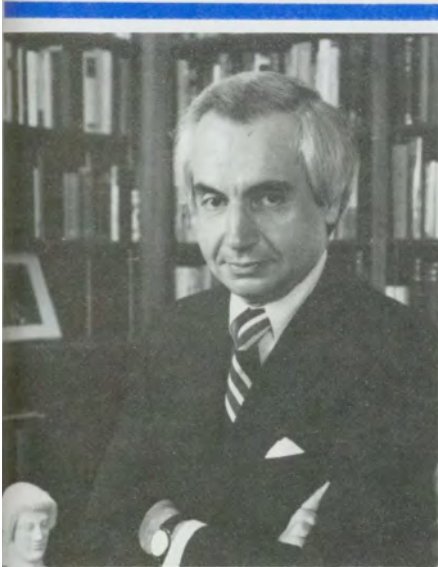


1983-84
Sonoma
State
University

FOR AN EDUCATION THAT
ANTICIPATES YOUR FUTURE

Creative Careers Through the Liberal Arts and Sciences



Sonoma State University offers a distinctive education in the liberal arts and sciences. The aim of such an education is the acquisition of intellectual and practical skills that allow both the serious pursuit of knowledge and preparation for professional engagement. Venerable intellectual traditions have shown that only such education could assist reflective individuals to understand the achievements of the past, enable them to comprehend the present, and lead them to sensible judgments about the future.

No intellectual curiosity or practical concern is beyond the province of serious education in the liberal arts and sciences and no professional task can be served well without the critical insights of such education. It is based on the study of ideas and is advanced through cogent reasoning. It requires appreciation of abstract constructions, yet thrives

in practical applications that ensure depth and versatility in professional education. In fact, creative careers that serve the changing needs of our society can only be insured through professional education thus enlightened.

From nursing to computer science, and from management studies to criminal justice administration and counseling, professional training that is not based on a solid liberal arts and sciences education is impoverished. Many of the issues and problems confronting the world in the decades ahead may perplex the best intellects and challenge the best professions. There is no sure professional way of being prepared for every practical and political and moral and personal contingency in the years ahead.

Yet quality education in the liberal arts and sciences can help. It can assist individuals from every walk of life — with different talents and dispositions — to sharpen their intellectual powers, acquire knowledge, develop judgment, and prepare for both a good living and the good life. SSU is committed to promoting these noble ends.

Peter Diamandopoulos, *President*

Why go to SSU?

On the cover of this catalog, we mentioned "an education that anticipates your future." That's more than a snappy slogan — it's a serious theme that recognizes what a university education should do for you now . . . and later.

The truth is that no university or program of study can teach you all you will need to know in the future, or prepare you completely for a career. More than half of the careers available today did not even exist ten years ago. The average university graduate can expect to have three or four different careers throughout life.

In light of these facts, the best possible education is one that teaches you how to think clearly and develop the ability to solve problems that haven't yet been recognized, to find answers to questions that haven't been asked, to communicate effectively in a world that will be different in ways not yet imagined.

If you value this kind of broad-based approach to learning, you can find it in the total university experience offered at SSU.

One of the best reasons for going to SSU is, we believe, an approach to learning that we call . . .

"Hands-on"

It means actually working with what you're learning about — everything from old-fashioned clay handled in a sculpturing class to a modern synthesizer used in the music recording studio to high-technology equipment operated in a computer class. At many schools, only the most advanced students have access to sophisticated equipment; at SSU, every student has many opportunities for "hands-on" learning.



In the sciences, for example, physics and astronomy students use a powerful argon ion laser and a tuneable dye laser . . . use a well-equipped laboratory and an observatory with 14- and 10-inch telescopes . . . use the campus computer systems and the state-wide computer network. Chemistry students use sophisticated spectrophotometers. Geology students use binocular petrographic microscopes. Biology students use an electron microscope and a radio isotope laboratory.

Another compelling reason for going to SSU, and it is an important complement to "hands-on" learning, is what we call . . .

"Minds-on"

It means having the opportunity to learn personally and directly from insights and ideas of some of today's leading thinkers — from social and cultural commentators to scientific researchers and discoverers.



Lewis Lapham, Editor of *Harper's Magazine*, speaks to students, faculty and staff as part of President's Lecture Series.

The President's Lecture Series brings to the campus internationally-recognized commentators on the American scene such as Michael Scriven, philosopher and authority on information technology and human intellectual processes; Betty Friedan, widely-acclaimed author and founder of the National Organization for Women; and David Halberstam, Pulitzer Prize-winning reporter.

