately following the end of the term during which it was assigned. This limitation prevails whether or not the student maintains continuous enrollment.

An incomplete, in either the traditional or non-traditional mode, will be counted as equivalent to an F for grade point average if a student fails to complete the assigned work within one calendar year.

Unauthorized Incomplete (U). The symbol "U" indicates that an enrolled student did not withdraw from the course and failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. For purposes of grade point average computation this symbol is equivalent to an "F".

Satisfactory Progress (SP). The symbol "SP" is used in connection with thesis, project and similar courses where assigned work frequently extends beyond a single academic term. It indicates that work is in progress and has been evaluated and found to be satisfactory to date, but that assignment of a precise grade must await completion of additional work. Enrollment for more units of credit than the total number of units which can be applied to the fulfillment of the student's educational objective is expressly prohibited. Work is to be completed within a stipulated time period. This may not exceed one year except for graduate degree theses for which the time may be up to two years, but may not exceed the overall time limit for completion of all master's degree requirements. Any extension of time limit must receive prior authorization by the Dean of Graduate Studies.

Withdrawal (W). The symbol "W" indicates that the student was permitted to drop the course after the fourth week of instruction with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average. (See Change of Program under Changes of Official Enrollment section for further information.)

Audit (AU). AU is the recorded grade if a student enrolls in a class but is not receiving credit. (See Auditors under the Categories of Enrollment section for further information.)

Credit (CR). CR grades are not included in the calculation of grade point average.

No Credit (NC). NC grades are not included in the calculation of grade point average.

Transcripts of SSU Courses

A student may obtain transcripts of his/her Sonoma State University record from the Office of Admissions and Records only upon written request and with the payment of a four dollar fee for the first transcript requested, two dollar fee for the second through tenth transcript, and one dollar thereafter for each transcript ordered at the same time as the first transcript.

The University reserves the right to withhold issuing the transcript of any student not in good financial standing with the University.

Grade Reporting

Approximately two weeks following the end of finals students will be mailed a "Grade Report" indicating the official grades that will be recorded on their Permanent Record Cards. While this "Grade Report" is unofficial, any discrepancies should be reported at the Office of Admissions and Records so that they may be promptly investigated. In some cases it may be necessary to contact individual instructors to resolve grade reporting errors. With the exception of a removal of an incomplete within the prescribed period, no changes to the Permanent Record Card will be made after a degree has been awarded.

Dean's List

Undergraduate students who earn at least a 3.50 GPA in a minimum of 12 units of letter graded work will be awarded Dean's List recognition. Courses taken in extension or Credit by Examination will not be included in this calculation. Only the grades for one semester will be used in the computation of the GPA for purposes of granting this recognition.

Grades

Grade Symbol	*Explanation*	*Grade Points*
A	Outstanding	4 per unit value of course
B	Very Good	3
C	Average	2
D	Barely Passing	1
F	Failure	0
CR	Credit	Not applicable
NC	No Credit	Not applicable
I	Incomplete	Not applicable
U	Unauthorized Incomplete	0
SP	Satisfactory Progress	Not applicable
W	Withdrawal	Not applicable
AU	Audit	Not applicable
RD	Report Delayed	Not applicable

Academic Records

Student academic records are maintained by the Office of Admissions and Records. These records are considered confidential, and while available to faculty members for advising purposes, the information contained is subject to very strict control. Parents of minor students are authorized access to academic records. All other persons requesting access to academic records, including governmental investigators and parents of students 18 years old or older, must have the student's written permission.

A student's permanent academic record cannot be changed except where error in recording has occurred or by approval of proper university authority. One year is allowed for errors to be identified by a student and corrected by the Office of Admissions and Records or for petititon to be submitted.

An individual may have access to his/her official records by appointment with the Office of Admissions and Records.

Scholastic Status

Grade Point Average (GPA), used as a measurement of satisfactory scholarship, is calculated by dividing the number of grade points by the number of units attempted for the grades of A, B, C, D, F. (CR and NC are not used in this calculation.)

Good Standing

Any student who is eligible to enroll in the University is considered to be in good standing. This means that undergraduate students who have maintained satisfactory scholarship with at least a 2.0 cumulative grade point average, as well as those who are on probation are in good standing. Students who are disqualified are not routinely eligible to enroll and are therefore not considered in good standing.

Academic Probation

If a student's cumulative grade point average in all university work attempted, or cumulative grade point average at Sonoma State Unversity, falls below the minimum GPA shown below, he or she will be subject to academic probation.

Undergraduate	2.0
Postbaccalaureate	2.5
Graduate Student	3.0

Administrative Academic Probation

A student may be placed on administrative-academic probation for withdrawal from a substantial portion of a program in two sucessive terms, for repeated failure to progress toward a degree, or for failure to comply with an academic requirement or regulation which is routine for all students or for a defined group of students.

Academic Disqualification

Students on academic probation are subject to academic disqualification should they fall below a 2.0 (C) average by the number of grade points indicated either for all units attempted or for all units attempted at Sonoma State University.

Freshman, Sophomore (0–59 units completed)
15 or more below a 2.0
Juniors (60–89 units completed)
9 or more below a 2.0
Seniors (90 or more units completed)
6 or more below a 2.0

A graduate student on academic probation who fails to earn sufficient grade points for removal from probationary status is subject to academic disqualification.

Administrative-Academic Disqualification

Students may be placed in administrative academic disqualified status for continued failure to remedy the condition resulting in their being on administrative academic probation. Additionally, the President may designate a campus official to act for him in the disqualification of students not on probation when: (1) a student has, at the end of any term, fewer cumulative grade points than cumulative units attempted; and (2) the cumulative grade point deficiency is so great that, in view of the student's overall educational program, it seems unlikely that the deficiency will be corrected within a reasonable period of time. A student disqualified from the University may be reinstated only by special action.

Reinstatement After Disqualification

Disqualified students may be considered for reinstatment by petitioning to the Office of Admissions and Records. Petitions must be accompanied by evidence that would justify reinstatement, such as satisfactory academic work elsewhere. A disqualified student who is reinstated will be on a probationary basis for one semester and until he or she has removed all grade point deficiencies or is again disqualified.

Additional Regulations

Repeat of Courses

Non-Calculation of a Previous Grade: with prior consent of the appropriate department, a student may repeat a Sonoma State University course in order to improve any grade. In recalculating the GPA, only the second attempt will be counted. If a "no credit" grade is awarded for the *second* attempt, the *first* attempt will count. Grades from subsequent attempts will be included in calculating the GPA. Unit credit will be granted one time only except for courses permitted by the University and identified in the Catalog. In order for this policy to be enacted and the GPA recalculated, students must notify the Office of Admissions and Records after the course has been repeated. If the course is to be repeated by taking anything other than the exact class, prior approval of the department is required in order for the repeat policy to apply.

Excessive Enrollment: If a student enrolls in the same course beyond catalog limitations, units earned will not be counted toward a Baccalaureate Degree. The units attempted and any grade points earned, however, will be averaged with the student's other grades.

Academic Renewal

The Trustees of the California State University and Colleges have established a program of Academic Renewal whereby students who are having difficulty meeting graduation requirements due to a grade point deficiency may petition to have up to two semesters or three quarters of previous college work discounted from all considerations associated with meeting requirements for the baccalaureate degree. Academic Renewal is intended only to facilitate graduation from SSU and is not applicable for individuals who already possess a baccalaureate degree or who meet graduation requirements without the approval of a petition for Academic Renewal.

Conditions: In order to qualify for Academic Renewal all of the following conditions established by the Trustees must be met:

1. The student must present evidence in the petition that the course work to be disregarded was sub-standard and not representative of the student's present scholastic ability and level of performance, because of extenuating circumstances.
2. The student must present evidence that if the petition is denied, it would be necessary for the student to enroll in additional course work involving one or more additional terms in order to qualify for graduation. The student should include the specific course work or requirements involved. Normally students should have completed 90 units prior to filing the petition.
3. Five years must have elapsed since the term or terms to be disregarded were completed. Terms taken at any institution may be disregarded.
4. Since completion of the term(s) to be disregarded, the student must have completed course work at SSU of at least one of the following:
   a. 15 semester units with at least a 3.00 GPA.
   b. 30 semester units with at least a 2.50 GPA.
   c. 45 semester units with at least a 2.00 GPA.

If and when the petition is granted, the student's permanent academic record will be annotated so that it is readily evident to all users of the record that no work taken during the disregarded term(s), even if satisfactory, will apply toward baccalaurate graduation requirements. However, all work will remain legible on the record to insure a true and complete academic history.

A final decision on the petition will be made by the University Standards Committee. The committee will review petitions only if all of the basic requirements (indicated above) have been met. Normally, students will be notified of the decision within 30 days after the completed petition is submitted.

Catalog Requirements Under Which An Undergraduate Student Graduates

An undergraduate student remaining in continuous attendance and continuing in the same major at SSU, at any other California state university, or in any California community college, or any combination of California community and state universities may elect to meet the SSU graduation requirements in effect at the time of his/her entering the major or at the time of his/her graduation from SSU, except that substitutions for discontinued courses may be authorized or required by the proper campus authorities. The continuous attendance policy allows interruptions in enrollment so long as an interruption is not longer than one semester (two consecutive quarters).

Student Responsibility for Catalog Information

The Catalog represents the intention of the University at the time of its publication to present certain academic programs and requirements to its students. With the passing of time, modifications may be made—the addition of some offerings and the deletion of others—in which case some opportunities for students may be eliminated or other opportunities may be presented. The University reserves the right to make such additions, deletions and modifications as circumstances may dictate.

Some sections of the current catalog such as REGISTRATION and STUDENT CONDUCT CODE pertain to all students, irrespective of when they entered the University. Some sections pertain only to certain categories of students. In cases of doubt, it is the student's responsibility to obtain clarification from the appropriate department chair or dean whether or not a particular regulation or requirement applies.

Class Attendance

Students should not miss classes except for valid reasons, such as illness, accidents, and participation in officially approved university activities. When a student is absent from classes, it is his/her responsibility to inform the instructor of the reason for absence and to arrange to make up missed assignments and class work insofar as this is possible. Students should be cautioned that even though absences may be for valid reasons, such absences can impair performance and result in a lower grade.

If a student who enrolls in a class does not claim his or her place in that class during the first week of instruction, or by the second meeting of the class, whichever is the later, the instructor may assign it to another student. However, such action by the faculty *does not drop* the student from the enrollment roster. The student must submit a change of program form to drop the class.

Faculty are also expected to meet their scheduled class assignments and to establish office hours which are posted at the beginning of every semester.

Classroom Smoking Policy

A policy on smoking shall be established in each class at the beginning of the semester. The instructor shall determine if any student objects to smoking in the classroom. This should be done by written secret ballot. If any objection is voiced by either the instructor or the student, a non-smoking policy shall be made. If no objection is raised, smoking may be permitted. This policy shall in no way modify specific non-smoking policies presently in effect in various areas of the campus.

Privacy Rights of Students

The full text of the Family Educational Rights and Privacy Act of 1974 (the Buckley Amendment), as amended, is available in Appendix page 366. The campus is authorized under the Act to release directory information concerning students unless the campus has received a prior written objection from the student specifying information not to be released. NOTIFICATION TO WITHHOLD SUCH INFORMATION MUST BE MADE AT EACH REGISTRATION FOR THAT SEMESTER.

Student Conduct

Students are expected to conduct themselves so as to reflect credit to themselves and to the University. One of the fundamental objectives of the University is to foster the development of students as active and responsible citizens in our society; and students are, therefore, expected to make steady growth in maturity, self-reliance, and self-discipline as they progress toward a degree or credential. To help students achieve this end, the university places reliance not only upon its instructional program, but also upon student activities and student-faculty collaboration in many aspects of university community life. For the vast majority of students, these constructive means of defining and teaching good standards of conduct and integrity are effective. See the Appendix page 367 for details on Student Discipline.



Fees, Expenses and Financial Assistance

Institutional and Financial Assistance Information

Student Financial Assistance. The following information concerning student financial assistance may be obtained from the Financial Aid Office in Stevenson Hall 1078. Telephone: (707) 664-2389.

- Student financial assistance programs available to students who enroll at Sonoma State University
- The method by which such assistance is distributed among student recipients who enroll at Sonoma State University
- The means, including forms, by which application for student financial assistance is made, and the requirements for accurately preparing such applications
- The rights and responsibilities of students receiving financial assistance
- The standards which the student must maintain in order to be considered to be making satisfactory progress for the purpose of establishing and maintaining eligibility for financial assistance

Costs. The following information concerning the cost of attending Sonoma State University is available from the Financial Aid Office in Stevenson Hall 1078, Telephone: (707) 664-2389. This information includes:

- Fees and tuition (where applicable)
- Estimated costs of books and supplies
- Estimates of typical student room and board costs or typical community costs
- Any additional costs that may typically be incurred while attending Sonoma State University

Refunds. Information concerning the refund policy of Sonoma State University for the return of unearned tuition and fees or other refundable portions of costs is available from the Office of Financial Management (Accounting), Stevenson Hall 1001, Telephone: (707) 664-2451.

Procedure for the Establishment of a Student Body Fee

The law governing The California State University provides that a student body fee may be established by student referendum with the approval of two-thirds of those students voting. The Student Body Fee was established at Sonoma State University by student referendum on May 2, 1980. The same fee can be abolished by a similar two-thirds approval of students voting on a referendum called for by a petition signed by 10 percent of the regularly enrolled students (*Education Code,* Section 89300). The level of the fee is set by the Chancellor upon recommendation by the campus. Student body fees support a variety of cultural and recreational programs, child care centers, and special student support programs.

Schedule of Fees

	0–6.0 units	*6.1 & up*
State University Fee *	$183.00	$315.00
Student Union Fee	35.00	35.00
Facilities Fee	3.00	3.00
Associated Students Fee	19.00	19.00
Instructionally Related Activities Fee	5.00	5.00
Total per Semester	$245.00	$377.00

Fees for auditing are the same as for credit. If a student's registered number of units is increased during the term to a higher fee or tuition category, the student must pay an additional amount.

Nonresidents (U.S. and Foreign)

Nonresident Tuition *
Per unit $141.00
(A 15% service charge is levied for installment payment of foreign non-resident tuition)

Summer Session

Fee per unit $71.00

Extension Program

Fee per unit $66.00

Other Fees or Charges

Application Fee (for admission or re-admission, non-refundable) $35.00
Late Registration 25.00
Replacement of Permit to Register (I.D.) Card 1.00
Transcript of Record—1st copy 4.00
Additional copies purchased at same time as 1st copy ..... 2.00 ea.
Failure to meet time limit (late fee) 5.00
Graduation Fee 13.00
Replacement of items lost or broken ..... Cost
Check returned for any cause..... 10.00

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

Credit Cards

VISA and Master Charge bank credit cards may be used for payment of student fees.

Parking Fees

Parking fees are payable by all students using campus parking facilities. No provision is made for part-time reserve parking.

Automobiles, reserved, per semester $90.00
Automobiles, non-reserved, per semester 33.75
Motorcycles, motorbikes, Mopeds, motorized bicycles, etc. 8.40
Daily Park UR Self non-reserved space—per admission..... .75
Replacement of Decal 2.00

Library Fees

Library Photo ID Card $2.00
(Replacement charge is $3.00)

General Circulation Overdue Fees

Semester Loan—Per Day Overdue.... .25
4 Week Loan—Per Day Overdue..... .25
2 Day Periodical Loan—Per Day Overdue ..... .50

Reserve Book Room Overdue Fees

1 Week Loan—Per Day Overdue..... .25
2 Day Loan—Per Day Overdue 1.00
Overnight—Per Day Overdue..... .25
2 Hour Loan—Per Day Overdue ..... .25

Miscellaneous Fees

Deposits for locker keys and breakage are required in some laboratory courses, as follows: keys—$2.50; breakage—$5.00. These deposits are refundable in whole or in part. If deposits are not required, charges may still be made for undue breakage or failure to clear lockers and/or return keys. In addition, fees are required for miscellaneous expenses in some courses, as indicated in catalog course descriptions, and for field trips.

A fee of $10.00 per semester is charged for use of Music Department instruments and equipment. In addition, a deposit of $15.00 is required for each instrument checked out for each semester. The deposit will be refunded with the return of the instrument.

Refund of Fees

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to be followed in seeking refunds may be obtained by consulting Section 41803 (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, *California Administrative Code*. In all cases it is important to act quickly in applying for a refund. Information concerning any aspect of the refund of fees may be obtained from the Registrar's Office.

* Fees are subject to change.

Debts Owed to The Institution

Should a student or former student fail to pay a debt owed to the institution, the institution may "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 from any person owing a debt" until the debt is paid (see Title 5, *California Administrative Code,* Sections 42380 and 42381). For example, the institution may withhold *permission to receive official transcripts of grades from any person owing a debt.* If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the campus business office. The business office, or another office on campus to which the student may be referred by the business office, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

Financial Assistance

Student financial aid is in the form of grants, loans, employment and scholarships.

Alan Pattee Scholarships

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, are not charged fees or tuition of any kind at any California State University Campus, according to the Alan Pattee Scholarship Act, *Education Code* Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars.

For further information, contact the Office of Admissions, which determines eligibility.

University Scholarship Program

The University Scholarship Program serves to give tangible encouragement and public recognition to students with superior academic qualifications. The program is made possible through the generous support of public-spirited individuals and organizations in the community who recognize that the outstanding contributions made by the University and its graduates ultimately benefit the public itself.

Most University Scholarships are awarded on the basis of an applicant's academic record and overall achievements without special consideration of financial need. To meet minimum requirements for many scholarships, a candidate must have a GPA of at least 3.5 in the last 30 semester (45 quarter) units of academic work, but there are exceptions. The applications of candidates who meet these minimum requirements are reviewed by the University Scholarship Committee, which makes the final selection of scholarship recipients.

The University Scholarship Committee asks each applicant to submit a personal narrative and three letters of reference, in addition to the basic application form. In the narrative, which is judged for both content and style, applicants are invited to discuss the basis of their scholarly excellence and to address such matters as academic record and achievements, educational goals and career objectives, as well as academically related work-experience or community service. The letters of reference should come from individuals qualified to attest to the applicant's academic ability, achievements, and potential.

Although inquiries about the University Scholarship Program may be submitted at any time, the scholarship application and award process occurs each spring term, in anticipation of the following academic year. The application deadline, which is strictly enforced, is normally early in the spring term. Students interested in applying for one of the awards offered through the University Scholarship program may obtain an application form by contacting the Office of Relations with Schools, Stevenson 1088, (707) 664-2374.

The following is a list of the various kinds of financial assistance available:

Grants

1. *Pell Grant.* Grants may range from approximately $250 to $2,100 per academic year. This Federal program was established as a "foundation" for financial aid packages for undergraduates with demonstrated need who have not completed their first baccalaureate degree.
2. *Supplemental Educational Opportunity Grant (SEOG).* These Federal grants range from $200 to $2,000 per academic year. These funds are available to undergraduates with demonstrated need who have not completed their first baccalaureate degree.
3. *Educational Opportunity Program Grant (EOPG).* These are State funded grants available to qualified participants in the Educational Opportunity Program. Grants may range from $400 to $1,000 per academic year. The student must be admitted to the University through the EOP program and have demonstrated need to receive consideration for EOP grant funds. Eligibility is based on demonstrated need.
4. *State University Grant Program (SUGP).* This grant is for a maximum of $360 per academic year and is available to both graduate and undergraduate students enrolled for a minimum of six units per semester. Applicants must be California residents in addition to having demonstrated financial need.
5. *SSU Graduate Fellowship Program.* This grant is for a maximum of $2,500 per academic year. Applicants must be California residents in addition to having demonstrated financial need.
6. *Cal Grants (administered by the California Student Aid Commission).* Cal Grant A awards are to be used for registration fees only. Eligibility for this program is based on GPA in addition to demonstrated financial need. Applicants must be residents of California and must not have completed more than six semesters (or nine quarters) of college work. Cal Grant B awards range between $300 to $1,280 (plus assistance with registration fees for renewal winners). The intent of this program is

to aid high potential students from low income/minority families. First time applicants must be residents of California and must not have completed more than one full time semester or 16 units of part-time college work.

7. *Graduate Fellowship Program (administered by the California Student Aid Commission).* These awards are to be used for registration fees only. Eligibility is based on GRE scores, GPA and financial need. To apply, a student may not have completed more than one year of graduate study beyond the baccalaureate degree. Applicants must be California residents.
8. *Bilingual Teacher Grants (administered by the California Student Aid Commission).* These grants may be awarded to undergraduate or graduate students who are enrolled in an approved California bilingual teacher training program. Grants may range from $300 to $4,045 per year, depending on the applicant's financial need.
9. *Bureau of Indian Affairs Grant (BIA).* These Federal grant funds are available to qualified Native Americans possessing one-quarter or more American Indian, Eskimo, or Aleut ancestry. Available to undergraduate or graduate students, these awards supplement other financial aid to meet the demonstrated need of the student.