Visiting Scholars Lecture Series, sponsored by various departments, and the Associated Students present noted authors, geographers, physicists, businessmen, mathematicians, biologists, astronomers, artists and economists. In all, more than 190 off-campus lecturers have appeared during the past two years, including Frances Fitzgerald, Pulitzer Prize-winning author; Melvin Calvin, Nobel Laureate in chemistry; Buckminster Fuller, inventor; and Herb Caen, popular San Francisco columnist.

The Public Poetry Center, established in 1979, presents six to eight readings each year featuring popular local and nationally-known poets.

Major conferences are held regularly on campus. These include meetings of internationally recognized philosophers, historians, geologists, environmentalists, attorneys, educators, multicultural specialists, psychologists and media experts.

All of these "minds-on" events are available to all students and to the public, and most of them are offered free of charge.



Personal Attention from Distinguished Faculty

A close and responsible relationship between teacher and learner is emphasized at SSU. This personal attention extends from individual counseling and advising to the classroom. You will not find yourself in a class of 400 to 500 students; the average class size is about 16 students.

SSU's most important resource is a distinguished faculty, 67% of whom hold the doctorate. Lecture, seminar and laboratory classes are taught by faculty, not by teaching assistants.



Sonoma State University, with approximately 6,000 students, is one of nineteen campuses that comprise The California State University system. University status was granted to SSU in Fall 1978, acknowledging the identity and quality of programs that have been developed since the institution was established as a college in 1960. The campus is located on a 270-acre site near the home of Luther Burbank, noted horticulturist and author.

Student life is not limited to the campus. The region surrounding the University is rich in natural and historic resources, and the Golden Gate Bridge is only an hour's drive away by auto or bus. Students find it easy to venture into San Francisco to take advantage of social and cultural activities . . . or to travel to the Sierra Nevada mountains to tour historic gold mining towns, to ski, go backpacking, etc. The Pacific Ocean is less than one hour from the campus, and Northern California's world-famous wine country is a few miles to the north.

Full Accreditation

Sonoma State University is fully accredited by the Western Association of Schools and Colleges and by the California State Board of Education (for teacher education). The Bachelor of Science degree in Chemistry has been certified by the American Chemical Society. The Bachelor of Arts in Music is accredited by the National Association of Schools of Music. The National League for Nursing has accredited the Nursing Department, which offers a Bachelor of Science degree. The SSU Art Department is accredited by the National Assoc. of Schools of Art and Design.

What's special about SSU?

Following are just a few examples of why Sonoma State is unique among California colleges and universities, and how an education at SSU does anticipate your future.

"The Department without a Faculty"

The Center for Performing Arts is a unique part of the education experience at SSU. Attendance involves no "requirements", no assignments, no grades. Programs are as diverse as chamber singers and jazz workshops, African dance, opera workshops, and original drama. The many activities sponsored by the Center are immensely popular and draw an enthusiastic audience from throughout the community as well as the campus.

The Center, a department within the School of Arts and Humanities, coordinates all performance activities of the departments of Music and Theatre Arts (including student-initiated senior projects); presents weekly noon concerts; and sponsors distinguished guest artists and off-campus performances by performing arts groups.



"Second Step" Nursing

SSU's Second Step nursing program is a two-year upper division major planned specifically for registered nurses. For the nurse with an associate degree or the equivalent, it offers the opportunity to proceed with advanced nursing and general education and to obtain a Bachelor of Science Degree in Nursing.

The program was the first nationally accredited program of its type in the United States. Since its establishment in 1972 more than 500 nurses have completed their studies and earned degrees at SSU.