Loans

10. *National Direct Student Loan (NDSL).* These are long-term loans, interest free while the borrower is in school. Maximums are $3,000 total during the first two academic years, $6,000 total during undergraduate years, and $12,000 total maximum including graduate studies. Repayment and interest (5%) begin six months after a student ceases to be enrolled in at least a half-time course of study. Minimum repayment is $30 per month, with a maximum of 10 years to repay. (Repayment may be extended an additional 10 years for special categories of low income borrowers.) Limited loan cancellation and loan deferments are available for special circumstances as determined by the United States Department of Education. These loans are based on demonstrated need.
11. *California Guaranteed Student Loan (CGSL).* These are long-term loans made by participating lending institutions such as banks and credit unions. The annual loan maximums are $2,500 for undergraduates; and $5,000 for graduate or professional students. Repayment period and interest (8%) begins six months after a student ceases to be enrolled in at least a half-time course of study. There are no loan cancellation provisions and limited loan deferments are available. The decision to loan is made by the lender.
12. *California Loans to Assist Students (CLAS).* Independent undergraduate students, graduate and professional students, and parents of dependent undergraduates will be eligible to borrow under this program. Independent undergraduates will be limited to $2,500 per year and an aggregate of $12,000 combined borrowing under CLAS and CGSL. Parents, graduate and professional students will be able to borrow up to $3,000 per year with an aggregate maximum of $15,000 for each student, exclusive of amounts borrowed by the student under CGSL. In no case may the combined borrowing exceed a student's estimated net cost of education.
13. *Nursing Student Loan (NSL).* These are long term loans, interest free while in school. Awards may range up to $2,500 per academic year with a total maximum of $10,000 including graduate studies. Repayment and interest (6%) begin 9 months after a student ceases to be enrolled in at least a half-time course of study. Minimum repayment is $15 per month, with a maximum of ten years to repay. Limited loan cancellation and loan deferments are available for special circumstances by the Secretary of Health and Human Services. To be eligible a student must be admitted to the Nursing Program and must exhibit a demonstrated need.
14. *Short Term Loans (STL).* On a funds available basis, loans are made, up to $150, interest free for periods of thirty days to those registered for six or more units.

Employment

15. *College Work-Study (CW-S).* This is a program of part-time employment for both undergraduate and graduate students with average earnings of $900 to $1,500 per academic year. Employment may be either on campus or in various community non-profit organizations. The Financial Aid Office assists students in finding Work-Study jobs. Work-Study awards are based on demonstrated need.
16. *Work Opportunities.* Student employment is generally available in Sonoma County and the surrounding University service area to students with ability and initiative. The Student Employment Office on campus is helpful in referring interested students to part-time job opportunities.

Scholarships

17. *University Scholarship Program.* Awards are generally based on academic achievement without special consideration of financial need. See page 312 for a detailed description of this program.
18. *Other Scholarships.* Each year many specialized scholarships go unawarded. High School Counselors often know about scholarships available in the community and have appropriate application forms. Community social service clubs, employers, churches and other like organizations often offer scholarships.

University and other scholarships are always packaged into a student aid award. When possible, the loan or work-study component of the aid package is reduced by the amount of the scholarship.

Application Procedure

To determine "demonstrated need" all applicants, new and continuing, are required to file the Student Aid Application for California (SAAC). This application may be used to apply for all the programs listed above (excluding GSL/CLAS, BIA, University Scholarships, non-CWS employment and STL. Applications for these programs are available through the Sonoma State University Financial Aid Office.) This form asks for confidential information about family income, assets, expenses, etc., which the College Scholarship Service and the Financial Aid Office review in order to help determine what, if any, aid the student is eligible for. These forms are available at the Financial Aid Office beginning mid-December. As is indicated on the above program descriptions, special California Student Aid Commission Supplements must be filed with the SAAC for Cal Grant or Graduate Fellowship consideration in early February. To have the result of the SAAC forwarded to Sonoma State University, Code 4723 should be entered on the SAAC form to insure the review of the application by the Financial Aid Office for determination of eligibility for the Federal and State student aid programs administered by the University. March 1 is the priority filing date at Sonoma State University for financial aid consideration for the following academic year. Applicants must reapply every year. All eligible students are awarded in order of the date their file is considered to be "complete". (In addition to the SAAC, students are required to turn in supporting documentation such as certification of registration with the Selective Service, tax returns, verification of non-taxable income, Financial Aid Transcripts, etc. A student's file is not considered "complete" until all requested documents are on file.)

The Financial Aid Office expects the student and the student's family to make maximum efforts when possible to finance the student's education. Students who do not meet the federal definition of financial independence from their parents must provide parental financial data on the "Student Aid Application for California." This information, in addition to the student's own resources, will be taken into consideration when determining a student's eligibility for the various aid programs administered by the University. When the file is complete, the student's financial need is determined by subtracting those resources available for his/her education (parents' contribution from income and assets, summer job savings, and the students' other resources) from his/her standard budget from September through May.

It is toward meeting this need—difference between costs and resources—that financial aid is directed. Generally, the need is met by a "package"—loan, scholarship, employment, and/or grant. Where feasible, the student's preferences are considered. For example, an outside job and heavy course load may cause one student to prefer loan rather than a college work-study award. Another student, not wishing to borrow, might prefer part-time work in the Work-Study program.

Notification of aid for the following year is sent to each applicant as files are completed and reviewed usually beginning in early May.

When a student has a subsequent change in status, (e.g., gets married, obtains non-college work-study employment, etc.) the Financial Aid Office must be notified immediately. If funds are available, a review of the financial need may make it possible to allot additional funds to meet this change. For short-term emergencies, the short term loan fund may meet special needs.

Questions regarding a student's eligibility or types of Financial Aid offered should be directed to a Financial Aid Counselor.



Instructionally Related Services

Ruben Salazar Library

Ruth Hafter, Library Director; Richard Bellamy, Barbara Biebush, Patricia Chapman, Jean Day, Timothy Huston, Lenore Radtke, Jay Smith, Sandra Walton, Patricia Wollter.

With a collection of over 365,000 bound volumes, the Ruben Salazar Library has officially achieved the status of a Resource library. Approximately 14,000 volumes are added each year. The periodicals collection consists of 60,000 volumes, with approximately 3,200 current subscriptions. Some 56,000 items are contained in the documents area which is a depository for state publications and shares federal depository status with the Sonoma County Library.

The first floor of the Library houses the documents, atlases, reference department, an archives and special collections complex, and a separate reserve bookroom containing material which is heavily used because of assigned class readings. The administrative offices, technical services and collection development department are also on this floor.

Services provided by the reference department include orientations and individual assistance in using the various library collections. A valuable aid to researchers, faculty and students is provided by reference librarians through on-line bibliographic data bases which are accessed via computer terminal. Access to materials not in the Ruben Salazar is facilitated by a computerized interlibrary loan service.

An audiocassette walking tour can be arranged through the Library Media Center. Courses can also greatly assist the library user. In addition to the library segment in the English 101 classes, librarians teach a 2-unit course, "Introduction to Library Research" (English 292) each semester.

The rest of the library services and materials are located on the second floor. This includes all circulation services and the open-stack circulating book collection, periodicals and study space for 1220 students. There are also collections of elementary and secondary textbooks, curriculum guides and children's books, group study rooms, a typing room, copying facilities and terminals directly linked to the campus Computer Center. Expanded facilities have been provided for the microform collection that now numbers over 890,000.

The Library Media Center contains over 17,000 audio records, tapes and cassettes and video cassettes and discs as well as the equipment to play them. A Kurzweil reading machine is available for use by the visually impaired.

General Library hours during the semester are:

Monday–Thursday.....	8:00 a.m.–10:00 p.m.
Friday	8:00 a.m.–5:30 p.m.
Saturday	9:00 a.m.–5:00 p.m.
Sunday	1:00 p.m.–6:00 p.m.

The Reserve Book Room is open for an additional hour (until 11 p.m.) Monday–Thursday and opens at 7:45 a.m. Monday–Friday.

Computing Services

The Department of Computing Services provides the instructional, research and administrative computing facilities for the university. The following computer systems serve the University:

1. CYBER 170–730 Timesharing system, CYBER 180–810
2. PDP 11 Word Processing Systems
3. PRIME 9750 Local Timesharing System (Primos and Primix operating systems)
4. The State University Data Center computer in Los Angeles (CYBER 170-760).

Hours: Office (Salazar 1502) hours for the Computer Center are: Monday–Friday 8 a.m. to 4:30 p.m. Telephone 664-2346

The Computer Center Lab facilities are available: Monday–Thursday 7 a.m. to midnight; Friday 7 a.m. to 5 p.m.; Saturday & Sunday 10 a.m. to 6 p.m.

Authorized users may also use dial-up lines which are available 24 hours daily. The general information number concerning the status of the computer systems is 664-1188.

Student Consultants: Consultants are assigned to assist computer users in the Computer Center main terminal room, Salazar 1506. A schedule showing consultants, hours and expertise is posted during the first week of classes each semester.

Microcomputer Experimental Lab Room: 1503 houses an APPLE II PLUS Microcomputer with two disc drives and a color monitor. The hardware also includes a graphics tablet and a light pen. Discs for running PASCAL, BASIC and APPLE programs can be checked out through the Library Reserve Room. The lab houses also a MacIntosh 512, an IBM PC and color monitor as well as a shared Imagewriter; software may be checked out through the student consultants. Use of this room is intended for faculty/students who wish to familiarize themselves with new microcomputer equipment and software.

Additional Terminal and Printer Locations:

(Open hours for each location are posted; each facility houses terminals and at least 2 local printers)

A. Darwin 19 (houses TEK & AED graphics terminals)
B. Stevenson 2055.
C. Salazar Library, 2nd floor.

Media Services

Media Services provides consultation, equipment, films, videotapes and materials production services in support of the University's instructional program; in addition, Media Services extends equipment and technical support to aid in the design, production and presentation of class projects.

Equipment available includes film projectors, slide projectors, tape recorders, P.A. systems, portable video recording systems and cameras for class projects or campus activities. Equipment may be checked out for a three day period.

Equipment, videotapes and films are delivered and set up for classroom use upon request by a faculty member, or may be checked out at the Media Services counter. Media Services is not staffed to offer projectionist service; however, films and videotapes can be shown, on request, over the Electronic Distribution System.

Three preview rooms are available for students and faculty to view films, videotapes, audition records and use tape recording equipment. These rooms are available on a first-come, first-serve basis.

Quality cassette tape duplication for instructional purposes is possible. Persons using this service furnish their own tape which must be approved by the equipment technician.

Arrangements can be made for professional recordings of University sponsored performances, lectures and other events. Media Services may provide a technician for this service.

Photography services for black and white study prints, color slides, copy slides, such as illustrations and art reproductions and other types of production by the photographic process, are available for classroom use; such assistance is limited to materials to be used for classroom instruction, public relations programs of the University, and in support of faculty papers published in non-profit professional journals.

Media Services has a self-paced, self-instructional package which individuals may use to learn how to operate equipment, such as slide projectors, 16mm and 8mm projectors, overhead and opaque projectors. A video systems orientation program is also available; upon completion of the orientation, individuals may use the portable video systems for instructionally related video work.

The Media Production Lab offers assistance to students and faculty in the production of media projects for classroom and other University related events. Those working on media projects are invited to consult with the Lab Coordinator regarding the design and production of any media project.

Office hours are Monday–Friday: 7:30 A.M. to 5:00 P.M., Stevenson Hall, Room 1038. The Media Production Lab is located in Stevenson Hall, Room 1063.



Photo by Arlene Houghton



Student Affairs

Dean, Student Affairs

The Dean of Student Affairs provides overall supervision and direction for the wide array of student services at the University. The Student Affairs Division includes the Advising/Counseling Center, Career Development Center, Educational Support Programs, Health Center, Housing Services, International Students Programs, Learning Center, Office for Students with Disabilities, Student Resource Center, and Testing Services.

These programs assist students to make the most of their university experience by offering services that range from pre-admission advising through career planning for alumni. Working closely with the academic departments, these programs assist students in attaining their academic, personal, and career goals while providing social and cultural opportunities beyond the classroom. The Dean's office is in Village 305, 664-2838.

Dean:

Rand Link

Academic Advising/Counseling Center

The Advising/Counseling Center provides a wide variety of services focusing on both enrolled and prospective students. These services include:

- Academic Advising
- Personal Counseling
- Reentry
- University Ombudsman

The Center is located in Village 515.

Academic Advising

Fundamental to a liberal education is the relationship between teacher and learner. While it is easy to recognize this relationship in the classroom, it is equally important to define the way in which the total resources of the University can be effectively organized to meet the educational goals of each student. In this sense academic advising is an integral part of the instructional program of the University.

The Advising/Counseling Center assists all students but has a special responsibility to undeclared majors in clarifying their educational objectives and planning their academic programs. Declared majors are advised by the faculty in their major departments. However, they are welcome to use the services of the Center for assistance with General Education problems and with the various petition procedures. In addition, prospective and transfer students are encouraged to consult with the Center staff for assistance in developing their academic plans and resolving articulation problems. For information call 664-2442.

Personal Counseling

Personal counseling is provided without charge to enrolled students with academic, career, educational, and personal concerns that interfere with their ability to take full advantage of the university experience. Professional counselors and graduate interns are available by appointment and on a drop-in basis to individuals, couples, and groups. Confidentiality* is maintained in an

* The law permits the use of the subpoena process to gain access to counselors' records and requires notification of appropriate parties in certain instances.

interactive and non-judgemental atmosphere that promotes resolution of issues through self-understanding and constructive problem solving.

The counseling staff offers workshops and courses on a variety of themes such as: career planning through self-exploration, assertiveness training, men's and women's issues, communication skills, stress reduction, eating disorders, overcoming test anxiety, procrastination and time management. In addition, consultation services are offered to student groups, faculty, and University staff. Referrals are also made to community agencies and private practitioners for students requiring long-term services. For information and appointments call 664-2153.

Reentry Program

More and more people are entering and re-entering college after a break from formal education. About two-thirds of the present student body at Sonoma is of nontraditional college age. Described as "reentry students" these people enrich the fabric of the University. They bring a broad and varied life experience of working, parenting, traveling, thinking, and growing to share with other learners.

The staff of the Reentry Program provides academic advising, support and referrals for reentry students. Workshops and late afternoon "Conversations" are featured activities. Each semester faculty/staff/students or members of the local community are invited to share a moment of significant, personal learning. These sessions, called "Learning Moments," are available to all students and may be taken for credit. Faculty and staff join reentry students at the weekly Brown Bag Lunch, held every Thursday of the academic year, from 11:30 a.m. to 1:30 p.m. For more information call 664-2444.

University Ombudsman

The University Ombudsman's duties include providing informal mediation and impartial information services for Sonoma State University students and the supervision and direction of all student grievances. The University Ombudsman is located in the Advising/Counseling Center, Village 515. For information and appointments call 664-2153.

Associated Students

The Sonoma State University Associated Students is a non-profit corporation directed solely by students. Each student who registers for classes at Sonoma State automatically becomes a member of the Associated Students. Students holding positions of leadership within the corporation are responsible for making decisions that affect the quality of student life both on campus and statewide. Each year over one hundred students are either appointed or elected to positions on committees and boards, both on the State and campus level, providing students with the opportunity to participate directly in the effective representation of students in University matters.

The success of this vigorous student government office depends directly upon the continuing involvement of an ever increasing number of students. To become an active participant in the Associated Students Corporation, stop by the Associated Students office located upstairs in the Student Union. Participation in the Associated Students provides an excellent opportunity for self-development and education in business and politics outside of the classroom. Insights gained from active involvement with the student corporation help prepare students for positions of leadership later in their professional careers. For information, call 664-2815.

Child Care

The Children's School at Sonoma State University opened in February 1978 and provides child care services for the children of students, faculty and staff at the University. Up to thirty-five children, ages two years to five years, may be cared for at one time in the center.

The Children's School, which receives its principal operating funds from the California State Department of Education and the Associated Students, provides a comprehensive program emphasizing socialization and healthy emotional development in a child-centered environment.

Admission priority is given to single-parent and low-income families. A limited number of spaces are available for families who do not meet the income eligibility requirement and tuition is based on an hourly rate.

The center is staffed by credentialed pre-school teachers, work study students, student volunteers, and parents in a modified parent-cooperative setting. Hours of operation are from 8:00 a.m. to 5:00 p.m. For information regarding enrollment, call (707) 664-2230.

Career Development Center

The Career Development Center provides programs and services to assist students in developing career awareness and realistic options through three component offices: Student Employment, Field Experience, and Career Planning and Placement. The Center is in Village 405, (707) 664-2196.

Student Employment

This office assists students in securing part-time, temporary, and summer jobs. Students are encouraged to register in person and to visit the office at least once each month in order to update their work applications and to stay informed of the many job listings that are processed daily in the office.

Employers from throughout the University service area hire students to work in the following categories: para-professional; office and sales work; skilled and semi-skilled labor; and domestic, hospital, and restaurant positions. The Student Employment Office makes over 6,000 job referrals annually. More than two-thirds of Sonoma State students work during the academic year.

The Student Employment Office also maintains a Job Location and Development Program to identify and develop part-time employment opportunities that relate to students' academic and career objectives. For information, call (707) 664-2513.

Field Experience

The Community Involvement Program (CIP) and numerous departmental internship programs provide students with a broad range of experiential learning opportunities for academic credit. As a result of these field experience placements, students gain a better understanding of their fields of study, develop career-related work experience, provide a service to their community, and explore potential vocations while they accrue university units through various academic departments. The Field Experience Office also offers Cooperative Education opportunities which provide alternating periods of full-time, paid employment and on-campus study.

In order to assist currently enrolled students with the pursuit of these credit-generating, off-campus learning experiences, the Center maintains hundreds of community service C.I.P. and internship requests from the local service area as well as throughout the United States. The office also has a wide variety of resource materials to assist students in the development of their own individualized experiential learning programs. For information, call (707) 664-2547.

Career Planning and Placement

This office assists students in matching their abilities, experience, potential, and needs with the demands of the labor market. Through workshops, individual advising, job listings, and career resource materials available in this office, students learn job-seeking skills that serve them throughout their working lives. The Career Development Center works in conjunction with academic departments and student services offices to develop and maintain effective career advising. The Career Resource Library provides extensive information on occupational fields and employment opportunities that is useful in clarifying educational and career goals.

SIGI (System of Interactive Guidance and Information) is a computer-assisted, career decision-making program that emphasizes individual values while it provides a vast store of career planning information. EUREKA is a computer assisted guidance system that integrates California labor market and educational information. Career Planning and Placement also offers a variety of workshops that bring practitioners from various career fields to the campus to interact with students and faculty. Themes of recent workshops have included: Computers and Careers, Careers in Health, Careers in Law, Power and Work, and Fear of Success. There is also a Contract File composed of Sonoma State alumni willing to discuss their chosen field.

In addition to assisting students with life/work planning, Career Planning and Placement maintains extensive job listings, provides frequent resume and interview techniques workshops, and schedules on-campus interviews with business, industry, and government employers. The office also prepares and sends a newsletter to registrants on request, and processes placement files for registrants. Graduating seniors, credential candidates, and alumni who have completed or are completing twenty-four units at Sonoma State Unviersity may register for file and referral service. All services are furnished without charge for a full year after graduation. Alumni who have not attended the University during the preceding year are charged a fee for services. For information, call (707) 664-2196.

Career Placement Information

The campus may furnish, upon request, information concerning the subsequent employment of students who graduate from programs or courses of study which have the purpose of preparing students for a particular career field. This information includes data concerning average starting salary and the percentage of previously enrolled students who obtained employment. The information provided may include data collected from either graduates of the campus or graduates of all campuses in The California State University. Copies of published information are available in the Career Development Center. Village 405, (707) 664-2196.

International Student Candidates

Undergraduate and graduate candidates for admission must take the TOEFL.

Educational Support Programs

Educational Support Programs (ESP) form an administrative unit established to coordinate support services for minority and disadvantaged students at Sonoma State University. These services include the Educational Opportunity Program (EOP), the Student Affirmative Action Program (SAA), Upward Bound and the Success Consortium. In addition, ESP sponsors special projects for high school and college students.

Educational Opportunity Program

Educational Opportunity Program (EOP) provides access through special admissions to the University for students demonstrating the potential and motivation for success in higher education but who for economic and/or academic reasons require assistance in such services as admissions, orientation, advising, registration, financial aid, and tutoring in order to ensure completion of their educational endeavors.

Students who wish to enroll in the University under the program should check the EOP response of the State University admission application.

Student Affirmative Action

The Student Affirmative Action Program at Sonoma State University is designed to facilitate the enrollment of ethnic minority high school and college transfer students. The SAA program has two major components, Outreach and Retention Services.

The College-Bound program, an outreach service, assists minority and low income students in their preparation and motivation for successful experiences in college and university settings. The College-Bound program works cooperatively with public high schools in Sonoma and Napa counties and provides its participants with the following services: tutoring, career goals clarification, study skills development, Saturday enrichment workshops, academic mentoring, college placement assistance in security financial aid, and field trips.