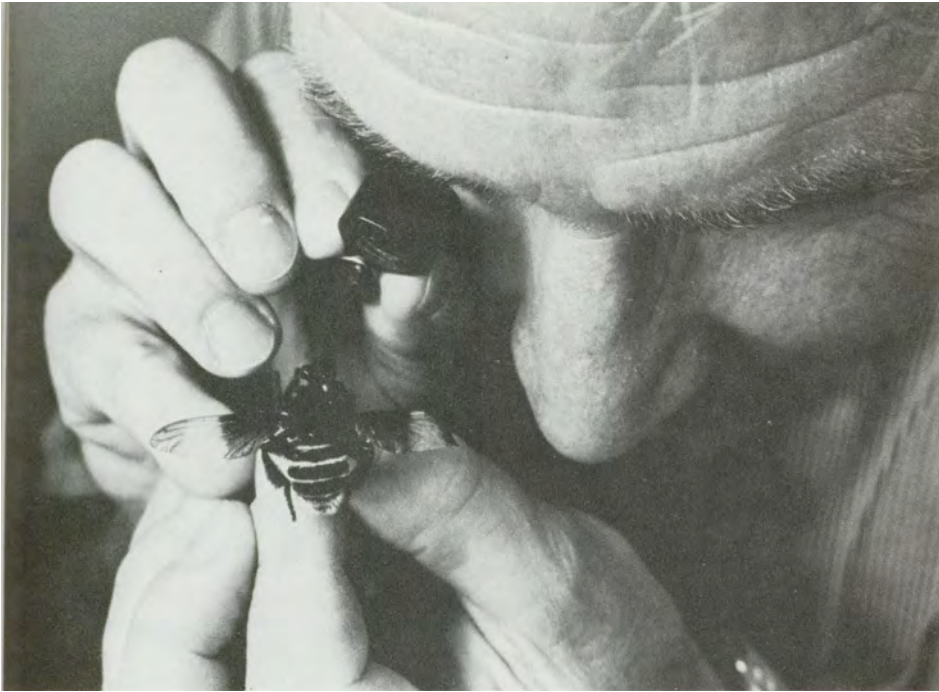
A Masters Degree Program (Family Nurse Practitioner specialization) is planned for the future.



Art Gallery

The 2,800-square-foot Art Gallery, located in Sonoma State's new \$2.3 million art complex, is one of the newest and largest in the North Bay Area.

Significant exhibitions are scheduled on a regular basis, including national shows, the University's own collection of more than 80 important works, and current art of faculty and students. A variety of special programs give students unique opportunities to meet and talk with internationally-recognized artists who visit the campus to lecture and to exhibit their work.



Field Studies in Biology and Geology

SSU enjoys an ideal location for the "real world" field work that supplements classwork. The Biology Department, for example, manages a 160-acre natural preserve, and maintains a 22-foot boat for coastal research. Students in the Geology Department conduct map and survey work from the high Sierras to Death Valley.



Anthropology Beyond the Classroom

SSU's Anthropology Department, through its many projects that emphasize "real world" opportunities, has become an important State Archeological center. The Department maintains the Northwest Information Center of the California Archeological Inventory. A Contract Research Program allows students to participate in archives work, surveys, digs, and Indian language and culture projects.

Small Business Institute

In still other areas of the "real world"—public agencies and private businesses—Management Department students apply their skills through the Small Business Institute. Research and analysis projects are conducted under the direction of the Institute but in the context of actual management situations and problems. Students also can participate actively in producing a professional publication, **The Sonoma Management Review**, which has received critical acclaim by the management and business community.

Cluster Schools

SSU was one of the first of the 19 CSU campuses to develop "cluster schools"—small, distinctive schools that emphasize learning through seminars, tutorials, and independent study.

One of these is the Hutchins School of Liberal Studies, named for the distinguished educator Robert Maynard Hutchins. Hutchins was a life-long champion of broad, liberal education—the development of the whole person, conversant with most of the great ideas and values of humankind and able to make personal, well-informed choices in all areas of life.

The school focuses on the interrelated nature of knowledge with faculty drawn from the arts and humanities, social sciences and natural sciences.

Another cluster school at SSU is Environmental Studies and Planning which was founded on the belief that the urgency of the environmental crisis is real; that its problems can be solved, and that these solutions will result from the use of organized knowledge and the development of an environmental ethic.



You Should Know . . .

- . that SSU is the only school in the U.S. to receive three awards in one year from the National Endowment for the Humanities (Fellowships awarded to SSU professors).
- . that SSU students enjoy one of the highest rates of acceptance into medical, dental, optometry and other professional schools.
- . that SSU leads the CSU in the percentage of its students majoring in Physics.
- . that nearly 500 junior and senior high school jazz groups with 12,000 young musicians from 130 different schools have participated in the annual SSU Redwood Empire Jazz Festival competition since 1970.
- . that SSU's "Sonoma Plan" in Nursing has served as a model program throughout the U.S.
- . that the Center for Performing Arts has presented more than 626 performances attended by more than 61,000 people since 1973.
- . that approximately 2,700 service area professionals in education, human services, health, government, law, medicine, engineering and business received all or part of their training at SSU.
- . that the survey of historic buildings, a project of SSU's Historic Preservation Program, was the basis for the historic preservations component of the Sonoma County Master Plan.
- . that the internationally-recognized "Ten Best Censored Stories" media research project is done by students at SSU
- . that members of the English Department faculty have authored more than 14 novels and books of poetry as well as articles in more than 100 journals.
- . that the SSU Psychology Department pioneered a Humanistic Psychology Program that received a Presidential Award for Outstanding Contribution to Higher Education.
- . that the SSU English Department enjoys and employ the talents of a "Writer in Residence", currently acclaimed author Gerald Rosen.
- . that SSU's Math Department students consistently receive top awards in the National Putnam Math Competition.
- . that SSU's Geography Department houses one of the most complete historical weather libraries in California.



What's a "liberal" education?

That word "liberal" can be misinterpreted, particularly because it is used so often in a political sense (as in "liberals" vs. "conservatives"). To understand the word's true meaning for education, let's look at its origin.

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

That is the idea of a liberal education in the arts and sciences: maximum opportunities for self-expression . . . limitless possibilities for pursuing personal and career goals.

A liberal education aims at the development of minds. It helps students to understand the achievements of the past, enables them to comprehend the present, allows them to make sensible judgments about the future. A liberal arts and sciences education says, "This is what has endured; this is what has proven to be valuable." It helps each student to set his or her own course for learning — a course that can be followed for life.

A liberal education can assist individuals, from every walk of life and with different talents and dispositions, to sharpen their intellectual powers, to acquire knowledge, to develop judgment and to prepare both for a good living and the good life. In this sense, SSU's education is "an education that anticipates your future."

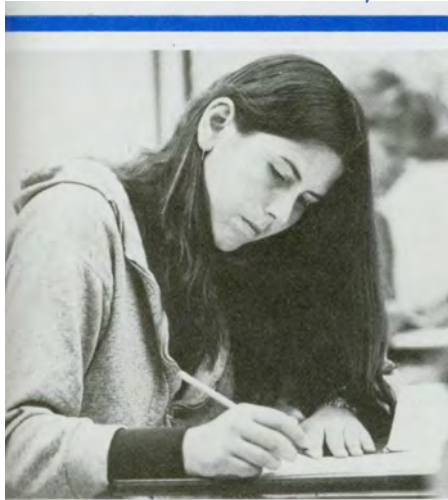


What we esteem highly at SSU are the minds of our students, the intellectual power and dedication of our faculty, and the institution's freedom for all to question ideas and scrutinize arguments.

President Peter Diamandopoulos

By valuing achievement and counting on creative potential, the faculty of SSU engage the intellects of our students and teach them how to be self-educating throughout their lives.

President Peter Diamandopoulos



General Education

When students hear of "general education" at SSU, many wonder if they must start all over from the beginning. Not at all! General education simply means a broadening of one's base . . . an expanding of one's overall perspective and insight . . . a foundation that can enhance any career.

General education includes about 50 units of coursework in the traditional disciplines crossing all of the three Schools in the University, pursued either in Hutchins School seminars or in conventional courses.

Arts and Humanities, Social Sciences, Natural Sciences

The School of Arts and Humanities is an unusually diverse one which combines education in the arts and humanities with a recognition of the career goals of students. In the arts, instructional programs include Art, Music and Theatre Arts. Programs in the humanities include American Multi-Cultural Studies, English, Foreign Languages, India Studies, Media Studies, Mexican-American Studies, Native-American Studies and Philosophy. The School of Arts and Humanities also houses the Hutchins School of Liberal Studies and the Special Major Program.

Related to the School are the Center for Performing Arts, the Art Gallery, the Sonoma Film Institute, the Arts and Humanities Lecture Series, the campus radio station and the student newspaper.

Supporting career goals while building upon the humanities, the School provides an education that allows students to develop their abilities to think and communicate, the best preparation for an uncertain future.

The School of Natural Sciences offers degree programs in Biology, Chemistry, Geology, Mathematics, Nursing, Physics, Health Sciences and Physical Education, and Computer Science. Flexibility permits development of particular interests such as minors in Astronomy or Computer Science.

Pre-professional students often are advised to enroll in Biology or Chemistry programs that contain courses necessary to meet medical and dental school requirements. Graduates have an excellent record of acceptance by the nation's leading professional and graduate schools.

A great deal of effort is directed toward ensuring that students are exposed in a "hands-on" fashion to current equipment and technology in the laboratory component of the curriculum.