Once enrolled at SSU, the Retention Services Component furnishes the student with the necessary support services for a successful undertaking of a university education and experience. The supportive services include: information about college opportunities, admissions assistance, summer orientation program, tutoring, and learning assistance to help students with classwork and advising.

The ultimate goal of the Student Affirmative Action Program is to provide a service to ethnic minority students by expanding the range of opportunity for a student to pursue an academic program which will be both personally and socially meaningful. Students wishing to participate in the program should contact the Student Affirmative Action Program Office, (707) 664-2427.

Upward Bound Program

Upward Bound is a federally-funded high school program whose goal is to assist low-income and potentially first-generation college graduates in their preparation and motivation for successful college and University experiences. The Upward Bound Program works cooperatively with public and private high schools in Sonoma County and provides the following enrichment activities to program participants: tutoring, Saturday enrichment sessions, field trips, career goal clarification, college placement, assistance in securing financial aid, and academic monitoring. The Program has both an academic year and a summer component. The summer component is residential for pre-juniors and pre-seniors; and is non-residential for the freshmen and pre-sophomore students.

Student Health Center

The University maintains a modern, well-equipped health center for regularly enrolled students. The Center is open during normal, working hours of the University—8:00 a.m. to 4:30 p.m. Monday through Friday. A full-time professional staff provides treatment for minor illnesses and injuries on an out-patient basis only. Most services normally obtained in a family physician's office are available.

All new students are required to file with the Student Health Center the Health Status Report prior to using the Health Center facility. The form is available in the Student Health Center. An additional special health requirement applies to credential candidates.

As no campus infirmary facilities are available, all medical care which is beyond the scope that the Health Center can deliver, or needed when the Health Center is closed, must be obtained through private and community facilities at the student's expense. Through an outside carrier with whom the student makes his own contract, the Associated Students makes available a moderately priced insurance policy which covers most of the cost for medical care beyond that which the Health Center can provide.

Housing Services

On Campus: The campus residential community provides comfortable, convenient, personalized living accommodations for 640 single students. The residential life program is also designed to be an important part of student's overall educational program in that the program includes a diversity of recreational, social, and educational learning opportunities. Specific room and board costs are furnished at the time accommodations are assigned. The average rate for room and a full meal plan is approximately $3,200. Interested students should contact the Housing office for more information (707) 664-2541.

Community Housing: To assist with the off-campus housing needs of students, the off-campus housing office maintains listings of off-campus accommodations including houses, condominiums, apartments, trailers, rooms, and shared quarters. The location of apartment complexes located off campus can be obtained from this office. Maps of the area, a courtesy phone, and community resource information are available. The office provides services to students on tenant's rights, landlord-tenant problems, and small claims court procedures. The office is located in Zinfandel Hall in the housing complex. For more information, call 664-2541.

Summer: During the summer, the Residence Halls provide housing and food services for Summer Session students and for participants in the numerous conferences held on campus.

International Programs

See International Studies p 184.

International Student Programs

FOREIGN STUDENT ADVISING

The Director of International Student Programs serves as International Student Advisor, assisting international students with various problems as a supplement to assistance provided by their regular academic advisors, and specifically, problems dealing with legal matters relating to their visa status, work permits, transfers, and extensions of stay.

In addition, this office serves the International Student Association which links students to the larger community. The Association provides opportunities for hospitality, and an opportunity for international students to share their perspectives and cultural traditions with others in the University and its service area.

International Student Programs is in Village 102, phone: (707) 664-2582.

Sonoma State American Language Institute (SSALI)

Administered under the aegis of the Office of Extended Education, the Sonoma State American Language Institute (SSALI) provides an opportunity for those students who are not native speakers of English to acquire a variety of English language skills before formally entering the University.

SSALI classes are offered at beginning, intermediate and advanced levels to accommodate a wide range of students, and the 25 hours of classwork each week include instruction in grammar, communication, reading, writing, study skills, listening comprehension and pronunciation. In addition to attending classes, SSALI students participate in a variety of social events and excursions to nearby places of cultural and social interest.

Complete details on the SSALI program are available by contacting the Sonoma State American Language Institute, Village 102, Sonoma State University, Rohnert Park, CA 94928, (707) 664-2742.

National Student Exchange

Under this program Sonoma State University has become part of a 'national' university network which enables our undergraduate students to study for up to one academic year at any of sixty-eight universities and colleges in the United States. In addition, this exchange of students enables the Sonoma State undergraduate to enroll at any of these universities without having to pay out-of-state, non-resident tuition fees, just as we will accept students from member universities. All other expenses must be borne by the student. Eligibility for the same federal and state financial aid the student might receive at Sonoma State University, however, may be transferred to meet the costs of this program.

To make the most of the opportunity, advanced planning and proper advising is necessary for the student. For more information and referral to the relevant advisor, contact the Office of International Student Programs, Village 102, phone: (707) 664-2582.

Learning Center

The Learning Center, located in the Ruben Salazar Library, provides a wide variety of support services to assist students to become effective and efficient learners.

Tutorial Program

The tutorial component provides free individual or group tutorial assistance to all Sonoma State University students. A large staff of qualified tutors is available to help students who may be having difficulty in a course, or who want to review a particular subject. Tutors also help students acquire or improve study skills, or prepare for placement or proficiency exams. Small study groups focusing on particular courses, and workshops targeting particular skills are also available.

Tutors can receive credit for tutoring through the Community Involvement Program (C.I.P.) or through various departments. Experienced tutors may be paid through student assistant or work-study funding.

For more information about tutoring or being tutored, call x2429.

Learning Skills Program

The Learning Skills Program of the Special Services Project is a federally-funded program with a staff of specialists who diagnose students' learning abilities, prescribe appropriate academic assistance, and monitor student progress. The program has a Learning Skills Lab which includes self-paced materials and computer assisted instruction. The Special Services Project also provides Supplemental Skills Instruction Sessions which emphasize the development of learning-how-to-learn strategies in various subject areas. For information, call x2853 or x2459.

Intensive Learning Experience

This program is designed to provide opportunities for eligible students to fine tune their basic skills. First-time freshmen who do not meet the English Placement Test (EPT) and/or Entry Level Mathematics Test (ELM) score requirements for entry-level college English and Mathematics courses are eligible for this intensive one-year program. The first-semester courses (University 98A—Writing Skills; University 98B—Reading Skills; and University 98C—Arithmetic Skills) include classroom instruction and lab practice. Study groups and specialized workshops are also provided. The second-semester courses (English 99 and Mathematics 99) continue many of the activities of the first semester. The courses are designed to ensure that those who complete them will have sufficient skills and knowledge to succeed at the next level (English 101 and Mathematics 106, 121 or 131). In addition to coursework, the program provides a variety of diagnostic and support services in order to enhance students' skills development and assist with their academic success. For information, call x2215.

Office for Students with Disabilities

The Office for Students with Disabilities (OSD) exists at Sonoma State to provide complete access to the University's unique programs of liberal arts and sciences. All aspects of the educational experience: intellectual, social and personal, are available to everyone, irrespective of physical or perceptual limitation.

Students are educated to utilize available resources and become more successful advocates for themselves. OSD also takes as its responsibility educating the campus community to the rights of people with disabilities, and to the contributions they offer the academy.

We take a special pride in the way we confront, explore and challenge the experiences of disability. With the campus community, the individuals we serve, and ourselves, we seek to uncover the attitudes, fears, and misconceptions we all possess which prevent us from looking past individuals' limitations to their innate humanity and to their unique contributions. By helping students to become independent and the University community to be responsible and aware, we aid all in redefining and affirming the human experience.

To facilitate access to a quality education, OSD offers disability management advising and a wide variety of services and equipment to people with long-term and temporary disabilities, including admission and registration assistance, interpreters, notetakers, readers, test taking arrangements, Kurzweil Reading Machine, employment assistance, campus mini-bus, close-in parking, wheelchair loans, and TDD's.

Anyone interested in obtaining services or information is welcome to drop-in or call Monday through Friday from 8:30 to 5:00, Stevenson 1041. The telephone numbers are 707.664.2677 (voice) or 707.664.2958 (TDD).

Student Resource Center

The Student Resource Center, housed in the Student Union, exists to encourage and develop a learning climate for students outside the classroom. Working closely with the Associated Students and the Student Union, The S.R.C. staff support the planning and implementation of student-initiated and student-related educational, cultural and social events. The Center administers campus policies and procedures related to student acitivities including: student use of campus facilities and services; food sale permits; vendor permits; distribution of published literature and the speakers' policy. Major programs of the Center include:

Orientation—Coordinating a variety of orientation programs for incoming students.

Chartered Student Organizations—Providing ongoing support and advisement to the 50 chartered student clubs on campus.

Leadership Development—Conducting workshops and classes in leadership skill development to assist students in maximizing their effectiveness in campus leadership roles.

Intramural Sports—Overseeing the rapidly expanding Intramural Sports Program, which offers a wide variety of men's, women's, coed, team and special one day events throughout the year.

Student Needs Assessment—Sponsoring a variety of research activities designed to assess the needs and interests of students, including a telephone survey (done annually), and audience surveys at programming events.

Special Activities—Offering of a variety of special activities including traditional on campus events (Homecoming, Holiday Crafts Faire and Health and Fitness Forum).

Orientation

New students at Sonoma State University are urged to participate in a variety of orientation activities that introduce them to the many facets of campus and community life. Orientation and advising week, offered the first week of each semester, is supplemented by: an on-campus residential weekend experience offered each July where prospective students (and interested parents) explore Sonoma's programs, services and environs, assisted by trained student guides, faculty and student affairs staff; a first semester support system that links up incoming freshmen with volunteer mentors from the staff and faculty; and an activity day where student clubs and campus resources are showcased.

Student Union

The Student Union is the campus center for cultural, social and educational activities at Sonoma State University. Students are encouraged to participate actively in all phases of the planning and development of the Union through the Sonoma Student Union Board and its committees. Many programs are housed in the Sonoma Student Union including: the Pub (which includes evening food service), lounge areas, saunas, photographic developing and printing facilities, low-cost duplication service, and an art gallery. In addition the Associated Students Office is located in the Student Union. The meeting rooms of the Sonoma Student Union accommodate many of the activities that contribute to the exciting co-curricular environment at Sonoma State University. The Student Resource Center, which is housed in the Union, enjoys a close working relationship with the Union in the development of campus programs and services. The **Inter-Cultural Center,** a center for the many diverse cultures that are represented at Sonoma State, is located on the first floor of the Union.

Testing Services

The Office of Testing Services provides a variety of testing services to the University community. Some are designed to assist students in their exploration of personal, educational and career objectives and are available in cooperation with the Counseling Center and Career Development Center. Others are more instructionally related and are designed to help faculty with assessment of educational objectives.

Tests which meet admission, undergraduate, graduate and degree requirements are available on a regularly scheduled basis. Advance registration for all tests is required.

Undergraduate Candidates for Admission
- SAT or ACT
- TOEFL (International Students)

Placement Tests
- CSU English Placement Test (EPT)
- CSU Entry Level Math Test (ELM)

For students who do not take the EPT and ELM when regularly scheduled, a special demand test will be scheduled and an additional fee will be charged.

Upper Division Graduation Requirement
- SSU Written English Proficiency Test (WEPT)

Credential Candidates

All Educational Credential Candidates must pass the WEPT or its equivalent as approved by the SSU English Department. This applies to all Multiple Subject Candidates before enrolling in student teaching and to Single Subject Candidates before admission to the program.

All applicants to basic credential programs (Multiple and Single Subject) shall be required to pass the California Basic Education Skills Test (CBEST), Credential Candidates with majors *unapproved* by the Commission on Teacher Credentialing will be required to take an additional State approved examination.

Credit by Examination Candidates
- College Level Examination Program (CLEP)
- CSU English Equivalency Examination (EEE)

Graduate School Candidates

For advancement to classified standing in master's degree programs at Sonoma State University candidates must meet the writing proficiency requirement. In addition, the following tests are required:

Anthropology
- GRE General Test

Biology
- GRE General/GRE Advanced Biology Tests and SSU Biology Department Assessment Exam *

Counseling
- GRE General Test

Cultural Resources Management
- GRE General Test

Education
- GRE General Test

English
- GRE Advanced Lit. or SSU English Dept. Comprehensive Exam *

History
- GRE General and GRE Advanced Test in History

Management
- Graduate Management Admission Test (GMAT)

Mathematics
- GRE Advanced Test in Mathematics

Nursing
- GRE General Test

Physical Education
- GRE General Test

Psychology
- GRE General Test or Miller Analogies Test (MAT)

Public Administration
- GRE General Test

Special Major
- GRE General Test. Other tests may also be required depending on the specific requirements of participating departments.

Students interested in further information are invited to contact the Office of Testing Services, Village 302, (707) 664-2947.

* For more information concerning the Biology Assessment Exam or the English Comprehensive Exam please contact the appropriate academic department.



General Information

History

Sonoma State University was established by the California State Legislature in 1960 and began instruction in temporary quarters in Rohnert Park the following year until permanent buildings were constructed on the present site. Situated fifty miles north of San Francisco, the University currently enrolls approximately 6,000 students. In addition to well-equipped classrooms and laboratories, the present campus includes student residence halls, a modern Health Center completed in 1974, and a new Student Union. Recent construction includes the Library Addition, an Art building, a new classroom building, and a child care center.

One of the nineteen campuses of The California State University, Sonoma offers a strong undergraduate liberal arts and sciences curriculum, twelve master's programs, and selected professional programs. Three Cluster Schools, each with small enrollments, provide exceptional opportunities for the close student-faculty relations and open communication to which the University is committed.

Through its Extended Education Program, the University serves many students each year, and sponsors numerous workshops, seminars, conferences, and institutes both on and off campus.

Visits to the campus may be arranged through the Office of School Relations.

Accreditation

Sonoma State University is fully accredited by the Western Association of Schools and Colleges, the agency which grants national accreditation to colleges and universities in the western United States. The University is also accredited by the California State Board of Education, the American Chemical Society, the National Association of Schools of Music, the National League for Nursing, the National Association of Schools of Art and Design, and the Council for Accreditation of Counseling and Related Educational Programs.

Schedule of Classes

The regular educational program of the University is offered from 8:00 a.m. to 10:00 p.m. Monday through Friday. A Class Schedule that lists meeting times and places for all classes is prepared for each semester and may be purchased at the Bookstore. Separate schedules are provided for summer session, external degree, and extension courses.

Affirmative Action Policy

Sonoma State University is guided by the precept that in no aspect of its programs or employment shall there be a difference in the treatment of persons because of race, sex, creed, color, religion, sexual preference, national origin, age, marital status, pregnancy, Vietnam era veteran's status, or disabling condition. In addition, it ensures that students and employees are not subjected to any form of sexual harassment.

Equal employment and educational opportunity is observed in the administration, housing, and education of students; in policies governing programs and extra-curricular activities; and in the employment of faculty, staff, and students. The University is working cooperatively with the community in furthering the principle of equal employment and educational opportunity through its affirmative action programs. For more information, contact the Affirmative Action Office, Stevenson Hall 1025, (707) 664-2664.

Sonoma State University Academic Foundation

The Sonoma State University Academic Foundation, Inc. is a non-profit corporation established in 1974 to assist and promote the educational program of the University. The Foundation is an auxiliary organization of The California State University, as defined in Title V of California Administrative Code. The Foundation sponsors activities for which the State does not appropriate funds, including educational institutes, workshops, conferences, training programs and research projects; and provides for the reception and administration of grants, contracts, gifts, endowments and scholarships. The activities of the Foundation are directed by a Board of Directors comprised of student, faculty, community and administrative representatives.

President's Associates

The President's Associates is a group of business, professional and community leaders who are dedicated to helping the University realize its potential as a quality liberal arts and sciences educational institution while involving members of the community in the many programs and activities of the University. Their goals are:

To encourage academic excellence through the Scholars-at-Entrance program.

To help strengthen the link between Sonoma State and its community.

To assist the public in benefiting fully from the University's resources.

To develop sources of support, human and financial, to supplement State funding.

Sonoma State Corporate Partners

The Sonoma State Corporate Partners is a voluntary association of businesses, corporations, and members of the professions who wish to contribute to the improvement of Sonoma State University.

Contributions from members help support the University Endowment fund as well as provide assistance on an annual basis. Membership helps further understanding between the University and the business and professional community of the region.

Alumni Association

The Sonoma State University Alumni Association endeavors to maintain a continuing relationship between the University and her alumni, to represent the University in the community through its membership, and to sponsor educational projects, programs and activities. Membership in the Association is open to those who have been awarded a degree or credential by the University or who have completed two or more semesters at Sonoma, regardless of where the degree is finally earned.

Extended Education/Summer Session

Extended Education programs offer opportunities for learning new career skills, for updating professional skills and meeting relicensure requirements, for broadening personal interests, and for academic achievement through degree and certificate programs. Included are:

- Attorney Assistant Certificate Program
- Continuing Education Program for Educators
- Microcomputers in Education Certificate Program
- Early Childhood Education Certificate Program
- Management and Supervisory Development Certificate Program
- Human Resource Management Certificate Program
- M.A. Degree in Psychology (External Degree)
- EXCEL: a special summer program for young people grades 4–10
- Open University

Open University

Open University, also known as Concurrent Enrollment, is a means by which one may enroll as an extension student in resident courses offered at the University. *Students are encouraged whenever possible to apply for acceptance into the resident program.* Open University may be available for those for whom such enrollment is not possible or appropriate, such as:

- high school juniors and seniors;
- professionals seeking to upgrade skills, maintain licenses or make career changes;
- those with personal interest in a particular subject who have no degree objective;
- students temporarily denied admission to the University; or
- those interested in exploring college coursework before committing themselves to a degree program.

January Intersession

A special three-week program offered by Extended Education during the break between fall and spring semesters. Includes a selection of resident university courses.

Summer Session

A six-week program offering resident credit coursework, emphasizing General Education and other courses required for graduation. Includes a selection of Extension courses and programs, with an emphasis on continuing education for teachers. A special feature is the EXCEL program, designed for young people grades 4–10, offering a variety of academic, technical and creative subjects to augment traditional offerings during the school year.

Extension Academic Credit

Extension courses offer a number of types of credit to meet the various needs of participants:

- **"e" credit**—Academic courses with an "e" designation (e.g.: MGT e490) are offered for "extension academic credit." Up to 24 units of extension credit may be applied toward a baccalaureate degree, subject to approval by the academic department concerned. Up to nine units of extension credit may be applied toward a master's degree. Note: "e" designated classes do not receive resident credit.
- **"s" credit**—Courses with the "s" designation (e.g.: MGT s380) offered during summer session may be taken without limit toward a degree.
- **"C.E.U." credit**—"Continuing education units" are offered for various professional development courses. C.E.U.s are intended for use when employers, relicensure agencies, school districts and other authorities require a specified number of hours of study on a regular basis for career advancement purposes, and when non-credit study is acceptable. One C.E.U. is awarded for each 10 hours of contact participation. C.E.U.s are not accepted for academic credit and do not apply toward degree programs or meet teaching credential requirements.
- **"non-credit"**—Courses with a department number of "eNC" are available for general interest but do not award academic or continuing education units. Students do not receive grade reports or verification of course completion.

Complete information on all Extended Education programs is published each semester in QUEST, the Extended Education catalog. Free copies of QUEST, as well as brochures detailing the many specialized programs, are available at the Office of Extended Education, Stevenson Hall 1045, (707) 664-2394.



Members of the Faculty

Instructional Faculty, Full-Time

Les K. Adler (1970) ..... Professor of History, Hutchins School of Liberal Studies
B.A. 1963, University of New Mexico; M.A. 1965; Ph.D. 1970, University of California, Berkeley.

Harold G. Alderman (1969) ..... Professor of Philosophy
B.A. 1961, University of Florida; M.A. 1965; Ph.D. 1967, Tulane University.

Chester L. Allen (1985) ..... Professor of Management Studies
B.B.A. 1963, University of Texas at Austin; M.B.A. 1969, Texas A & I University; D.B.A. 1973, Texas Tech University.

Ellen I. Amsterdam (1969) ..... Professor of Music
B.A. 1957, M.A. 1959, Smith College; Ph.D. 1968, University of California, Berkeley.

Sherri C. Anderson (1980) ..... Associate Professor of Management Studies
B.A. (Art 1973; B.A. (Management) 1977; Sonoma State University; CPA 1980; M.B.A. 1983, San Francisco State University.

Skinner Anderson (1982) ..... Lecturer in Management Studies
B.S. 1950, Oklahoma State University; M.B.A. 1964, Oklahoma University.

Stuart D. Anderson (1985) ..... Lecturer in Physics & Astronomy
A.B. 1963, Harvard University; Ph.D. 1968, University of California, Berkeley.

Thomas B. Anderson (1968) ..... Professor of Geology
B.S. 1961, Yale University; M.S. 1965, Ph.D. 1969, University of Colorado.