The School of Natural Sciences sponsors Science Night each fall at SSU which brings approximately 2,000 high school students, teachers and others on campus for demonstrations, experiments, displays, films and lectures.

The School of Social Sciences combines disciplines concerned with people, individually and in groups, in their various pursuits, places and times. The School offers programs in Anthropology, Criminal Justice Administration, Counseling, Economics, Education, Geography, History, Management, Politics, Psychology, Sociology, Gerontology, Linguistics, Women's Studies and Interdisciplinary Studies. All programs permit flexibility, and in some cases special arrangements have been made to allow students to pursue double majors (e.g., in Management and Economics). The School of Environmental Studies and Planning is also an important program within the School of Social Sciences.

Students in the Social Sciences have opportunities to study with faculty members who are working in several diverse areas of interests, including human services, refugee populations, bilingual education, energy studies and the management and administration of organizations.

What should I study?

Perhaps you like astronomy, but you want to manage a business.

Or you get angry over the American political process, but you'd rather learn about marine biology than why Wendell Wilkie lost the 1940 Presidential election to Franklin Roosevelt.

Or you have graduate school in mind, but nothing will stop you from becoming a lawyer.

Or you may be one of those people who finally has discovered that what you have been doing for the past several years isn't giving you the fulfillment that you want in your life and career.

If any of the above conflicts reminds you of yourself, don't be alarmed. You're not alone. In fact, the feeling of "Where do I go from here?" is shared by the majority of college students today.

You and Your Academic Advisor

Outside of your own individual effort, a trusted advisor is perhaps the single most important factor in assuring your success in your university education. At SSU, every student is encouraged to confer regularly with his or her academic advisor. Advisors are faculty members or trained members of our staff who know how to help you achieve your objectives.

If you know what your major will be, you should contact a faculty member from the academic department of your chosen field. He or she will become your academic advisor and will help you program your classes and achieve your academic and professional goals. Your advisor can serve as a sounding board and a consultant, and ideally, as a friend.

If you haven't decided on a major, don't be disheartened. SSU recognizes you needs. The Office of Academic Advising will help you plan a program of exploration as an "undeclared major" until you match your interests and talents with clearly defined goals.

If you're entering or re-entering after a break from formal education, a special Re-entry Program can assist you with pre-entry concerns, academic planning and career exploration.

While your academic advisor probably will be your most important source of guidance, you should make efforts to talk with all of your instructors. All can help you with your plans. And, if you look carefully around the campus, you'll find other offices to assist you: Admissions and Records, Educational Support Programs, Re-entry, Career Development, Learning Assistance, etc.



What about my career?

SSU offers an abundance of valuable programs and services designed to assist students in developing career options through career advising, placement services, part-time employment and field experience opportunities.

The Career Development Center

The Career Development Center consists of three major components: Career Planning and Placement, Field Experience and Student Employment. By providing both information and counseling, the Center helps students to develop techniques of career planning and job-seeking that will serve them throughout their lives. Specific services and programs are directed toward assisting students to:

- Clarify career goals
- Develop job-seeking skills
- Obtain employment in their chosen field

Through part-time paid employment, volunteer placements and pre-professional internships, the Career Development Center provides work opportunities for students while they are enrolled. The Offices of Student Employment and Field Experience assist students to:

- Secure part-time, temporary and summer employment.
- Serve community agencies while at the same time "reality testing" possible career interests.

Each semester, recruiters from business, industry, government agencies, and school districts visit the campus to interview Sonoma State University students for potential employment. Special workshops are held to disseminate information regarding the agencies recruiting on campus that help candidates prepare for the interviews, while information sessions open to all students and faculty are held on each recruitment date.

Meet "SIGI"

SIGI (System of Interactive Guidance and Information) is a compact, dynamic, values-based, computer-assisted system you can use to help you discover career directions.

SIGI emphasizes individual values while it provides a vast store of occupational data, and it blends all of this into a unified system. SIGI is used in combination with other resource materials, counseling and advising.



What services are available?

SSU provides a wide range of student services — academic, special and personal —plus housing arrangements and financial assistance. Some of the most-used services (but not all of them) are described on these and the following pages.

Academic Services

Ruben Salazar Library

One of the most important places outside of the classroom for any student is here —in a modern library of 300,000 volumes plus magazines, journals, microfilm and other media.

Many students find a university library large and confusing. At SSU, dedicated, knowledgeable staff will help to solve your problem and open up library resources to give you access to all available information.

The Library also sponsors special lecture series seminars and art exhibits.

Computing Services

The computer has become an important part of the learning experience at SSU. Students can expect to find a wide range of applications in classes ranging from Management to Art, from Physics to Psychology, and Computer Science to Music. The Computer Center, with extensive up-to-date equipment, supports instructional, research and administrative activities for the entire university.

Students have access to:

1. CYBER 170-730 Timesharing System
2. Campus PDP 11/44 timesharing system;
3. State University Data Center Computers in Los Angeles (CYBER 170-760 and 730).

Among the languages available are ALGOL, APL, GPSS, SPSS, BASIC, COBOL, FORTRAN, LISP, PASCAL, SIMULA and COMPASS and MACRO assembly languages. Comprehensive program packages are available for many tasks.

Learning Assistance Center

The Learning Assistance Center offers tutorial assistance in most subjects, workshops for writing and study skills and numerous learning aids for mastering specific subjects or developing special techniques.

The Center is partially funded through a federal Special Services for Disadvantaged Students (SSDS) grant. As part of the SSDS program, a Core Curriculum is offered, with classes in study skills, mathematics, English and speech.

Media Services

Media Services provides consultation, audio-visual materials, equipment and materials production services in support of the University's instructional programs. Media Services can provide the equipment and technical support to aid you in the design, production and presentation of your class projects.



Special Services

Veterans Affairs

SSU is committed to providing veterans with the best possible programs and services during their years of study.

Through the VA office veterans receive a wide spectrum of support services that include: assistance with admission and enrollment; academic and VA benefits counseling; reconciliation of VA problems; certification of veterans dependents; and, financial aid counseling and coordination. Assistance is also provided as needed in selecting qualified tutors for veterans, with tutoring fees paid by the Veterans Administration.

Educational Opportunity Program

EOP provides access to the University for students who demonstrate the potential and motivation for higher education, but for economic and academic reasons require special support services.

Student Affirmative Action

SAA is a project designed to provide access to higher education for qualified students of under-represented groups including: ethnic minorities, the physically handicapped, and women.

Both EOP and SAA provide outreach, recruitment, admission, registration, financial aid, academic planning, advisement, practical counseling and referral.



Re-entry Program

More and more people are entering and re-entering college after a break from formal education. These "re-entry" students, a large portion of the student body at SSU, enrich the whole fabric of the University.

The Re-entry Staff provides counsel, encouragement, support and referrals for present and prospective students. Workshops to meet particular needs and interests are offered through the program. Monthly late-afternoon "Conversations" is a featured activity. Faculty and staff join re-entry students and prospective students at the weekly Brown Bag Lunch held every Thursday in the Student Union.

Office for Students with Disabilities

OSD services all SSU students with disabilities, including temporary disabilities. The services include priority registration, orientation, close-in parking and an on-campus shuttle. OSD also offers academic assistance such as sign language and oral interpreters, notetakers and readers.



International Educational Services

International Educational Services provides information and assistance for students interested in study abroad through the CSU International Programs, through programs sponsored by foreign governments and American universities, or through independent study abroad directed by Sonoma faculty.

The Office also coordinates the National Student Exchange which enables students from SSU to study for one semester or one year at other participating universities in the United States.

Personal Services

Student Health Center

The Student Health Center provides health care to regularly enrolled students. The staff, consisting of doctors, nurses, support staff, laboratory technologist, x-ray technologist and pharmacist, will assist you with acute illnesses, minor injuries and referrals. Most services are available at no cost to students. Low-cost health insurance is available.

Counseling Center

The Counseling Center provides free assistance to students with personal, social, vocational and educational concerns that interfere with their ability to take full advantage of the university experience.

Professional counselors, graduate interns and peer advisors are available by appointment and on a drop-in basis. Complete confidentiality is maintained. The Center also offers a referral service to community or private practitioners for students needing therapy.

Children's School

Children's School provides child care services for children of students, staff and faculty. The Center is staffed by credentialed preschool teachers, student volunteers and parents of children enrolled, and offers a comprehensive education/developmental program for children ages two to five years. The program provides a warm environment where parents can feel comfortable sharing their child's care.



Campus Food Services

Food services at Sonoma provide a variety of nutritious and reasonably priced meals which are available for all students.

The Residence Halls Dining Room is open for breakfast, lunch, and dinner Monday through Friday, and brunch and dinner on Saturday and Sunday. The dining room features an extensive salad bar, meat and vegetarian entrees and a hamburger and fry grill.