Kathryn Armstrong (1966) ..... Professor of Art
B.F.A. 1955, University of Colorado; M.F.A. 1958, California College of Arts and Crafts; M.A. 1965, University of California, Berkeley.

David Owen Arnold (1970) ..... Professor of Sociology
B.A. 1960, University of Chicago; M.A. 1962, University of Iowa; Ph.D. 1966, University of California, Berkeley.

William Babula (1981) ..... Dean, School of Arts & Humanities; Professor of English
B.A. 1965, Rutgers University; M.A. 1967, Ph.D. 1969, University of Calfornia, Berkeley.

Marsha Red Bailey (1985) ..... Assistant Professor of Art
B.A. 1970, M.F.A. 1973, University of California, Irvine.

Michael E. Baldigo (1975) ..... Associate Professor of Management Studies
M.B.A. 1966, University of Chicago; CDP 1970; M.B.A. 1971, Indiana University, Bloomington; CPA 1973; B.A. 1976, B.S. 1978, Thomas A. Edison College; Ph.D. 1977, California Coast University; CMA 1982; CIA 1983; CSP 1985.

Susan van den Hoek Barnes (1972) ..... Associate Professor of Psychology, Hutchins School of Liberal Studies
B.A. 1965, Rutgers University; M.S. 1971, University of Oklahoma; Ph.D. 1973 California School of Professional Psychology, San Francisco.

William J. Barnier (1969) ..... Professor of Mathematics
B.A. 1961, M.S. 1963, San Diego State College; Ph.D. 1967, University of California, Los Angeles.

Mary Bates (1982) ..... Assistant Professor of Art
B.F.A. 1973, Colorado State University, Fort Collins; M.F.A. 1981, Indiana University, Bloomington.

Philip H. Beard (1969) ..... Professor of German
B.A. 1965; M.A. 1966; Ph.D. 1971, Stanford University.

Timothy A Bell (1968) ..... Professor of Geography
B.A. 1958, Stanford University; M.A. 1964, Ph.D. 1971, University of Oregon.

Paul V. Benko (1970) ..... Professor of Biology
B.S. 1954, University of California, Berkeley; M.S. 1958; Ph.D. 1968, University of California, Davis.

Sterling Bennett (1967) ..... Professor of German
B.A. 1961, Harvard University; M.A. 1964; Ph.D. 1970, University of California, Berkeley.

Barry Ben-Zion (1969) ..... Professor of Economics
B.A. 1965, Sonoma State College; M.A. 1968, Ph.D. 1973, University of Oregon.

Dorothy M. Blake (1973) ..... Associate Professor of Nursing
B.S. 1956, M.Ed. 1958, University of Minnesota.

Maurice Blaug (1970) ..... Associate Professor of Biology, Hutchins School of Liberal Studies
B.S. 1959, The City University of New York; M.S. (Physics) 1962, M.S. (Zoology) 1966, Ph.D. 1970, University of Minnesota.

Martin S. Blaze (1968) ..... Professor of English
B.A. 1959, Queens College; M.A. 1960, Ph.D. 1970, New York University.

David M. Bromige (1970) ..... Professor of English
B.A. 1962, University of British Columbia; M.A. 1964, University of California, Berkeley.

Leslie Brooks (1968) ..... Professor of Chemistry
B.S. 1957, University of California, Berkeley; Ph.D. 1961, University of Washington.

Robert F. Brown (1967) ..... Professor of History
B.A. 1952, Johns Hopkins University; Certificate de francais usuel 1959; D. del'Université 1963; University of Paris, France.

Joe H. Brumbaugh (1964) ..... Professor of Biology
B.S.Ed. 1952, Miami University; M.S. 1956, Purdue University; Ph.D. 1965, Stanford University.

David O. Butcher (1985) ..... Associate Professor of Computer Science
A.B. 1972, University of California, Los Angeles; M.A. 1977, Ph.D. 1978, Stanford University.

Libby R. Byers (1970) ..... Professor of Education
B.A. 1943, Hunter College; M.A. 1968, San Francisco State College; Ph.D. 1973, University of California, Berkeley.

Noel T. Byrne (1978) ..... Lecturer in Management Studies
B.A. 1971, Sonoma State University; M.A. 1975, Rutgers University.

Kathleen C. Charmaz (1973) ..... Professor of Sociology
B.S. 1962, University of Kansas; M.A. 1967, San Francisco State College; Ph.D. 1973, University of California, San Francisco.

James Christmann (1982) ..... Assistant Professor of Biology
B.S. 1968, Arizona State University; M.A. 1969, Ph.D. 1976, Johns Hopkins University.

Galen E. Clothier (1962) ..... Professor of Biology
B.A. 1955, Fresno State College; M.S. 1957, Ph.D 1961, Oregon State University.

Michael D. Coleman (1970) ..... Professor of Philosophy, Hutchins School of Liberal Studies
B.A. 1965, M.A. 1967, Ph.D. 1972, University of California, Santa Barbara.

Robert Coleman (1972) ..... Associate Professor of English
B.A. 1967, San Francisco State College; M.A. 1978, San Francisco State University.

Thomas P. Cooke (1974) ..... Professor of Education
B.A. 1970, M.A. 1971, University of South Florida; Ph.D. 1974, George Peabody College.

William O. Cord (1963) ..... Professor of Spanish
B.S. 1943, Southeast Missouri College; M.A. 1948, Washington University; Ph.D. 1960, University of Colorado.

Eleanor C. Criswell (1969) ..... Professor of Psychology
B.A. 1961, M.A. 1962, University of Kentucky; Ed.D. 1968, University of Florida.

William K. Crowley (1969) ..... Professor of Geography
B.A 1964, University of California, Riverside; M.A. 1966, University of Cincinnati; Ph.D. 1972, University of Oregon.

Victor Daniels (1968) ..... Professor of Psychology
B.A. 1962, San Francisco State College; M.A. 1964, Ph.D. 1965, University of California, Los Angeles.

Sandra A. DeBella (1975) ..... Associate Professor of Nursing
B.S. 1968, University of San Francisco; M.S. 1973, California State University, San Jose; Ed.D. 1985, University of San Francisco.

Jayne A. DeLawter (1974) ..... Professor of Education
B.S. 1964, Ball State University; M.A. 1967, Ed.D. 1970, Teachers College, Columbia University.

Gary W. Denmark (1983) ..... Lecturer in Art
B.A. 1976, San Diego State University; M.F.A. 1981, University of Wisconsin, Madison.

Nirmal Singh Dhesi (1964) ..... Professor of English
B.A. 1950, M.A. 1953, Punjab University, India; Ph.D. 1968, Michigan State University.

Mildred Dickemann (1968) ..... Professor of Anthropology
B.A. 1950, University of Michigan; Ph.D. 1958, University of California, Berkeley.

Donald A. Dixon (1972) ..... Professor of Political Sciene
B.A. 1966, Sonoma State College; Ph.D. 1975, University of California, Santa Barbara

Margaret A. Donovan-Jeffry (1964) ..... Professor of Music
B.A. 1955, M.A. 1959, University of California; D.M.A. 1964, Stanford University.

Mark J. Doolittle (1980) ..... Associate Professor of Counseling
B.A. 1970, University of Washington; M.A. 1979, Ph.D. 1979, University of California, Berkeley.

Jeffrey T. Doutt (1973) ..... Dean, School of Social Sciences; Professor of Management Studies
B.S. 1968, M.S. 1970, Ph.D. 1976, University of California, Berkeley.

James P. Driscoll (1971) ..... Professor of Criminal Justice Administration
B.S. 1948, Rutgers University; M.A. 1968, San Francisco State College; Ph.D. 1977, University of California, Santa Barbara.

Donald G. Duncan (1963) ..... Professor of Mathematics
B.A. 1942, M.A. 1944, University of British Columbia; Ph.D. 1951, University of Michigan.

Helen D. Dunn (1970) ..... Lecturer in English
B.A. 1962, Mount Mary College; M.A. 1965, Fordham University; Ph.D. 1980, University of California, Berkeley.

John R. Dunning, Jr. (1969) ..... Professor of Physics & Astronomy
B.S. 1960, M.S. 1961, Yale University; Ph.D. 1965, Harvard University.

C. Douglas Earl (1969) ..... Professor of Health Sciences and Physical Education
B.A. 1961, M.A. 1963, Chapman College; Ph.D. 1968, University of New Mexico.

Wesley W. Ebert (1964) ..... Professor of Biology
B.S. 1961, University of Minnesota; M.S. 1963, Ph.D. 1964, University of California, Davis.

David L. Eck (1970) ..... Professor of Chemistry
B.A. 1963, University of Montana; Ph.D. 1967, Washington State University.

Gerald V. Egerer (1965) ..... Professor of Economics
B.Sc. 1952, University of London; D. en Droit 1957, University of Lyons, France.

Saul Eisen (1977) ..... Associate Professor in Management Studies
B.S. 1962, M.B.A. 1963, University of California, Los Angeles; Ph.D. 1969, Case-Western Reserve University.

F. George Elliott (1968) ..... Professor of Education
B.A. 1948, University of British Columbia; M.A. 1961, California State College, Long Beach; Ed.D. 1967, University of California, Los Angeles.

Rolfe C. Erickson (1966) ..... Professor of Geology
B.S. 1959, Michigan Technological University; M.S. 1962, Ph.D. 1968, University of Arizona.

Clement E. Falbo (1964) ..... Professor of Mathematics
B.A. 1956, M.A. 1958, Ph.D. 1963, University of Texas.

Yvette M. Fallandy (1964) ..... Professor of French
B.A. 1948, University of California, Los Angeles; M.A. 1949, University of Oregon; Ph.D. 1958, University of California, Los Angeles.

Donald J. Farish (1983) ..... Dean, School of Natural Sciences; Professor of Biology
B.S. 1963, University of British Columbia; M.S. 1966, North Carolina State University at Raleigh; Ph.D. 1970, Harvard University; J.D. 1976, University of Missouri-Columbia.

Joann E. Feldman (1966) ..... Professor of Music
B.A. 1963, Queens College; M.A. 1966, University of California, Berkeley.

Norman Feldman (1967) ..... Professor of Mathematics
B.Sc. 1959; M.Sc. 1961, McGill University, Canada.

Robert F. Fletcher (1969) ..... Professor of Education
B.A. 1939; M.A. 1960, San Diego State College; Ed.D. 1967, Stanford University.

Kenneth W. Flynn (1968) ..... Professor of Health Sciences and Physical Education
B.S. 1956, Springfield College; M.S. 1961, Ithaca College; Ed.D. 1967, University of Oregon.

Herbert Fougner (1961) ..... Professor of Education
B.S. 1943, State Teachers College, Bemidji, Minnesota; M.Ed. 1949, Ed.D. 1956, University of California, Los Angeles.

Joseph W. Frasca (1975) ..... Professor of Computer Science
A.B. 1967, A.M. 1968, St. Louis University; Ph.D. 1979, University of Oklahoma.

William J. Frazer (1965) ..... Professor of Geography
B.S. 1952, University of Illinois; M.A. 1953, M.A. 1957, Ph.D. 1959, University of Michigan.

David A. Fredrickson (1967) ..... Professor of Anthropology
B.A. 1948, University of California, Berkeley; M.A. 1966, Ph.D. 1973, University of California, Davis.

Laurel A. Freed (1972) ..... Professor of Nursing
B.S. 1966, California State College, Los Angeles; M.N. 1970, University of California, Los Angeles; P.N.P. 1976, University of California, Los Angeles Extension.

Vivian A. Fritz (1972) ..... Associate Professor of Health Sciences and Physical Education
B.A. 1963, Southwest Texas State University; M.A. 1964, Ball State University.

Robert Y. Fuchigami (1968) ..... Professor of Education
B.A. 1956, M.A. 1958, San Jose State College; Ed.D. 1964, University of Illinois.

James B. Gale (1969) ..... Professor of Health Sciences and Physical Education
B.S. 1962, M.Ed. 1964, Miami University; Ph.D. 1970, University of Wisconsin.

Francisco Gaona (1964) ..... Professor of Spanish
B.A. 1953, Yale University; Ph.D. 1963. Tübingen University, Germany.

Susan B. Garfin (1970) ..... Professor of Sociology
B.A. 1964, Stanford University; M.A. 1965, The Fletcher School of Law and Diplomacy; Ph.D. 1973, University of California, Berkeley.

Victor A. Garlin (1970) ..... Professor of Economics
B.A. 1956, M.A. 1961, Ph.D. 1965, University of California, Berkeley; J.D. 1983, University of California, Hastings College of Law.

Robert K. Girling (1976) ..... Associate Professor in Management Studies
B.A. 1967, University of California, Berkeley; M.A. 1968, University of Essex, England; Ph.D. 1974, Stanford University.

Barry W. Godolphin (1969) ..... Professor of Psychology
B.A. 1960, M.A. 1966, Ph.D. 1974, University of California, Los Angeles.

Stashu D. Geurtsen (1963) ..... Professor of Psychology
B.S. 1948, Lewis and Clark College; M.Ed. 1950, Oregon State College; Ed.D. 1955, University of Oregon; Ph.D. 1978, International Studies in Humanistic Psychology at Baden.

Bernice Goldmark (1966) ..... Professor of Education
B.S.Ed. 1945, College of the City of New York; M.Ed. 1957, Ph.D. 1963, University of Arizona.

Richard H. Gordon (1984) ..... Professor of Computer Science
B.A. 1968, Harvard University; Ph.D. 1976, University of California, Berkeley.

Leland W. Gralapp (1964) ..... Professor of Art
B.S. 1943, University of Oregon; M.F.A. 1948, Ph.D. 1953, State University of Iowa.

James E. Gray (1970) ..... Associate Professor of American Multi-Cultural Studies
B.A. 1967, M.A. 1975, San Francisco State College; Ph.D. 1984, University of California, San Francisco.

Samuel L. Greene, Jr. (1966) ..... Professor of Physics & Astronomy
B.S. 1956, Polytechnic Institute of Brooklyn; Ph.D. 1962, Syracuse University.

Robert G. Greenway (1969) ..... Associate Professor of Psychology
B.S. 1955, University of Washington; M.A. 1966, Brandeis University.

Theodore Grivas (1962) ..... Professor of History
B.A. 1952, M.A. 1953, Ph.D. 1958, University of Southern California.

Robert K. Gronendyke (1968) ..... Professor of Art
B.A. 1955, M.A., 1960, California State College, Long Beach.

William H. Guynn (1968) ..... Professor of French
B.A. 1963, University of California, Berkeley; M.A. 1964, Middlebury College; Ph.D. 1980, University of California, Berkeley.

Martha Haggard (1981) ..... Associate Professor of Education
B.S.E. 1967, Central Missouri State University; M.A. 1971, Northeast Missouri State University; Ph.D. 1976, University of Missouri.

Betty W. Halpern (1968) ..... Professor of Education
B.A. 1949, M.A. 1960, Ed.D. 1968, University of California, Berkeley.

David F. Hanes (1969) ..... Professor of Biology
B.A. 1959, Wittenberg University; M.S. 1961, University of Michigan; Ph.D. 1971, Oregon State University.

Dennis E. Harris (1965) ..... Professor of History
B.A. 1960, M.A. 1962, Ph.D. 1969, University of California, Santa Barbara.

Marcia K. Hart (1972) ..... Associate Professor of Health Sciences and Physical Education
B.A. 1961, California State University, Los Angeles; M.A. 1972, Ball State University.

Gerald W. Haslam (1967) ..... Professor of English
B.A. 1963, M.A. 1965, San Francisco State College; Ph.D. 1980, Union Graduate School.

Sue E. Hayes (1974) ..... Professor of Economics
B.A. 1965, Stanford University; M.S. 1973, Ph.D. 1975, University of California, Berkeley.

Daniel L. Haytin (1971) ..... Associate Professor of Sociology
B.A. 1966, M.A. 1968, D. Crim. 1969, University of California, Berkeley.

Richard H. Hendrickson (1970) ..... Professor of English
B.A. 1959, University of California, Santa Barbara; B.S. 1960, University of Wisconsin; Ph.D. 1968, University of Connecticut.

Colin O. Hermans (1969) ..... Professor of Biology
B.A. 1958, Pomona College; M.S. 1964, Ph.D. 1966, University of Washington.

Elizabeth C. Herron (1970) ..... Assistant Professor, Mentor Program
B.A. 1964, M.A. 1966, San Francisco State University.

Wyman W. Hicks (1968) ..... Professor of Management Studies
B.A. 1947, M.A. 1948, University of California, Berkeley.

Manuel J. Hidalgo (1971) ..... Assistant Professor of Mexican-American Studies
B.A. 1968, California State College, Hayward; M.A. 1985, San Jose State University.

Arthur Hills (1969) ..... Professor of Music
B.A. 1953, Cascade College; M.A. 1955, University of Portland.

Janice E. Hitchcock (1972) ..... Professor of Nursing
B.S. 1960, Simmons College; M.S. 1966, University of California, San Francisco.

Vincent D. Hoagland, Jr. (1969) ..... Professor of Chemistry
B.A. 1962, Wesleyan University; Ph.D. 1967, Florida State University.

LeVell Holmes (1969) ..... Professor of History
B.A. 1957, M.A. 1961, San Francisco State College; Ph.D. 1977, University of California, Berkeley.

John D. Hopkirk (1969) ..... Professor of Biology
B.A. 1957, Sacramento State College; M.A. 1962, Ph.D. 1967, University of California, Berkeley.

Laurence J. Horowitz (1969) ..... Professor of Psychology
B.S. 1949, Long Island University; B.A. 1949, University of California, Berkeley; M.A. 1954, San Francisco State College; Ph.D. 1967, Stanford University.

Sally Hurtado-Lopez (1972) ..... Assistant Professor of Education
B.A. 1965, California State College, Long Beach; M.S. 1968, University of Southern California.

Donald E. Isaac (1963) ..... Professor of Biology
B.A. 1949, Chico State College; M.A. 1953, Ph.D. 1967, University of California, Berkeley.

George A. Jackson, Jr. (1970) ..... Professor of Psychology
B.S. 1946, New Mexico State University; M.S. 1948, University of Illinois; Ph.D. 1969, Claremont Graduate School.

Bernd Jager (1969) ..... Professor of Psychology
B.A. 1962, M.A. 1963, San Francisco State College; Ph.D. 1965, Duquesne University.

Carl M. Jensen (1973) ..... Professor of Communications Studies
B.A. 1971, M.A. 1972, Ph.D. 1977, University of California, Santa Barbara.

Donald O. Johnson (1966) ..... Professor of History
B.A. 1952, University of Minnesota; M.A. 1957, Ph.D. 1960, Columbia University.

George C. Johnson (1975) ..... Associate Professor of Management
B.S. 1954, M.S. 1963, Ph.D. 1972, University of California, Berkeley.

Robert H. Johnson (1973) ..... Professor of Mathematics
B.A. 1960, M.A. 1965, University of California, Berkeley; Ph.D. 1974, Virginia Polytechnic Institute and University.

William T. Johnson (1969) ..... Professor of Music
B.A. 1964, Princeton University; M.A. 1966, University of California, Berkeley.

Paul V. Juhl (1970) ..... Professor of Management Studies
B.A. 1940, University of Iowa; L.L.B. 1948, University of Iowa Law School; M.S. 1964, San Francisco State College.

Richard H. Karas (1974) ..... Professor of Physics & Astronomy
B.A. 1964, M.A. 1966, Ph.D. 1970, University of California, Berkeley.

Robert A. Karlsrud (1970) ..... Associate Dean, School of Social Sciences; Professor of History
B.A. 1961; University of California, Berkeley; M.A. 1965, Ph.D. 1972, University of California, Los Angeles.

Eli Katz (1970) ..... Professor of Linguistics
B.S.S. 1949, College of the City of New York; M.A. 1959, Ph.D. 1963, University of California, Los Angeles.

Anthony J. Kehl (1982) ..... Head Football Coach in Intercollegiate Athletics
B.A. 1969, Humboldt State University.

Marvin L. Kientz (1967) ..... Professor of Chemistry
B.A. 1958, M.A. 1959, Fresno State College; Ph.D. 1966, University of Western Ontario, Canada.

Chris K. Kjeldsen (1966) ..... Professor of Biology
B.A. 1960, M.S. 1962, University of Pacific; Ph.D. 1966, Oregon State University.

Kathryn L. Klein (1971) ..... Associate Professor of Health Sciences and Physical Education
B.S. 1960, University of Michigan; M.A. 1966, University of Washington; Ph.D. 1971, University of Southern California.

James L. Kormier (1966) ..... Associate Professor of English
B.A. 1951, University of California, Berkeley; M.A. 1962, San Francisco State College.

John F. Kramer (1970) ..... Professor of Political Science
B.A. 1959, Miami University; M.S. 1961, University of Illinois; Ph.D. 1969, Massachusetts Institute of Technology.

Walter E. Kuhlman (1969) ..... Professor of Art
B.A. 1941, University of Minnesota; Certificate, California School of Fine Arts; Certificate, Académie de la Grande Chaumiére; Certificate, St. Paul School of Art.

Albert A. Laferriere (1967) ..... Associate Professor of History
B.A. 1956, M.A. 1958, Fresno State College.

Carol Ann Landis (1976) ..... Associate Professor in Nursing
B.S.N. 1968, University of Pittsburgh; M.S. 1973, University of California, San Francisco.

George Ledin, Jr. (1984) ..... Professor of Computer Science
B.S. 1967, University of California, Berkeley; J.D. 1982, University of San Francisco.

Ardath M. Lee (1972) ..... Dean of Academic Programs; Professor of English, Hutchins School of Liberal Studies
B.A. 1955, Michigan State University; M.A. (Humanities) 1961, M.A. (English) 1963, M.A. (Art History) 1965, Ph.D. 1972, Wayne State University.

William R. Lee (1969) ..... Professor of English
B.A. 1964, M.A. 1966, Wayne State University; Ph.D. 1972, University of Connecticut.

Raymond G. Lemieux (1970) ..... Professor of French
B.A. 1958, Northeastern University; M.A. 1960, University of Iowa; Certificate 1961, University of Paris; Ph.D. 1969, University of Iowa.

Stephen Lewis (1982) ..... Professor of Economics
B.A. 1963, University of California, Davis; Ph.D. 1969, University of California, Santa Barbara.

Wingham Liddell (1971) ..... Professor of Management Studies
M.A. 1967, M.B.A. 1967, Ph.D. 1969, University of California, Berkeley.

Howard Limoli (1966) ..... Associate Professor of French
B.A. 1954, Rutgers University; M.A. 1963, University of California, Berkeley.

Han-sheng Lin (1969) ..... Professor of History
B.A. 1954, National Taiwan University; M.A. 1958, University of South Carolina; Ph.D. 1967, University of Pennsylvania.

Michael G. Litle (1985) ..... Assistant Professor of Communications Studies
B.A. 1967, Dartmouth College; M.A. 1970, Stanford University; Ph.D. 1977, Union for Experimenting Colleges and Universities.

Wallace M. Lowry (1969) ..... Professor of Management Studies
B.A. 1955, Stanford University; M.B.A. 1969, University of California, Berkeley; CPA.

Frederick W. Luttmann (1970) ..... Professor of Mathematics
B.A. 1961, Amherst College; M.S. 1963, Stanford University; Ph.D. 1967, University of Arizona.

Robert E. Lynde (1969) ..... Professor of Health Sciences and Physical Education
B.A. 1954, M.A. 1960, Sacramento State College; M.S. 1968, Ed.D. 1969, University of Oregon.

Nancy E. Lyons (1971) ..... Professor of Theatre Arts
B.A. 1966, University of California, Berkeley; M.A. 1968; Mills College.

Duncan M. MacInnes (1970) ..... Associate Professor of Education
B.A. 1960, University of British Columbia; M.A. 1966, San Francisco State College.

Vivian A. Malmstrom (1972) ..... Professor of Nursing
B.S. 1958, University of California, San Francisco; M.S. 1960, University of Colorado.

Kenneth K. Marcus (1967) ..... Professor of Criminal Justice Administration
B.A. 1952, M.A. 1953, University of Michigan; Ph.D. 1961, University of Illinois.

Daniel W. Markwyn (1970) ..... Professor of History
B.A. 1959, University of Colorado; M.A. 1967, San Jose State College; Ph.D. 1970, Cornell University.

Donald D. Marshall (1966) ..... Professor of Chemistry
B.A. 1957, University of California, Davis; M.S. 1958, University of Nevada; Ph.D. 1965, Washington State University.

Leonide L. Martin (1974) ..... Professor of Nursing
B.S. 1963, McNeese State College; M.S. 1967, F.N.P. 1973, University of California, Los Angeles; M.P.H. 1979, Dr. P.H. 1983, University of California, Berkeley.

R. Douglas Martin (1984) ..... Associate Professor of Chemistry and Science Education
B.S. 1969, California State University, Sacramento; Ph.D. 1973, University of California, Berkeley.

Peter Maslan (1985) ..... Lecturer in Theatre Arts
B.A. 1964, University of Washington; M.A. 1968, San Francisco State University.

Marylu C. Mattson (1970) ..... Professor of English, Hutchins School of Liberal Studies
B.S. 1955, Mount Saint Mary's College; M.A. 1964, University of California, Los Angeles; Ph.D. 1970, University of Southern California.

Marylou McAthie (1984) ..... Professor of Nursing
B.S. 1953, M.S. 1956, DePaul University; Ed.D. 1980, University of San Francisco

George E. McCabe (1961) ..... Professor of Psychology
B.A. 1941, University of California; M.A. 1952, Ed.D. 1953, Teachers College, Columbia University.

William E. McCreary (1966) ..... Professor of Psychology, Arts & Humanities
B.A. 1951, Westminster College; M.A. 1955, Columbia University; Ph.D. 1962, University of Wisconsin.

Stanley V. McDaniel (1966) ..... Associate Professor of Philosophy
B.A. 1953, University of California, Santa Barbara; M.A. 1964, University of California, Los Angeles.

Susan R. McKillop (1975) ..... Associate Professor of Art
A.B. (English), B.J. (Journalism), 1951, University of Missouri, Columbia; M.A. 1953, University of California, Berkeley; Ph.D. 1966, Harvard University.

M. Joyce McLaughlin (1984) ..... Associate Professor of Management Studies
B.B.A. 1978, Pace University; M.B.A. 1980, University of Pittsburgh.

Peter J. D. Mellini (1970) ..... Professor of History
B.A. 1962, M.A. 1965, Ph.D. 1971, Stanford University.

Herminia Q. Menez (1970) ..... Professor of American Multi-Cultural Studies
B.A. 1955, St. Scholastica's College; M.A. 1956, Dominican College; Ph.D. 1973, University of Pennsylvania.

Edith P. Menrath (1964) ..... Associate Professor of Psychology
Higher School Certificate, 1950, Cambridge University; License-ès-Lettres, 1954, University of Paris, France.

Charles H. Merrill (1969) ..... Professor of Psychology
B.S. 1961, M.S. 1962, East Texas State University; Ed.D. 1968, University of Florida.

Jean A. Merriman (1974) ..... Associate Professor of Environmental Studies and Planning
B.A. 1961, University of Utah; M.A. 1966, San Jose State University; Ph.D. 1972, University of Pittsburgh.

Louallen F. Miller (1971) ..... Associate Professor of Political Science, Hutchins School of Liberal Studies
B.A. 1963, Occidental College; M.A. 1968, Ph.D. 1975, University of California, Santa Barbara.

Claude R. Minard, Jr. (1968) ..... Professor of Geography
B.S. 1953, M.S. 1954, Stanford University; Ph.D. 1971, University of California, Berkeley.

Carroll V. Mjelde (1968) ..... Associate Dean, Education; Professor of Education
B.A. 1955, M.A. 1962, Ph.D. 1964, University of Washington.

Edward F. Mooney (1968) ..... Professor of Philosophy
B.A. 1962, Oberlin College; M.A. 1966, Ph.D. 1968, University of California, Santa Barbara.

Fred A. Moore (1974) ..... Associate Professor of Counseling
B.A. 1955, University of California, Los Angeles; M.S. 1962, California State College, Los Angeles; Ed.D. 1971, University of Southern California.

William P. Morehouse (1967) ..... Professor of Art
B.F.A. 1954, San Francisco Art Institute; M.A. 1956, San Francisco State College.

Edgar W. Morse (1970) ..... Associate Professor of History, Hutchins School of Liberal Studies
B.S. 1951, Illinois Institute of Technology; M.A. 1965, Ph.D. 1972, University of California, Berkeley.

Susan G. Moulton (1971) ..... Professor of Art
B.A. 1966, University of California, Davis; M.A. 1969, Ph.D. 1977, Stanford University.

J. Anthony Mountain (1970) ..... Professor of English Hutchins School of Liberal Studies
B.A. 1961, Columbia University; M.A. 1966, Ph.D. 1970, University of Washington.

Rose Murray (1972) ..... Associate Professor of Nursing
B.S. 1966, University of British Columbia; M.S. 1968, University of California, San Francisco Medical Center.

Judy L. Navas (1977) ..... Associate Professor of Theatre Arts
B.A. 1970, University of California, Berkeley; M.A. 1973, San Francisco State University.

Thomas C. Nelson (1969) .....Professor of Mathematics
B.S.E.E. 1961, M.S.E.E. 1963, Santa Clara University; Ph.D. 1969, Oregon State University.

H. Andrea Neves (1972) ..... Associate Professor of Education
B.A. 1967, Universidad de las Americas, Mexico City; M.A. 1972, California State University, Sacramento; Ph.D. 1984, Stanford University.

Michael S. Noble (1985) .....Professor of Management Studies
B.A. 1972, University of Arizona; M.B.A. 1973, Ph.D. 1978, Arizona State University.

Thomas F. Nolan (1983) ..... Professor of Nursing
B.A. 1961, Saint John's University; B.S. 1972, Cornell University; M.A. 1974, New York University; M. Divinity 1974, Saint John's University; Ph.D. 1980, New York University.

Philip T. Northen (1970) ..... Professor of Biology
B.A. 1963, Grinnell College; M.A. 1968, Ph.D. 1970, University of Wisconsin.

Stephen A. Norwick (1974) .... Associate Professor of Environmental Studies and Planning
B.A. 1965, Pomona College; M.A. 1967, Dartmouth College; Ph.D. 1971, University of Montana.

Bobby L. Nugent (1985) .....Associate Professor of Art, Gallery Director
B.A. 1970, M.F.A. 1971, University of California, Santa Barbara

Warren E. Olson (1962) .....Professor of Philosophy, Hutchins School of Liberal Studies
B.A. 1948, University of Denver; M.A. 1950, University of Washington, Ph.D. 1954, University of Minnesota.

Steven C. Orlick (1982)..... Associate Professor of Environmental Studies and Planning
B.A. 1969, University of California, Santa Barbara; M.U.P. 1971, Ph.D. 1975, University of Washington.

John T. Palmer (1967) ..... Professor of Counseling
B.S. 1943, University of Southern Mississippi; M.A. 1947, Teachers College, Columbia University; Ph.D. 1957, University of Southern California.

Sue Taylor Parker (1971) .....Professor of Anthropology
A.B. 1966, M.A. 1969, Ph.D. 1973, University of California, Berkeley.

Don R. Patterson (1970) .....Professor of English
B.A. 1959, North Texas State College; M.A. 1965, North Texas State University.

Richard W. Paul (1969)..... Professor of Philosophy
B.A. 1960, Northern Illinois University; M.A. (English) 1961, M.A. (Philosophy) 1965, Ph.D. 1968, University of California, Santa Barbara.

David W. Peri (1969) ..... Associate Professor of Anthropology
B.A. 1960, San Francisco State College.

Cheryl J. Petersen (1961) ..... Professor of Political Science
B.A. 1948, Ph.D. 1960, University of California, Berkeley.

Charles J. Phillips (1968) .....Professor of Mathematics
B.A. 1948, M.A. (Mathematics) 1963, San Jose State College; M.A. (Education) 1949, Stanford University; Ph.D. 1969, Oregon State University.

Robert G. Plantz (1983) .....Professor of Computer Science
B.S. 1962, University of California, Berkeley; M.S.E.E. 1964, San Jose State College; Ph.D. 1971, University of California, Berkeley.

William H. Poe (1970) ..... Professor of History
B.A. 1963, Duke University; B.D. 1966, Princeton Theological Seminary; M.A. 1969, Ph.D. 1971, Brandeis University.

Duncan E. Poland (1965) ..... Professor of Physics & Astronomy
B.S. 1957, University of Michigan; Ph.D. 1963, University of Wisconsin.

Glenn W. Price (1967) ..... Professor of History
B.A. 1940, Là Verne College; A.M. 1950, Ph.D. 1966, University of Southern California.

Deborah Robyn Priddy (1971) ..... Professor of Education
B.A. 1959, California State University, Los Angeles; M.A. 1969, Ed.D. 1971 University of California, Los Angeles.

George L. Proctor (1968) ..... Professor of Philosophy
B.A. 1950, M.A. 1955, Ph.D. 1957, University of Virginia.

Kathleen A. Puntillo (1979)..... Associate Professor of Nursing
B.S. 1976, Sonoma State University; M.S. 1978, University of California, San Francisco.

Wright W. Putney (1961) .....Professor of Art, Arts & Humanities
B.A. 1950, M.A. 1951, New Mexico Highland University; Ph.D. 1955, Pennsylvania State University.

Charles F. Quibell (1970) ..... Professor of Biology
B.A. 1958, Pomona College; Ph.D. 1972, University of California, Berkeley.

Saeid Rahimi (1982)..... Associate Professor of Physics & Astronomy
B.S. 1971, M.S. 1973, Pahlavi University; Ph.D. 1981, Pennsylvania State University, University Park.

Gerald W. Redwine (1964).....Professor of Psychology
B.A. 1950, Sacramento State College; M.A. 1952, Ph.D. 1959, University of Southern California.

William L. Reynolds (1972).....Associate Dean, School of Business and Economics; Associate Professor of Management Studies
B.A. 1969, Sonoma State College; M.B.A. 1974, California State University, Sacramento.

Charles H. Rhinehart (1961) ..... Professor of Education
B.A. 1948, San Jose State; M.A. 1955, Stanford University.

Frederick J. Rider (1972) .....Associate Professor of Humanities, Hutchins School of Liberal Studies
B.A. 1951, Yale University; M.A. 1953, University of Washington; Ph.D. 1972, University of California, Santa Cruz.

A. Richard Rizzo (1974) ..... Associate Professor of Education
B.A. 1964, M.A. 1969, San Francisco State University; Ph.D. 1974, University of California, San Francisco.

Walter Rohwedder (1981) ..... Assistant Professor of Environmental Studies and Planning
B.A. 1976, University of California, Irvine; M.S. 1978, University of Michigan.

Pablo J. Ronquillo (1968) ..... Professor of Spanish
B.A. 1954, M.A. 1958, Tulane University; Diploma, 1959, Università per Stranieri, Perugia, Italy; Certificate, 1960, Universitá de Lausanne, Switzerland; Ph.D. 1969, Louisiana State University, Baton Rouge.

Gerald Rosen (1971) .....Lecturer in English
B.E.E. 1960, Rensselaer Polytechnic Institute; M.B.A. 1962, M.A. 1966, Ph.D. 1969, University of Pennsylvania.

R. Thomas Rosin (1970) ..... Professor of Anthropology
B.A. 1960, Reed College; Ph.D. 1968, University of California, Berkeley.

G. Edward Rudloff (1961) ..... Professor of Health Sciences and Physical Education
B.A. 1948, San Jose State College; M.A. 1949, Ed.D. 1955, Stanford University; M.P.H. 1962, University of California, Berkeley.

Robert R. Rueping (1966) ..... Professor of Psychology
B.S. 1954, M.S. 1956, University of Wisconsin; Ed.D. 1967, University of Oregon.

E. Gardner Rust (1968) ..... Professor of Music
B.A. 1957, University of California, Los Angeles; M.A. 1959, Ph.D. 1970, University of California, Berkeley.

Douglas S. Rustad (1969) ..... Professor of Chemistry
B.S. 1962, M.S. 1964, University of Washington; Ph.D. 1967, University of California, Berkeley.

Roshni Rustomji (1973) ..... Professor of India Studies
B.A. 1961, American University of Beirut; M.A. 1963, Duke University; Ph.D. 1972, University of California, Berkeley.

Carolyn L. Saarni (1980) ..... Associate Professor in Counseling
B.A. 1967, University of California, Berkeley; M.A. 1969, Ph.D. 1971, University of California, Berkeley.

Alan F. Sandy, Jr., (1971) ..... Professor of English
B.A. 1954, Amherst College; Diplôme de langue 1958, Sorbonne, Paris; M.A. 1961, Ph.D. 1965, University of California, Berkeley.

Gene D. Schaumberg (1965) ..... Professor of Chemistry
B.S. 1961, Pacific Lutheran University; Ph.D. 1965, Washington State University.

Sandra Schickele (1972) ..... Professor of Management Studies
B.A. 1962, M.A. 1970, Ph.D. 1977, University of Chicago.

Jeannine E. Schüler-Will (1972) .... Associate Professor of Humanities, Hutchins School of Liberal Studies
B.A. 1964, University of Colorado; M.A. 1967, University of California, Berkeley.

Mary D. Searight (1971) ..... Professor of Nursing
B.S. 1960, University of California, Berkeley; M.S. 1961, University of California, San Francisco; Ed.D. 1980, University of San Francisco.

Sara Sharratt (1976) ..... Professor in Counseling
B.A. 1965, M.A. 1968, George Washington University; Ph.D. 1971, Southern Illinois University.

Brian T. Shears (1970) ..... Director, International Studies and Sonoma State American Language Institute; Professor of Education
B.A. 1958, University of Wales; M.A. 1960, Ph.D. 1970, University of Minnesota.

Robert J. Sherman (1970) ..... University Tutor; Professor of Biology
B.A. 1962, Coe College; M.S. 1966, Ph.D. 1968, Oregon State University.

William M. Sherman (1969) .. .. Associate Dean, Performing Arts; Professor of Theatre Arts
B.F.A. 1949, Pratt Institute.

Shirley K. Silver (1970) ..... Professor of Anthropology
B.A. 1949, Ph.D. 1966, University of California, Berkeley.

Thalia Silverman (1969) ..... Professor of Education
B.S. 1949, M.A. 1956, Northwestern University; Ph.D. 1975, University of California, Berkeley.

Frank R. Siroky (1964) ..... Professor of Psychology
B.S. 1952, John Carroll University; M.A. 1954, Fordham University; Ph.D. 1964, Duquesne University.

Harold R. Skinner (1965) ..... Professor of Education
B.A. 1949, Earlham College; M.S. 1958, Ed.S. 1960, Ed.D. 1963, Indiana University.

Robert W. Slagle (1970) ..... Professor of Psychology
B.S. 1963, University of New Mexico; Ph.D. 1968, University of California, Berkeley.

David L. Sloss (1970) ..... Professor of Music
B.A. 1962, Harvard University; M.A. 1968, Stanford University.

Robert A. Smith (1969) ..... Professor of Political Science
B.A. 1962, Yale University; M.A. 1964, Ph.D. 1971, University of California, Berkeley.

William V. Smith (1978) ..... Assistant Professor in Native American Studies
B.A. 1953, M.A. 1960, Chico State College.

Larry A. Snyder (1971) ..... Professor of Music
B.A. 1950, Whittier College; M.A. 1952, University of Rochester.

Robert P. Sorani (1966) ..... Professor of Health Sciences and Physical Education
B.S. 1958, M.S. 1959, Ph.D. 1967, University of Southern California.

Eugene H. Soules (1965) ..... Professor of English
B.A. 1957, M.A. 1958, San Francisco State College; Ph.D. 1966, University of the Pacific.

Gordon G. Spear (1974) ..... Professor of Physics & Astronomy
B.A. 1966, Ph.D. 1973, University of Pennsylvania.

Jean B. Y. Chan Stanek (1973) ..... Professor of Mathematics
B.S. 1960, M.S. 1961; University of Chicago; Ph.D. 1971, University of Calfornia, Los Angeles.

Clarice Stasz (1970) ..... Professor of Sociology
B.A. 1962, Douglass College; M.A. 1964, University of Wisconsin; Ph.D. 1967, Rutgers University.

John M. Steiner (1968) ..... Professor of Sociology
B.A. 1952, University of Melbourne; M.A. 1956, University of Missouri; Ph.D. 1967, University of Freiburg.

James C. Stewart (1975) ..... Associate Professor of Environmental Studies and Planning
B.A. 1961, Wesleyan University; M.A. 1968, Ph.D. 1977, University of Hawaii.

Jacqueline Strain (1970) ..... Professor of History, Hutchins School of Liberal Studies
B.A. 1958, M.A. 1959, Ph.D. 1964, University of California, Berkeley.

H. Gordon Tappan (1961) ..... Professor of Psychology
B.A. 1950, Stanford University; M.A. 1953, San Francisco State College; Ph.D. 1974, Saybrook Institute.

Henry Taylor (1981) ..... Lecturer in Management Studies
B.S. 1966, San Jose State University; M.B.A. 1970, University of Santa Clara; CPA 1980.

Keith L. Taylor (1985) ..... Professor of Management Studies
B.S. 1952, Antioch University; M.A. 1972, American Graduate School of International Management; D.B.A. 1981, Arizona State University.

Robert W. Tellander (1971) ..... Associate Professor of Sociology
B.A. 1960, Princeton University; M.A. 1966, University of California, Berkeley.

Philip O. Temko (1964) ..... Professor of Philosophy
B.A. 1949, M.A. 1950, Columbia University; Ph.D. 1968, Stanford University.

Joseph S. Tenn (1970) ..... Professor of Physics & Astronomy
B.S. 1962, Stanford University; M.S. 1966, Ph.D. 1970, University of Washington.