The Commons Cafeteria is open Monday through Friday from 7:45 a.m. to 2 p.m. Foods offered at the Commons range from baked goods, herb teas, and natural food items, to salads, sandwiches, soups, chili, or entrees, and grilled items.

The Pub, located on the second floor of the Student Union, is open Monday through Thursday, 11 a.m. to 9 p.m. Wednesday evenings feature live music and the hours extend to 11 p.m. On Fridays the hours are 1 a.m. to 6 p.m. The Pub serves beer and wine, freshly ground Columbian coffee, piroshkis, sandwiches, soup, chili, and a variety of special snacks and pastries.

Bookstore

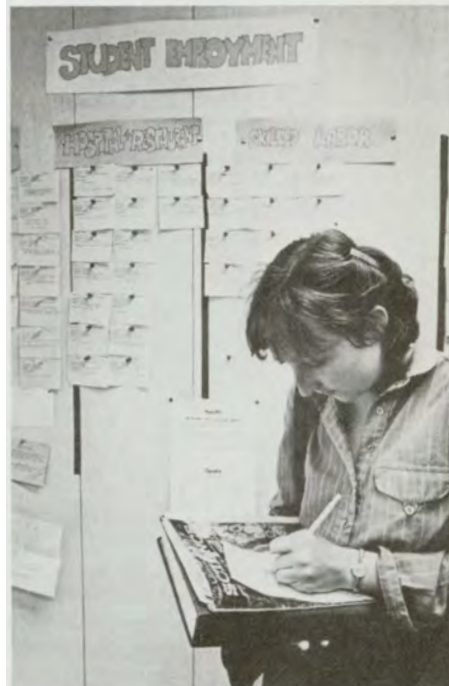
The bookstore is a non-profit store that provides the campus with textbooks, general reading material, supplies and convenience items.

Assigned textbooks can be found in the bookstore. Also available are the University Catalog and the Schedule of Classes. You can also have photos developed, buy gifts, sundries, art and stationery supplies.



Student Employment

Students interested in securing part-time, temporary and personal jobs can consult with a counselor and register at the Student Employment Office. Job Descriptions are posted regularly on the Job Bulletin Board. Last year more than 6,000 jobs advertised through the office were filled by SSU students.





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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 plus sales tax. 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.

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 1983–84

FALL, 1983

November 1, 1982	Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1983 begins.
November 21–Dec. 9, 1983	Academic Advising for Spring 1984.
November 30, 1982	Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.
February 9, 1983	Last day to apply for CAL Grants for 1983–84.
March 1, 1983	Last day to complete 1983–84 application process for financial aid consideration. (SEOG, NDSL, EOP, NS, NSL, and CW-S).
June 1, 1983	Last day for foreign students to apply for admission to the Fall Semester, 1983.
June 17, 1983	Schedule of Classes on sale in Bookstore.
August 29, 1983	Academic year begins. General faculty conference. Fall administration of ELM, EPT and ESLPT, required placement tests.
August 30, 1983	New Student Orientation and Advising. Department meetings 1:00–5:00 p.m.
August 31, Sept. 1, 1983.....	Registration.
September 6, 1983.....	Instruction, change of program and late registration begin.
September 20, 1983.....	Last day to apply for refund of registration fee or difference in unit payment status.
September 23, 1983.....	Last day to apply for degrees to be awarded in January, 1984.
September 26, 1983.....	Begin filing period for June 1984 graduation.
September 30, 1983.....	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 14, 1983	Last day to declare Basis of Grading. Last day to apply for partial refund of non-resident tuition. (See University Catalog, page 415).
November 1, 1983	Last day for foreign students to apply for admission to the Spring Semester, 1984.
Nov. 21–Dec. 9, 1983	Academic Advising for Spring 1984.
November 23, 1983	Last day to petition for a late schedule change or to withdraw from the University. (Serious and compelling reasons required) See catalog, page 402.

December 5, 1983	Last day to submit graduate theses or projects to Graduate Studies Office.
December 15, 1983	Last day of instruction.
December 16–22, 1983	Final Examinations.
December 24–31, 1983	Holiday recess. Classes not in session.
January 3–4, 1984	Student faculty conferences; School and department meetings for evaluation. Semester ends.
January 6, 1984	Grades due.