David A. Thatcher (1969) ..... Professor of Education
B.A. 1947, Swarthmore College; M.A. 1949, University of Pennsylvania; Ed.D. 1965, University of California, Berkeley.

Hobart F. Thomas (1961) ..... Professor of Psychology, Arts & Humanities
B.A. 1947, Southern Methodist University; M.A. 1948, Ph.D. 1951, Stanford University.

Sue A. Thomas (1972) ..... Professor of Nursing
B.S. 1960, University of California, San Francisco; M.S. 1969, Boston University; Ed.D. 1985, University of San Francisco.

Ellen Kay Trimberger (1975) ..... Professor of Women's Studies
B.A. 1962, Cornell University; M.A. 1963, Ph.D. 1969, University of Chicago.

Dale B. Trowbridge (1969) ..... Professor of Chemistry
B.A. 1961, Whittier College; M.S. 1964, Ph.D. 1970, University of California, Berkeley.

Ella M. Trussell (1965) ..... Professor of Health Sciences and Physical Education
B.A. 1950, M.A. 1952, Ed.D. 1966, University of California, Berkeley.

Delmar S. Valleau (1966) ..... Professor of Management Studies
B.S. 1959, M.B.A. 1960, Ph.D. 1967, University of California, Los Angeles.

Richard A. Van Gieson (1963) ..... Professor of Economics
B.A. 1958, Sacramento State College.

David W. Van Nuys (1971) ..... Professor of Psychology
B.A. 1962, University of Pennsylvania; M.A. 1964, Montana State University; Ph.D. 1970, University of Michigan.

Rosa Vargas-Arandia (1966) ..... Associate Professor of Spanish
B.M. 1953, M.M. 1955, University of Missouri, Kansas City; B.A. 1956, Saint Mary College, Kansas.

Walter R. Vennum (1971) ..... Professor of Geology
B.A. 1964, University of Montana; Ph.D. 1971, Stanford University.

Thomas R. Volk (1966) ..... Professor of Mathematics
B.A. 1961, M.A. 1963, San Francisco State College.

Albert L. Wahrhaftig (1969) ..... Professor of Anthropology
B.A. 1957, Stanford University; M.A. 1960, Ph.D. 1975, University of Chicago.

Charles R. Walker (1978) ..... Head Coach in Intercollegiate Athletics
B.S. 1960, Hamline University; M.Ed. 1970, West Chester State University.

L. Arthur Warmoth (1970) ..... Professor of Psychology
B.A. 1959, Reed College; Ph.D. 1967, Brandeis University.

Eva V. Washington (1966) ..... Professor of Education
B.A. 1945, San Jose State College; M.A. 1956, Stanford University; Ed.D. 1962, University of California, Berkeley.

Stephen D. Watrous (1968) ..... Professor of History
B.A. 1961, M.A. 1965, University of Wisconsin; Ph.D. 1970, University of Washington.

Shane Weare (1971) ..... Professor of Art
A.R.C.A. 1963, Royal College of Art, London.

D. Anthony White (1968) ..... Professor of History
B.A. 1958, Stanford University; M.B.A. 1961, University of California, Berkeley; Ph.D. 1968, University of California, Los Angeles.

Janice L. Wilson (1969) ..... Professor of English
B.A. 1957, Stanford University; M.A. 1962, Ph.D. 1969, University of California, Berkeley.

Ann B. Woodhead (1975) ..... Associate Professor of Theatre Arts
M.A. 1982, Sonoma State University.

Judith Wright (1973) ..... Professor of Management Studies
B.A. 1965, DePauw University; M.A. 1967; Ph.D. 1973, Indiana University.

William H. Wright, III (1969) ..... Professor of Geology
B.A. 1965, Middlebury College; M.A. 1967, Indiana University; Ph.D. 1970, University of Illinois.

Joyce Yamada (1982) ..... Associate Professor of Biology
B.A. 1971, M.P.H. 1974, Ph.D. 1982, University of California, Berkeley.

Martha M. Yates (1968) ..... Professor of Health Sciences and Physical Education
B.S. 1960, University of North Carolina; M.A. 1963, San Jose State College; Ph.D. 1969, University of Wisconsin.

Homero E. Yearwood (1974) ..... Professor of Criminal Justice Administration
B.A. 1956, New Mexico Highlands University; Master of Divinity 1959; Master of Religious Education 1960, Golden Gate Theological Seminary; Doctor of Criminology 1972, University of California, Berkeley.

David A. Young (1980) ..... Lecturer in Management Studies
B.A. 1968, Pomona College.

Virginia Young (1974) ..... Associate Professor of Nursing
B.S. 1963, M.S. 1964, University of California, San Francisco Medical Center; M.P.H. 1980, University of California, Berkeley.

William W. Young (1963) ..... Professor of Political Science
B.A. 1947, M.A. 1951, Ph.D. 1956, University of California, Berkeley.

David A. Ziblatt (1969) ..... Professor of Political Science
B.A. 1959, Reed College; M.A. 1961, Ph.D. 1965, University of Oregon.

Richard A. Zimmer (1971) ..... Professor of Anthropology, Hutchins School of Liberal Studies.
B.A. 1962, University of Michigan; M.A. (History) 1964, University of California, Berkeley; M.A. (Anthropology) 1969, Ph.D. 1976, University of California, Los Angeles.

Instructional Faculty, Part-Time

Daniel Abel (1981) ..... Assistant in Mathematics
B.A. 1972, University of Washington.

Charles P. Adams (1985) ..... Lecturer in Education
B.A. California State University, Northridge; M.A. 1980, Sonoma State University.

Melanie Almond (1981) ..... Lecturer in Management Studies
B.A. 1981, Sonoma State University.

Richard J. Andolsen (1985) ..... Visiting Lecturer in Nursing
B.A. 1965, M.A. 1968, University of Dayton; B.A. 1972, Sonoma State University; M.D. 1975, University of California, San Francisco.

Joe E. Armstrong (1984) ..... Lecturer in Environmental Studies & Planning
M.A. 1974, San Jose State University; Ph.D. 1960, University of Texas at Austin.

John Arnold (1977) ..... Emeritus Professor of Biology
B.A. 1932, Fresno State College; M.A. 1934, University of California, Berkeley; Ph.D. 1938, Cornell University.

David J. Ballard (1984) .....Lecturer in Mathematics
B.A. 1963, Harvard University; Ph.D. 1967, Massachusetts Institute of Technology.

Kathleen A. Ballester (1983) .....Lecturer in Computer Science
B.S. 1979, State University of New York College at Buffalo; M.S. 1980, Syracuse University.

Howard E. Barkan (1984) ..... Visiting Lecturer in Nursing
B.A. 1963, Brandeis University; M.A. 1969, University of Chicago; M.P.H. 1975, D.P.H. 1980, University of California, Berkeley.

Thomas A. Barnebey (1974) ..... Lecturer in Physics & Astronomy
B.A. 1964, M.S. 1966, Ph.D. 1971, University of California, Los Angeles.

Raymond S. Barrio (1985).....Lecturer in Mexican-American Studies
B.A. 1947, University of California, Berkeley; B.P.A. 1952, Art Center College of Design.

Terrie Baune (1985) ..... Studio Instructor: Violin
B.M. 1978, Oberlin College.

Christopher B. Beck (1977) ..... Lecturer in Theatre Arts

Lisa M. Beckett (1985)..... Coach in Intercollegiate Athletics
B.A. 1979, Sonoma State University; M.S. 1981, Washington State University.

Roger V. Bell, Jr. (1984) ..... Lecturer in Philosophy
A.B. 1966, University of California, Berkeley; M.A. 1971, San Francisco State University.

James A. Bennyhoff (1975) ..... Visiting Lecturer in Anthropology
B.A. 1948; Ph.D. 1961, University of California, Berkeley.

Susan L. Bernhard (1985) ..... Lecturer in Chemistry
B.A. 1979, Sonoma State University.

Babette Bohn (1985) ..... Lecturer in Art
B.A. 1972, Northwestern University; M.A. 1975, Boston University; Ph.D. 1982, Columbia University.

Robert A. Bordow (1985) ..... Lecturer in Physics & Astronomy
B.S. 1982, M.S. 1983, University of California, Berkeley.

Catherine A. Bridge (1985) .....Lecturer in English
B.A. 1969, University of California, Berkeley; M.A. 1974, San Francisco State University.

Michael G. Brunner (1983) .....Lecturer in English
B.A. 1972, M.A. 1979, San Francisco State University.

Bonnie K. Burleson (1985) ..... Assistant in Biology
B.A. 1983, Sonoma State University.

John Bushnell (1977) ..... Emeritus Professor of Biology
B.S. 1931, M.S. 1932, Ph.D. 1935, University of Wisconsin.

Eileen Carol (1982) ..... Visiting Lecturer in Nursing
B.S.N. 1973, California State University, Los Angeles; M.N., F.N.P. 1981, University of Washington.

Constance M. Chiba (1983) ..... Lecturer in Education
B.A. 1971, University of California, Berkeley; M.A. 1976, University of California, Riverside; Ph.D. 1981, University of California, Berkeley.

Norman E. Clark (1985) ..... Lecturer in Education
B.A. 1951, University of California, Santa Barbara; M.S. 1955, Ed.D. 1974, University of Southern California.

Richard H. Clark (1984) .....Lecturer in Management Studies
B.A. 1970, San Jose State University; M.A. 1983, Sonoma State University.

Mary Ann Clarke (1984) ..... Lecturer in Nursing
B.S. 1956, St. Louis University; M.A. 1959, Columbia University Teachers College.

William B. Clarke (1985) ..... Visiting Lecturer in American Multi-Cultural Studies; Director, Educational Opportunity Program
B.A. 1973, Southern Illinois University; M.A. 1981, Webster College.

Lyle G. Collet (1983) .....Visiting Lecturer in Physical Education
B.A. 1941, San Francisco State College.

Arthur T. Conway (1985) .....Assistant in Biology
B.A. 1984, Sonoma State University.

Linda L. Cotter (1985) .....Head Coach in Intercollegiate Athletics
B.S. 1970, Indiana University, Bloomington; M.S. 1971, Illinois State University; Ph.D. 1978, Indiana University, Bloomington.

Donna Crawford (1981) .....Lecturer in Computer Science
B.S. 1953, University of Minnesota; M.A. 1981, University of California, Los Angeles.

Diana K. Cunningham (1985) .....Assistant in Biology
B.A. (Art) 1979; B.A. (Biology) 1981, Sonoma State University.

Earl F. Couey (1985) ..... Lecturer in Education and English as a Second Language
B.A. 1968, Sonoma State University; M.A. 1975, Dominican College of San Rafael.

Elizabeth H. Craven (1985)..... Lecturer in Theatre Arts
B.S. 1971, University of Tennessee, Knoxville.

Robert V. Dahlstrom (1985) ..... Visiting Lecturer in Biology
B.S. 1949, M.S. 1951, University of Idaho; Ph.D. 1954, Cornell University.

Gayle M. Davis (1984) ..... Lecturer in American Multi-Cultural Studies and English
B.A. 1971, M.A. 1974, Midwestern State University.

Gloria deBlasio (1985) ..... Lecturer in Intensive Learning Experience
B.A. 1964, M.A. 1969, William Paterson College.

Joanne L. del Corral (1984) ..... Lecturer in Physics & Astronomy
B.S. 1983, Sonoma State University.

Mark D. Dennis (1984) .....Lecturer in Management Studies
B.A. 1972, University of California, Santa Cruz; J.D. 1976, California Western School of Law; LL.B. 1977, University of Cambridge.

Anne L. DiPardo (1983) .....Lecturer in English
B.A. 1975, California State University, Northridge; M.A. 1977, University of California, Los Angeles.

Marjorie S. Dunlap (1985) ..... Visiting Lecturer in Nursing
B.A. 1939, University of Missouri-Columbia; M.P.S. 1948, University of Colorado, Boulder; Ed.D. 1959, University of Southern California.

Yoav Elinevsky (1985) ..... Lecturer in Intensive Learning Experience
B.S. 1979, Suffolk University; M.S. 1984, University of New Hampshire.

Brandes S. Elitch (1984) ..... Lecturer in Management Studies
B.A. 1969, Syracuse University; M.B.A. 1976, New York University; J.D. 1982, University of Santa Clara.

Jon A. English (1984) ..... Studio Instructor: Trumpet/Trombone
B.M. 1966, University of Illinois, Urbana-Champaign.

Monica J. Evju (1985) ..... Studio Instructor: Cello

Sandra A. Feldman (1984) ..... Lecturer in Intensive Learning Experience
B.A. 1978, M.A. 1982, Sonoma State University.

Martin D. Fine (1985) ..... Coaching Specialist in Intercollegiate Athletics
B.A. 1985, Western New Mexico University.

Jerold C. Frohmader (1984) ..... Lecturer in Music
B.A. 1960, Central Washington University; M.M. 1965, University of Idaho.

Helen P. Gillotte (1985) ..... Lecturer in Education
B.S. 1963, Illinois State University; M.A. 1973, University of Chicago; Ed.M. 1978, Ed.D. 1983, Harvard University.

Christopher D. Giovacchini (1985) ..... Assistant in Spanish
B.A. 1985, Sonoma State University.

Johanna D. Gladieux (1984) ..... Lecturer in Counseling
B.A. 1967, M.A. 1970, Ph.D. 1975, University of California, Berkeley.

John W. Goelz (1985) ..... Coaching Specialist in Intercollegiate Athletics
B.A. 1976, M.A. 1983, San Francisco State University.

Mel Graves (1982) ..... Lecturer in Music; Studio Instructor: Bass
B.Mus. 1969, San Francisco Conservatory; M.A. 1976, University of California, San Diego.

Elaine L. Greenwood (1985) ..... Visiting Lecturer in Psychology
B.A. 1964, City University of New York-Queens College; M.A. 1983, Sonoma State University.

John P. Gregorian (1985) ..... Lecturer in Intensive Learning Experience
B.A. 1974, Hamilton College; M.A. 1977, Stanford University.

Lyndell E. Grey (1984) ..... Lecturer in English
B.A. 1967, Willamette University; M.A. 1975, University of Missouri, Kansas City; Ed.D. 1978, University of Georgia.

John J. Gyves (1985) ..... Lecturer in Education
B.A. 1959, Siena College; M.S. 1967, Ed.D. 1972, University of Southern California.

Sandra J. Hansen (1984) ..... Lecturer in Communications Studies
B.A. 1970, San Francisco State University.

Vivian Hansen (1982) ..... Lecturer in Education
B.A. 1967, University of California, Berkeley; M.A. 1981, Sonoma State University.

Lynn E. Harris (1985) ..... Visiting Lecturer in Nursing
B.S.N. 1978, M.S.N. 1984, Sonoma State University.

Nancy J. Hauser (1984) ..... Visiting Lecturer in Psychology
B.A. 1977, Northern Michigan University; M.A. 1977, Michigan State University.

William J. Hopper (1985) ..... Visiting Lecturer in Nursing
B.S. 1966, Union College; M.D. 1970, St. Louis University.

Virginia G. Horowitz (1985) ..... Visiting Lecturer in Psychology
B.A. 1940, San Francisco State University; M.A. 1977, Sonoma State University.

John C. Houlihan (1985) ..... Lecturer in Political Science
B.A. 1932, J.D. 1937, University of San Francisco

Ted D. Israel (1983) ..... Lecturer in Management Studies
B.S. 1976, Golden Gate University.

Norman F. Jacobson (1984) ..... Lecturer in Computer Science and Mathematics
B.S. 1950, Ph.D. 1956, California Institute of Technology; B.S. 1984, Sonoma State University.

Matthew J. James (1985) ..... Lecturer in Geology
B.S. 1977, University of Hawaii at Manoa.

Philip A. Jameson (1984) ..... Lecturer in Art
B.F.A. 1977, Oregon State University; M.F.A. 1981, Syracuse University.

Diane E. Johnson (1984) ..... Lecturer in English
B.A. 1950, Brown University; M.A. 1969, San Francisco State University.

Theodore R. Johnson (1975) ..... Lecturer in Management Studies
B.A. 1970, California State College, Long Beach; J.D. 1974, Hastings College of Law, Berkeley.

Warren O. Kahn (1980) ..... Lecturer in Music
B.A. 1972, Ithaca College.

Paul King (1983) ..... Coach in Intercollegiate Athletics
B.A. 1980, Sonoma State University.

Michael Landes (1981) ..... Lecturer in Mathematics
B.A. 1970; M.A. 1977, San Francisco State University.

John B. Landis (1985) ..... Lecturer in Education
B.A. 1950, University of California, Berkeley; M.A. 1955, San Francisco State University; Ed.D. 1978, University of San Francisco.

David R. Lapp (1984) ..... Lecturer in Physics & Astronomy
B.A. 1984, Sonoma State University.

Stephen L. Larson (1983) ..... Lecturer in Management Studies
B.S. 1971, M.B.A. 1982, California State University, Hayward.

Robert J. Latta (1985) ..... Visiting Lecturer in Nursing
B.A. 1960, M.D. 1964, Loma Linda University.

J. Karla Lemon (1983) ..... Lecturer in Music
B.A. 1977, University of California, Berkeley.

Carolyn Lewis (1976) ..... Studio Instructor: Voice
B.S. 1963, Utah State University.

Catherine F. Lewis (1985) ..... Lecturer in Nursing
B.S.N. 1974, San Francisco State University; M.H.S. 1979, University of California, Davis.

Larry M. Levinger (1985) ..... Lecturer in English
B.A. 1970, University of California, Santa Cruz; M.F.A. 1976, University of Montana.

Alan Lipkin (1985) ..... Lecturer in Geography
B.A. 1969, City University of New York-City College; M.A. 1973, Columbia University.

Lawrence Livingston, Jr. (1979) ..... Lecturer in Environmental Studies and Planning
A.B. 1940, Stanford University; J.D. 1947, Yale University; M.C.P. 1949, Massachusetts Institute of Technology.

Ronald Logsdon (1981) ..... Visiting Lecturer in Psychology
B.A. 1968; M.A. 1974, Sonoma State University.

Jennifer A. Lowood (1983) ..... Lecturer in English
B.A. 1975, University of California, Berkeley; M.A. 1981, San Francisco State University.

Miriam H. Lucas (1985) ..... Lecturer in Education
B.A. 1956, M.A. 1960, San Franicso State University.

Michael Lyle (1982) ..... Lecturer in Computer Science
B.S. 1970, M.S. 1972, New Mexico State University, Las Cruces.

J. Bruce Macpherson (1983) ..... Lecturer in Environmental Studies and Planning
B.S. 1963, M.B.A. 1965, San Jose State University.

George E. Marsh (1983) ..... Studio Instructor: Percussion

William A. Marshall (1985) ..... Visiting Lecturer in Nursing
M.D. 1966, University of Michigan-Ann Arbor.

Melvyn K. Martin (1985) ..... Studio Instructor: Saxophone

James McKenna (1985) ..... Visiting Lecturer in Nursing; Director of the Student Health Center
B.S., M.B. 1954, London University.

Val D. McOmber (1984) ..... Lecturer in Physics and Astronomy
B.S. 1974, M.S. 1975, Brigham Young University.

Kim J. McPherson (1985) ..... Visiting Lecturer in Psychology
B.A. 1984, M.A. 1985, Sonoma State University.

William H. McPherson (1984) ..... Visiting Lecturer in Psychology
B.A. 1948, LL.B., J.D. 1951, Stanford University.

Brynar Mehl (1983) ..... Lecturer in Theatre Arts

David Melcon (1981) ..... Lecturer in Mathematics
B.S. 1974, University of California, Berkeley; Ph.D. 1979, University of California, Davis.

Lois M. Meyer (1985) ..... Lecturer in Education
B.A. 1971, Kalamazoo College; M.Ed. 1976, Loyola University.

Bess F. Mixon (1985) ..... Lecturer in Intensive Learning Experience
B.S. 1964, Hampton Institute.

Nakissa Modir (1985) ..... Visiting Lecturer in American Multi-Cultural Studies
B.A. 1970, Pahlavi University (Iran); M.A. 1981, University of Colorado at Denver.

Raymond N. Munoz (1979) ..... Visiting Lecturer in Education
B.A. 1973, San Jose State University.

Brion Murphy (1985) ..... Lecturer in Spanish
B.A. 1981, Sonoma State University.

Macario M. Naranjo (1979) ..... Visiting Lecturer in Physical Education

Eddy Ng (1984) ..... Lecturer in Physics and Astronomy
B.S. 1981, University of California, Berkeley.

Kevin A. Owens (1985) ..... Visiting Lecturer in Nursing
B.S. 1978, University of California, Berkeley; M.D. 1982, University of California, Los Angeles

Hal Payne (1983) ..... Visiting Lecturer in Physical Education
B.A. 1977, M.A. 1979, Sonoma State University.

Ronald A. Pellegrino (1983) ..... Lecturer in Music
B.Mus. 1963, Lawrence University; M.Mus. 1965, Ph.D. 1968, University of Wisconsin, Madison.

Susan F. Peregoy (1985) ..... Lecturer in Education
B.A. 1970, M.A. 1973, University of California, Santa Barbara.

Erlinda Peraza (1985) ..... Lecturer in Mexican-American Studies
B.A. 1976, California State University, Northridge; M.S. 1978, University of Wisconsin, Whitewater.

Simon H. Perkoff (1983) ..... Studio Instructor: Piano

F. James Picchi (1982) ..... Lecturer in Management Studies
B.A. 1959, San Francisco State University; M.A. 1982, Sonoma State University.

Anatol I. Popovich (1985) ..... Coaching Specialist in Intercollegiate Athletics
B.S. 1965, Pratt Institute; M.A. 1976, Columbia University.

John Jay Potter (1982) ..... Coach in Intercollegiate Athletics
B.A. 1980, Sonoma State University.

T. R. Porter (1977) ..... Emeritus Associate Professor of Biology
B.A. 1934, M.A. 1936, University of Nebraska; Ph.D. 1938, University of California, Berkeley.

Roberto Ramirez (1983) ..... Lecturer in Education
B.S. 1970, Sonoma State University.

Steven S. Ranish (1985) ..... Lecturer in Counseling
B.A. 1971, Whittier College; M.A. 1975, California State University, Long Beach; Ph.D. 1978, Vanderbilt University.

Larry Rash (1981) ..... Lecturer in Management Studies
B.A. 1962, Rocky Mountain College; CPA 1977.

Jonah Raskin (1982) ..... Lecturer in English
A.B. 1963, Columbia College; M.A. 1964, Columbia University; Ph.D. 1967, University of Manchester.

Diana C. Reeder (1985) ..... Lecturer in Intensive Learning Experience
B.A. 1969, University of Southern Maine; M.A. 1979, Sonoma State University.

Anthony Reveaux (1981) ..... Lecturer in Art
B.A. 1961, University of Connecticut; M.F.A. 1972, San Francisco Art Institute.

Kathleen L. Reynolds (1984) ..... Studio Instructor: Flute
B.A. 1977, Sonoma State University; M.M. 1980, Manhattan School of Music.

Richard L. Riccardi (1985) ..... Visiting Lecturer in Music
B.M. 1964, Oberlin College; M.M. 1971, Yale University.

Tak Richards (1981) ..... Visiting Lecturer in Psychology
B.A. 1954, Antioch College; Ph.D. 1978, Union Graduate School.

George Rodetis (1981) ..... Lecturer in Art
B.A. 1958; M.A. 1965, San Diego State University; Ph.D. 1974, University of Illinois.

Dianne Romain (1983) ..... Lecturer in Philosophy
B.A. 1968, University of Missouri, Kansas City; M.A. 1970, Ph.D. 1980, University of California, Berkeley.

Philip Rosheger (1979) ..... Studio Instructor: Classical Guitar

Joel Rudinow (1984) ..... Lecturer in Philosophy
B.A. 1968, University of California, Santa Barbara; Ph.D. 1974, University of British Columbia.

Floyd F. Salas (1985) ..... Lecturer in English
B.A. 1964, M.A. 1968, San Francisco State University.

Joaquin J. Sanchez (1984) ..... Visiting Lecturer in Psychology; University Ombudsman/Counselor
B.S. 1961, Loyola Marymount University; M.S. 1963, California State University, Los Angeles; Ph.D. 1983, Saybrook Institute.

Frank Scalercio, Jr. (1979) .....Visiting Lecturer in Physical Education
B.A. 1971, M.A. 1973, Sonoma State University.

John T. Schaeffer (1983) .....Lecturer in Mathematics
B.A. 1981, Sonoma State University.

Stanley Scher (1983) ..... Visiting Lecturer in Biology
B.S. 1950, City University of New York; M.A. 1955, Brooklyn College; Ph.D. 1958, Rutgers University.

Daniel Schmidt (1982) ..... Lecturer in Music
B.A. 1964, Westminster Choir College; M.F.A. 1973, California Institute of the Arts.

Brenda Schuman-Post (1985) ..... Lecturer in Music
B.A. 1970, City University of New York-Queens College; M.M. 1972, State University of New York at Stony Brook; M.F.A. 1974, Sarah Lawrence College.

Roberta T. Seifert (1985) ..... Lecturer in Counseling
B.A. 1969, University of Wisconsin-Madison; M.A. 1970, California State University, Sacramento; Ph.D. 1973, University of Portland.

Alan Siegle (1982) ....Lecturer in Environmental Studies and Planning
B.A. 1977, Sonoma State University.

Dwight D. Simons (1984) ..... Visiting Lecturer in Anthropology
B.S. 1970, University of California, Davis.

Lois Simpson (1981) ..... Lecturer in Nursing
B.S. 1949, M.S. 1957, University of Colorado, Boulder.

David L. Stoller (1985) ..... Visiting Lecturer in Nursing
B.S. 1975, Stanford University; M.D. 1982, Case Western Reserve University.

Everett S. Stone (1984) ..... Lecturer in Physics and Astronomy
B.S. 1941, City University of New York-City College; M.E.E. 1957, Polytechnic Institute of New York.

Inez Storer (1976) ..... Lecturer in Art
B.A. 1970, Dominican College; M.A. 1971, San Francisco State University.

Victoria Strowbridge (1984) ..... Lecturer in American Multi-Cultural Studies
B.A. 1985, Sonoma State University.

Terrence F. Sullivan (1985) .....Assistant in Biology
B.A. 1983, Sonoma State University.

Patricia C. Swensen (1985) ..... Lecturer in History
B.S. 1951, University of Maryland-College Park; M.A. 1975, Sonoma State University; Ph.D. 1981, University of California, Berkeley.

William H. Thomas (1985) ..... Visiting Lecturer in American Multi-Cultural Studies
B.A. 1980, M.A. 1982, Sonoma State University.

Marilyn Thompson (1976) ..... Studio Instructor: Piano
B.M. 1964, San Francisco Conservatory of Music; M.A. 1982, Stanford University.

Hector Timourian (1979) ..... Visiting Lecturer in Biology
B.A. 1955, Ph.D. 1960, University of California, Los Angeles.

Robert R. Van Slambrouck (1980) ....Lecturer in Management Studies
B.A. 1939, Dartmouth College; M.A. 1949, Penn State University.

James Van Tassel (1982) .....Lecturer in Management Studies
B.A. 1967, California State University, Los Angeles; M.Div. 1971, Church Divinity School of the Pacific; M.B.A. 1976, Pepperdine University.

Victor A. Venuta (1985) ..... Coaching Specialist in Intercollegiate Athletics
B.S. 1978, San Jose State University; M.A. 1984, Saint Mary's College of California.

Randall Vincent (1981) .....Studio Instructor: Jazz Guitar

Joan M. Wagele (1985) ..... Lecturer in Intensive Learning Experience
B.A. 1969, University of San Francisco; M.A. 1971, San Francisco State University.

Ernest S. Waugh (1985) ..... Lecturer in BALS (Ukiah)
B.A. 1972, Ph.D. 1982, University of California, Berkeley.

Victoria E. Weisberg (1985) ..... Lecturer in Intensive Learning Experience
B.S. 1974, State University of New York at Buffalo; M.A. 1982, Sonoma State University.

Lois J. Welches (1985) ..... Lecturer in Nursing
B.S. 1955, M.S. 1965, University of California, San Francisco; M.P.H. 1966, University of California, Berkeley; D.N.Sc. 1976, University of California, San Francisco.

James T. Wetzel (1983) .....Visiting Lecturer in Physical Education
B.S. 1975, Point Park College.

Kenneth R. Wildnauer (1984) ..... Lecturer in Physics and Astronomy
B.S. 1979, M.S. 1980, Cornell University.

R. Steve Wilson (1978) .....Lecturer in Mathematics
B.A. 1969, M.A. 1970, Ph.D. 1972, University of California, Santa Barbara.

Robert W. Worth (1983) ..... Lecturer in Music
B.A. 1980, Sonoma State University; M.A. 1982, University of California, Berkeley.

Donna S. Yonash (1982) .....Lecturer in English
B.A. 1966, Ohio Wesleyan University; Ph.D. 1971, University of California, San Diego.

EMERITUS FACULTY

John R. Arnold, B.A., M.A., Ph.D..... Professor of Biology
Appointed 1961, Emeritus since 1976.

Mary R. Arnold, B.A., M.A., Ph.D. ..... Professor of Russian
Appointed 1967, Emeritus since 1983.

Russell H. Broadhead, B.A., M.A., Ph.D. ..... Professor of Education
Appointed 1969, Emeritus since 1976.

Ralph J. Bushnell, B.S., M.S., Ph.D..... Professor of Biology
Appointed 1967, Emeritus since 1977.

Thorsten R. Carlson, B.E., M.A., Ph.D..... Professor of Education
Appointed 1961, Emeritus since 1977.

Robert B. Clayton, B.A., M.A., Ph.D. .....Professor of English
Appointed 1963, Emeritus since 1982.

James B. Enochs, B.A., M.A., Ph.D. ..... Professor of Education
Appointed 1963, Emeritus since 1975.

Johanna Fritsche, B.A., B.S.L.S. ..... Associate Librarian
Appointed 1963, Emeritus since 1982.

Evangeline A. Geiger, B.S.E., M.A., Ed.D. ..... Professor of Education
Appointed 1968, Emeritus since 1981.

Duncan V. Gillies, B.A., M.A., Ed.D. ..... Professor of Psychology
Appointed 1963, Emeritus since 1975.

Bjorn Karlsen, B.A., B.S., M.A., Ph.D. ..... Professor of Education
Appointed 1966, Emeritus since 1985.

Alexander F. Karolyi, B.A., S.J.D., M.A.L.S. ..... Head, Acquisitions Department
Appointed 1962, Emeritus since 1973.

Hector H. Lee, B.A., M.A., Ph.D. ..... Professor of English
Appointed 1961, Emeritus since 1973.

Marie Luethe, B.S., M.L., M.P.A. ..... Librarian
Appointed 1972, Emeritus since 1984.

Norma J. Lyman, B.A., M.S.W. ..... Associate Professor of Psychology
Appointed 1968, Emeritus since 1985.

Antoinette O. Maleady, B.S., M.L.S. ..... Associate Librarian
Appointed 1968, Emeritus since 1982.

Ambrose R. Nichols, Jr., B.S., Ph.D. ..... President and Professor of Chemistry
Appointed 1961, Emeritus since 1976.

A. Steve Pickett, B.A., M.L.S. ..... Library Director
Appointed 1961, Emeritus since 1977.

Thomas R. Porter, B.A., M.A., Ph.D. .. Associate Professor of Biology
Appointed 1968, Emeritus since 1977.

Giovanni Previtali, B.A., M.A., Ph.D. ..... Professor of Spanish
Appointed 1970, Emeritus since 1980.

Mary M. Rich, B.A., M.A., Ph.D. ..... Professor of English
Appointed 1967, Emeritus since 1982.

Kenneth M. Stocking, B.A., M.A., Ph.D. ..... Professor of Biology
School of Environmental Studies and Planning
Appointed 1963, Emeritus since 1979.

Jean A. Young, B.S., M.A., Ed.D. ..... Professor of Education
Appointed 1965, Emeritus since 1984.

Carolyn H. Zainer, B.A., M.A. ..... Associate Professor of English
Appointed 1966, Emeritus since 1980.

ACADEMIC LIBRARIANS

Richard Bellamy (1969) ..... Associate Librarian
B.S. 1947, Northwestern University; M.L.S. 1966, University of California, Berkeley.

Barbara A. Biebush (1962) ..... Librarian
B.A. 1954, Stanford University; M.L.S. 1956, University of California, Berkeley.

Patricia G. Chapman (1968) ..... Associate Librarian
B.A. 1944, Stanford University; M.L.S. 1968, University of California, Berkeley.

B. Jean Day (1968) ..... Librarian
B.A. 1950, B.S. 1951, University of Washington.

Ruth Hafter (1978) ..... Library Director
B.A. 1956, Brandeis University; M.L.S. 1963, Columbia University; Ph.D. 1984, University of California, Berkeley.

Timothy M. Huston (1975) ..... Associate Librarian
B.A. 1967, University of Arkansas, Little Rock; M.L.S. 1969, University of Maryland, College Park; M.A. 1976, Sonoma State University.

Lenore S. Radtke (1962) ..... Librarian
B.A. 1947, University of California; M.S.L.S. 1962, Florida State University.

Sandra D. Walton (1970) ..... Associate Librarian
B.A. 1961; M.L.S. 1963, University of California, Berkeley; M.A. 1975, Sonoma State University.

Patricia M. Wollter (1970) ..... Associate Librarian
B.A. 1966, San Francisco State College; M.L.S. 1967, University of California, Berkeley; M.A. 1979, San Francisco State University.

MEDICAL OFFICERS

Martin H. Bauman, M.D. (1970) ..... Psychiatrist
1959, Northwestern University; 1967, Psy. Res., University of Wisconsin Medical School.

H. G. Lockard, Jr. (1972) ..... Staff Physician
M.D. 1948, Medical College of Virginia.

James McKenna (1984) ..... Director
M.B., B.S., 1954, London University.

Georgia G. Schwartz (1974) ..... Staff Physician
B.A. 1966, University of California, Berkeley; M.D. 1970, University of California, Irvine.

STUDENT AFFAIRS

Claire A. Arnesen (1984) ..... Financial Aid Counselor
B.A., 1968, University of California, Santa Cruz; M.A., 1971, University of California, Santa Barbara.

Marlene Ballaine (1973) ..... Associate Director Admissions Development
B.A., 1975, Sonoma State University.

Lanette Brown (1983) ..... Coordinator, Upward Bound Program
B.A., 1972, Valparaiso University; M.S. 1979, University of Wisconsin.

Keith Brookshaw (1982) ..... Assistant Director, Educational Support Programs
B.A. 1973, University of California, Davis; M.S. 1975, California State University, Hayward.

Rene Broughton (1986) ..... Advisor, Student Affirmative Action
B.A. 1972, California State University, Fullerton.

Philip Brownell (1970) ..... Counselor
B.A. 1961, University of California, Berkeley; M.S. 1971, California State University, Hayward.

L. Rose Bruce (1984) ..... Associate Test Officer/Psychometrist
B.A. 1977, M.A. 1979, California State University, Chico.

Dabah Dobrinen (1984) ..... Activities Advisor, Educational Opportunity Program
B.A. 1976, M.A. 1978, California State University, Chico.

William B. Clarke (1979) ..... Director, Educational Opportunity Program
B.A. 1973, Southern Illinois University; M.A. 1981, Webster College.

Carole Curtis (1976) ..... Associate Director of Financial Aid
B.A. 1970, M.A. 1975, Humboldt State College.

Albert G. Fortin (1974) ..... Financial Aid Counselor
B.A., 1973; M.A., 1974, University of Northern Colorado.

Irene Garmston (1966) ..... Academic Advisor, Advising/Counseling

David Godoy (1982) ..... Outreach Officer, Student Affirmative Action
B.A. 1982, Sonoma State University.

Teri Halverson (1984) ..... Activities Advisor, Student Resource Center
B.A. 1981, Simpson College (Iowa); M.Ed. 1984, University of Missouri.

Jose Hernandez (1986) .... Outreach Officer, College Bound Program
B.A. 1975, California State University, Fullerton.

Letta Hlavachek (1982) ..... Career Advisor, Career Development Center
B.A. 1975, M.A. 1977, Sonoma State University.

Carl Jew (1984) ..... Advisor, Educational Opportunity Program
B.A. 1975, University of California, Berkeley; M.A. 1978, San Francisco State University.

Fred Jorgensen (1968) ..... Registrar
B.A., 1961, California State University, Long Beach; M.A. 1967, University of New Mexico.

Martin D. Lee (1979) ..... Counselor
B.A. 1975, M.A. 1976, San Jose State University.

Linda Lipps (1979) ..... Advisor, Educational Opportunity Program
B.A. 1975, M.A. 1986, Sonoma State University.

Ronald O. Logsdon III (1977) ..... Student Employment Coordinator/Career Advisor
B.A. 1968, M.A. 1974, Sonoma State University.

Patricia A. Marren (1975) ..... Financial Aid Counselor
B.A., 1985, Sonoma State University.

Frank Montana (1984) ..... Community Housing/Conference Manager
B.A. 1969, University of Dayton; M.S. 1976, California State University, Los Angeles.

Charlyne Moten (1983) ..... Coordinator, Learning Center
B.A. 1954, Central State College; M.S. 1965, Temple University; Ed.D. 1977, Nova University.

Louis Naranjo (1974) ..... Evaluations Supervisor Admissions & Records
B.A. 1974, Sonoma State University.

Charles E. Rhodes (1980) ..... Associate Director, Housing
B.S. 1970, M.S. 1972, Virginia Polytechnic State University.

Tak Richards (1974) ..... Director of Reentry Program/Counselor
B.A. 1954, Antioch College; Ph.D. 1978, Union for Experimenting Colleges and Universities.

Joaquin Sanchez (1976) ..... University Ombudsman/Counselor
B.S. 1961, Loyola Marymount University; M.S. 1963, California State University, Los Angeles; Ph.D. 1983, Saybrook Institute.

Virginia G. Smith (1976) ..... Financial Aid Counselor
B.A. 1969, California State University, Fullerton.

Janet Swing (1984) ..... Career Advisor, Career Development Center
B.A. 1978, University of California, Santa Cruz; M.S. 1983, San Francisco State University.

Tim Tiemens (1981) ..... Director of Residence Halls
B.A., 1972, Calvin College; M.A. 1973, Purdue University.

Anthony Tusler (1976) ..... Director of Office for Students with Disabilities
B.A. 1975, Sonoma State University.

George T. Urdzik (1981) ..... Director of Financial Aid
B.A. 1966, University of Steubenville; M.Ed. 1972, University of San Diego.

Tena Webb (1982) ..... Outreach Officer, Educational Opportunity Program
B.A., 1981, University of California, Riverside.

Debra White (1981) ..... Counselor
B.A. 1973, University of California, Los Angeles; M.S. 1978, California State University, Long Beach; Ph.D. 1981, University of California, Santa Barbara.

Karin Winnard (1986) ..... Tutor Coordinator
B.A. 1978, Connecticut College; M.A. 1982, University of California, Irvine.

John R. Wright (1971) ..... Executive Director, Student Union
B.S. 1971, University of California, Davis.



Photo by Duane Strawser

Appendix

Average Annual Costs and Sources of Funds Per Full-Time Equivalent Student

The 19 campses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total State appropriation to the CSU for 1983/84, including capital outlay, is $929,650,300. The total cost of education for CSU, however, is $1,199,787,540 which provides support for a projected 242,460 full-time equivalent (FTE) students.

The total cost of education in the CSU is defined as the expenditures for current operations, including payments made to the students in the form of financial aid, including all fully reimbursed programs contained in State appropriations, but excluding capital outlay appropriations. The average cost of education is determined by dividing the total cost by the total FTEs. The average cost is further differentiated into three categories: State Support (the State appropriation, excluding capital outlay), Student Fee Support, and Support from Other Sources (including Federal Funds).

Thus, excluding costs which relate to capital outlay (i.e., building amortization), the average cost of education per FTE student is $4,948. Of this amount, the average student fee support per FTE is $1,006. The calculation for this latter amount includes the amount paid by nonresident students.

Privacy Rights of Students in Education Records

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (45 C.F.R. 99), and California Education Code Section 67100 et seq, set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to student records maintained by the campus, and the release of such records. In brief, the law provides that the campus must provide students access to records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on the campus. Copies of these policies and procedures may be obtained at the Personnel Office. Among the types of information included in the campus statement of policies and procedures *are*: 1) the types of student records and the information contained therein; 2) the official responsible for the maintenance of each type of record; 3) the location of access lists which indicate persons requesting or receiving information from the record; 4) policies for reviewing and expunging records; 5) the access rights of students; 6) the procedures for challenging the content of student records; 7) the cost which will be charged for reproducing copies of records, and 8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is: The Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Education, 330 "C" Street, Room 4511, Washington, D.C. 20202.

The campus is authorized under the Act to release "directory information" concerning students. "Directory information" includes the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying information which the student requests not be released. Written objections should be sent to the Office of Admissions and Records.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the campus' academic, administrative or service functions and who have reason for using student records connected with their campus or other related academic responsibilities.

Nondiscrimination Policy

Sex

The California State University does not discriminate on the basis of sex in the educational programs or activities it conducts. Title IX of the Education Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of sex in education programs and activities operated by Sonoma State University. Such programs and activities include admission of students and employment. Inquiries concerning the application of Title IX to programs and activities of Sonoma State University may be referred to the Affirmative Action Director, the campus officer assigned the administrative responsibility of reviewing such matters or to the Regional Director of the Office of Civil Rights, Region 9, 1275 Market Street, 14th floor, San Francisco, California 94103.

Handicap

The California State University does not discriminate on the basis of handicap and is in compliance with Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder.

More specifically, The California State University does not discriminate in admission or access to, or treatment or employment in, its programs and activities. Anthony Tusler, Director of the Office for Students with Disabilities, has been designated to coordinate the efforts of Sonoma State University to comply with the Act and its implementing regulations. Inquiries concerning compliance may be addressed to this person at Sonoma State University, 1041 Stevenson Hall. (707) 664-2677.

Race, Color, or National Origin

The California State University complies with the requirements of Title VI of the Civil Rights Act of 1964 and the regulations adopted thereunder. No person shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program of The California State University.

Student Discipline

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Sections 41301 through 41304 of Title 5, *California Administrative Code.* These sections are as follows:

Article 1.1, Title 5, *California Administrative Code*

41301. Expulsion, Suspension and Probation of Students. Following procedures consonant with due process established pursuant to Section 41304, 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 of 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 or her 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 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.
(n) 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 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
    (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.

(o) This Section is not adopted pursuant to Education Code Section 89031.

(p) 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. Disposition of Fees: Campus Emergency; Interim Suspension. 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 student for the semester, quarter, or summer session in which he or she 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 or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension. In the event that a student who has not reached his or her eighteenth birthday and who is a dependent of his or her parent(s) as defined in Section 152 of the Internal Revenue Code of 1954 is suspended or expelled, the President shall notify his or her 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 designated representative, enter any campus of the California State University 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 Sections 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.

41304. Student Disciplinary Procedures for the California State University. The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302, and for qualified admission or denial of admission under Section 41303; the authority of the campus President in such matters; conduct related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancellor shall report to the Board his actions taken under this section.

Determination of Residence for Nonresident Tuition Purposes

The campus Admissions Office determines the residence status of all new and returning students for nonresident tuition purposes. Responses to items 30–34 on the Application for Admission and, if necessary, other evidence furnished by the student is used in making this determination. A student who fails to submit adequate information to establish a right to classification as a California resident will be classified as a nonresident.

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 law governing residence determination for tuition purposes by the California State University is found in *Education Code* Sections 68000–68090, 68121, 68123, 68124, 89705–89707.5, and 90408, and in Title 5 of the *California Administrative Code,* Sections 41900–41912. 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 and who, at the same time, intends to make California his or her permanent home. Steps must be taken at least one year prior to the residence determination date to show an intent to make California the permanent home with concurrent relinquishment of the prior legal residence.The steps necessary to show California residency intent will vary

from case to case. Included among the steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting 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 the parent with whom the minor maintains his or her place of abode. The residence of a minor cannot be changed by the minor or the minor's guardian, so long as the minor's parents are living.

A married person may establish his or her residence independent of spouse.

An adult alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States.

onresident students seeking reclassification are required by law to complete a supplemental questionnaire concerning financial independence.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term. The residence determination dates for the 1984/85 academic year are:

Quarter Term Campuses

Fall
September 20
Winter
January 5
Spring
April 1
Summer
July 1

Semester Term Campuses

Fall
September 20
Winter (Stanislaus Only)
January 5
Spring
January 25

Questions regarding residence determination dates should be directed to the campus Admissions Office which can give you the residence determination date for the term for which you are registering.

There are exceptions from nonresident tuition, including:

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 who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time.
3. Persons below the age of 19 who have lived with and 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 retirement or transfer of the military person outside the state.
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. Certain credentialed, full-time employees of California school districts.
7. Full-time State University employees and their children and spouses. This exception applies only for the mininum time required for the student to obtain California residence and maintain that residence for one year.
8. Certain exchange students.
9. 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.

Any student, following a final campus decision on his or her residence classification, only may make written appeal to:

The California State University
Office of General Counsel
400 Golden Shore
Long Beach, California 90802

within 120 calendar days of notification of the final decision on campus of the classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. 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.

Admission Table

The following table gives high school grade point averages and test scores which together combine to establish eligibility for first-time freshmen. Students earning grade point averages above 3.20 are eligible for admission providing other admission requirements are met. Students earning grade point averages below 2.0 are not eligible for admission.

The minimum eligibility index for California Residents and California high school graduates is: SAT = 3072 and ACT = 741. The method used to compute scores is as follows:

—Multiply the grade point average by 800 and add it to the total SAT score; or
—Multiply the grade point average by 200 and add it to 10 times the composite ACT score.

Eligibility Index Table for California High School Graduates or Residents of California

G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score
Above 3.10 qualifies with any score			2.86	15	710	2.61	20	910	2.36	25	1110	2.11	30	1310
3.10	11	520	2.85	16	720	2.60	21	920	2.35	26	1120	2.10	31	1320
3.09	11	530	2.84	16	730	2.59	21	930	2.34	26	1130	2.09	31	1330
3.08	11	530	2.83	16	730	2.58	21	930	2.33	26	1130	2.08	31	1330
3.07	11	540	2.82	16	740	2.57	21	940	2.32	26	1140	2.07	31	1340
3.06	11	550	2.81	16	750	2.56	21	950	2.31	26	1150	2.06	31	1350
3.05	12	560	2.80	17	760	2.55	22	960	2.30	27	1160	2.05	32	1360
3.04	12	570	2.79	17	770	2.54	22	970	2.29	27	1170	2.04	32	1370
3.03	12	570	2.78	17	770	2.53	22	970	2.28	27	1170	2.03	32	1370
3.02	12	580	2.77	17	780	2.52	22	980	2.27	27	1180	2.02	32	1380
3.01	12	590	2.76	17	790	2.51	22	990	2.26	27	1190	2.01	32	1390
3.00	13	600	2.75	18	800	2.50	23	1000	2.25	28	1200	2.00	33	1400
2.99	13	610	2.74	18	810	2.49	23	1010	2.24	28	1210			
2.98	13	610	2.73	18	810	2.48	23	1010	2.23	28	1210	Below 2.00 does not qualify for regular admission		
2.97	13	620	2.72	18	820	2.47	23	1020	2.22	28	1220			
2.96	13	630	2.71	18	830	2.46	23	1030	2.21	28	1230			
2.95	14	640	2.70	19	840	2.45	24	1040	2.20	29	1240			
2.94	14	650	2.69	19	850	2.44	24	1050	2.19	29	1250			
2.93	14	650	2.68	19	850	2.43	24	1050	2.18	29	1250			
2.92	14	660	2.67	19	860	2.42	24	1060	2.17	29	1260			
2.91	14	670	2.66	19	870	2.41	24	1070	2.16	29	1270			
2.90	15	680	2.65	20	880	2.40	25	1080	2.15	30	1280			
2.89	15	690	2.64	20	890	2.39	25	1090	2.14	30	1290			
2.88	15	690	2.63	20	890	2.38	25	1090	2.13	30	1290			
2.87	15	700	2.62	20	900	2.37	25	1100	2.12	30	1300			

See *Eligibility Index* in the ADMISSION section.

[1] Above 3.2 eligible with any score.

SOURCE OF FUNDS AND AVERAGE COSTS FOR 1983/84 CSU BUDGET (PROJECTED ENROLLMENT: 242,460 FTE)

	Amount	Average Cost Per Student (FTE)[a]	Percentage
Total Cost of Education	$1,199,787,540 [b]	4,948	100.0
—State Appropriation	916,291,300 [c]	3,779	76.4
—Student Fee Support	243,896,427	1,006 [d]	20.3
—Support from Other Sources	39,599,813	163	3.3

[a] For budgetary purposes, full-time equivalent (FTE) translates total head count in to total academic student load equivalent to 15 units per term. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

[b] The total cost of education does not include the amount related to the capital investment of the CSU. The estimated replacement cost of all the systems, permanent facilities and equipment on the 19 campuses is currently valued at $4.4 billion, excluding the cost of land.

[c] This figure does not include the capital outlay appropriation of $13,359,000.

[d] The average costs paid by a student include the State University Fee, Student Services Fee, Application Fee, Catalog Fee and Nonresident Tuition. Individual students may pay less than $1,006 depending on whether they are part-time, full-time, resident or nonresident students.

Measles and Rubella Immunizations Health Screening Provisions

The campus shall notify certain students, born after January 1, 1957, of the CSU requirement to present proof of measles and rubella immunizations by the beginning of the next term of enrollment. At the beginning of the next term of enrollment, those so notified who have not presented acceptable proof of the immunizations shall be notified further of the need to comply before receiving registration materials to enroll for the succeeding term.

Persons subject to these health screening provisions include:

- New students enrolling fall 1986 and later;
- Readmitted students reenrolling fall 1986 and later;
- Students who reside in campus residence halls; (Campuses that do not operate residence halls may delete this reference)
- Students who obtained their primary and secondary schooling outside the United States;
- Students enrolled in dietetics, medical technology, nursing, physical therapy, and any practicum, student teaching, or field work involving preschool-age children, school-age children, or taking place in a hospital or health care setting. (Campuses may modify the list of types of study in this reference as appropriate to their curricula.)

The Student Health Center shall provide immunizations without cost to those students unable to obtain acceptable proof of immunizations.

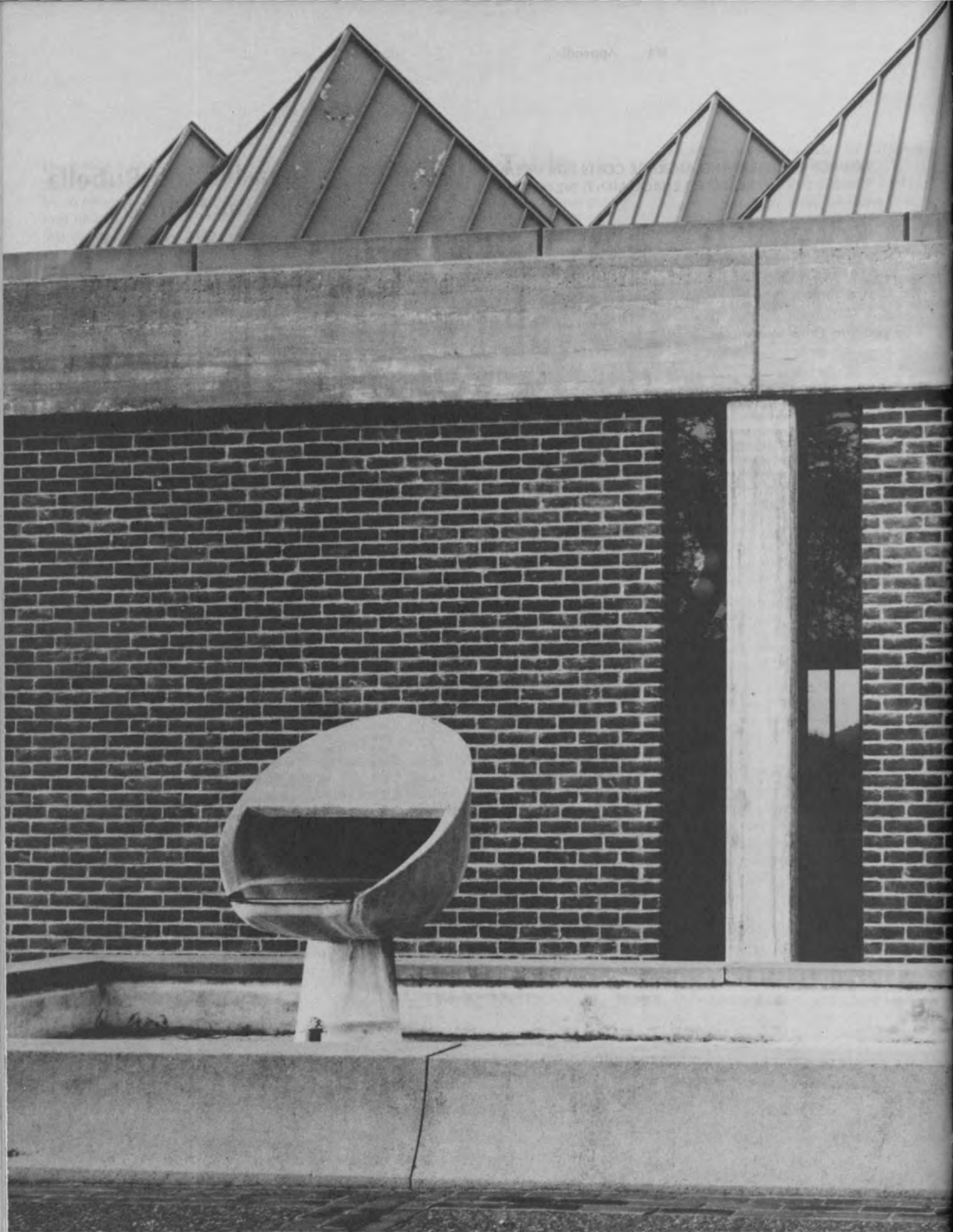


Photo by Ernest Waugh



Index

Index

Academic Advising, 338
Academic Calendar, 3
Academic Load, 320
Academic Records, 324
Academic Renewal, 325
Accounting, 190
Accreditation, 346
Adding and Dropping of Classes, 322
Administration
  California State University, 10
  Sonoma State University, 14
Administrative Academic Probation, 324
Administrative Services Credential, 110
Admission Table, 370
Admission to the University, 305
  Admissions Policies, 306
  Readmission, 310
  Admission Requirements, 307
  Filing Periods, 312
  Foreign Students, 309
  Postbaccalaureate Students, 308
Advanced Placement, 314
Advising Center, 338
Advisory Board, 14
Affirmative Action Policy, 346
Afro-American Studies, 30
Alan Pattee Scholarships, 330
Alumni Association, 347
American Language Institute, 341
American Multi-Cultural Studies, 31
Anthropology, 35
Appendix, 368
Applied Arts, 44
Applied Physics, 255
Aquatic Biology, 60
Archaeology, 35
Art, 46
Arts and Humanities School, 28
Arts Management, 69
Associated Students, 339
Astronomy, 55
Attendance Regulations, 325
Auditors, 321
Bachelor of Arts, Liberal Studies, 58
Biochemistry (Chemistry), 76
Biology, 59
  M.A. Program, 61
Business (Management), 190
California State University, 8, 11
Career Development Center, 339
Career Minors, 69
Career Planning, 24
Career Planning and Placement, 340
Catalog Requirements, 325
Categories of Enrollment, 320
Center for Critical Thinking, 28
Center for Performing Arts, 72
Certificate Programs, 73
Challenge Examinations, 314
Change of Enrollment, 322
Change of Major, 321
Change of Program, 322
Chemistry, 74
Child Care, 339
Children's Center Permit, 106
Class Attendance, 325
College Level Examination Program, (CLEP), 315, 316
Communications Studies, 81
Community Involvement Program, 300
Computer and Information Science, 85
Computing Services, 335
Computer Theory and Applications, 87
Concurrent Enrollment, 321
Consortium of the California State University, 12
Continuing Student Status, 321
Corporate Partners, 347
Counseling Center, 338
Counseling Program, M.A., 91
Creative Writing, 95
Credential Programs, 106
  Administrative Services, 106
  Multiple Subject, Elementary, 107
  Single Subject, Secondary, 108
  Multiple Subject, Early Childhood, 107
  Multiple Subject, Bilingual, 107
  Pupil Personnel Services, 92
  Single Subject/Social Science, 108
  Specialist, Early Childhood, 107

Specialist, Reading, 106
Specialist, Special Education, 106
Credit by Examination, 314
Credit Cards, 329
Criminal Justice Administration, 96
Cultural Resources Management, 38
Cultural Studies (Geography), 150
Curricula, 26
Dance, 289
Dean's List, 323
Debts Owed to the Institution, 330
Degree Listings, 26
Degree Requirements
Baccalaureate, 16
Postbaccalaureate, 21
Dentistry (Pre-Dental Preparation), 60, 269
Determination of Residence, 368
Disabled Students, 343
Disqualification, 324
Double Major, 17
Drama, 289
Early Admission, 313
Earth Sciences (Geography), 150
Ecology (Biology), 60
Economics, 99
Education, 105
M.A. Program, 109
Educational Opportunity Program, 341
Educational Support Programs, 343
Eligibility Index, 370
English, 120
M.A. Program, 122
English As a Second Language (ESL), 137
English Equivalency Examination, 314
English Placement Test, 313
Entry Level Mathematics Examination, 313
Enrollment Regulations, 320
Environmental Studies and Planning, 128
Equivalency Tests, 314
Extended Education, 347
Extension Program, 347
Extension Fees, 329
Faculty, 350
Fee Schedule, 329
Fees and Expenses, 328
Fees, Refund, 329
Field Experience, 340
Fifth Year Programs, 108
Financial Assistance, 328
Foreign Languages and Literatures, 135
Foundation, 347
French, 137
General Education, Disciplinary, 17
General Education, Interdisciplinary, 20, 172
General Information, 346
Geography, 149
Geology, 154
German, 139
Gerontology, 159
Grade Point Average, 323
Grade Reporting, 323
Grading, 322
Grading, Non-Traditional, 322
Grading Symbols, 322
Graduate Students, 308
Graduate Study, 21
Graduation Requirements, 16
Grants, 330
Health Center, 341
Health Sciences, 245
Health Systems Organization, 70
Historic Preservation, 163
History, 163
M.A. Program, 164
Holidays, 3–7
Honors at Graduation, 17
Housing, 341
Humanities Courses, 170
Hutchins School of Liberal Studies, 171
Impacted Programs, 311
Information and Research, 69
Intercollegiate Athletics, 303
India Studies, 143
Instructionally Related Services, 334
Intensive Learning Experience, 342
Interdisciplinary Studies, 180
Special Major, 181
International Studies, 184
International Programs, 341
International Students, 342
Internships, 301
Intrasystem Visitors, 321
Latin, 142
Latin-American Studies, 185
Learning Center, 341
Learning Skills Program, 342
Liberal Studies, 171
Library, 334
Library Fees, 329
Linguistics, 187
Majors for B.A. Degree, 26
Majors for B.S. Degree, 26
Majors for M.A. Degree, 27
Majors for M.S. Degree, 27
Management, 190
Marine Biology, 60
Mathematics, 201
Measles & Rubella Immunizations, 371
Media Services, 335
Media Studies—See Communications Studies, 81
Medical Technology (Biology), 60
Mentor Program, 208
Mexican-American Studies, 209
Microbiology, 60
Minor Degree Programs, 26
Music, 214
National Student Exchange, 342
Native-American Studies Program, 227
Natural Sciences School, 29
Non-Discrimination Policies, 367
North Coast Data Archive, 263
Numbering of Courses, 22
Nursing, 230
Ombudsman, 339
Orientation Activities, 343
Parking Fees, 329
Performing Arts, 72
Personal Counseling, 338
Philosophy, 239
Physical Education, 245
M.A. Program, 248
Physical Science Minor, 253
Physics, 254
Placement Services, 340
Planning (ENSP), 128
Political Science, 261
Pre-Dental, 60, 269
Pre-Law Preparation, 269
Pre-Medical, 60, 269
Pre-Veterinary, 60
President's Associates, 347
Prior Learning Assessment, 301
Privacy Rights of Students, 326
Probation, 324
Provisional Unclassified Graduate Status, 22
Psychology, 271
MA Program, 274
Public Administration (Political Science), M.A., 262
Public Historical Studies, 164
Pupil Personnel Services Credential, 92
Readmission, 310
Recording Technology, 70
Reentry Program, 339
Refund of Fees, 329
Registration, 320
Reinstatement After Disqualification, 310
Repeat of Courses, 324
Residency Requirements (for non-resident tuition), 368
Schedule of Classes, 346
Schedule Changes, 322
Scholarship Program, 330
Scholastic Status, 324
School of Arts and Humanities, 28
School of Business and Economics, 29
School of Education, 30
School of Environmental Studies and Planning, 128

School of Natural Sciences, 29
School of Social Sciences, 29
Science and Technical Writing, 71
Second Bachelor's Degree, 17
Smoking Policy, 326
Sociology, 284
Spanish, 145
Special Major, 181
Special Programs, 300
Special Studies Courses, 302
SSU History, 346
Statistics (Mathematics), 202
Student Affairs, 338
Student Affirmative Action, 341
Student Conduct, 326
Student Discipline, 367
Student Employment, 339
Student Health Center, 341
Student Records, 324
Student Resource Center, 343
Student Union, 343
Students with Disabilities, 343
Summer Session Fees, 329
Summer Session Programs, 347
Teacher and Specialist Credentials, 106
Teaching English as a Second Language, 71
Testing Services, 344
Theatre Arts, 289
Third World Societies, 185
Tuition (Nonresident), 329
Transcripts, 323
Transfer Credit, 314
Trustees, California State University, 10
Tutorial Program, 342
University Ombudsman, 339
University-wide Courses, 300
Upward Bound Program, 341
Veterinarian (Biology), 60, 269
Visitor Status, 321
Water Quality Studies (ENSP), 129
Wine Marketing, 73
Withdrawal from The University, 322
Women's Studies, 295
Written English Proficiency Requirement, 16
Zoology (Biology), 60

Photoelectronic composition by
CALIFORNIA OFFICE OF STATE PRINTING

86–81200

Sonoma State University
Rohnert Park, California 94928
A member of The California State University system