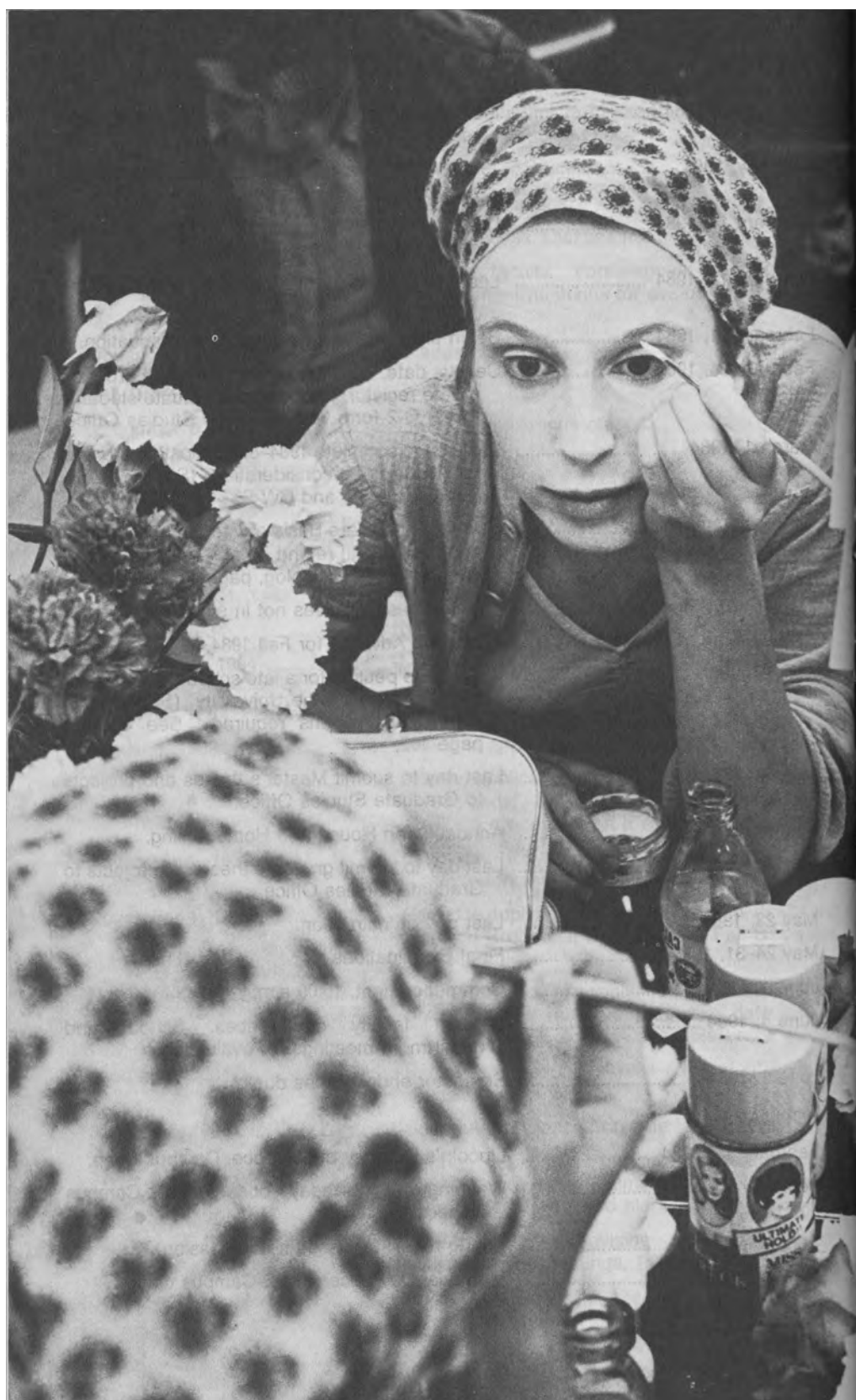
HOLIDAYS

September 5, 1983.....	Labor Day. Campus closed.
September 9, 1983.....	Admission Day. Campus open.
October 10, 1983	Columbus Day observance. Campus open.
November 11, 1983	Veterans' Day observance. Campus open.
November 24–25, 1983	Thanksgiving Holiday. Campus closed.
December 24–31, 1983	Holiday recess. Campus closed.
January 2, 1984	New Year's Day Observance. Campus closed.
January 5–20, 1984	Mid-semester recess. Classes not in session.

SPRING, 1984

August 1, 1983	Period to apply for Spring Semester, 1984 begins.
August 30, 1983	Priority application period for Spring Semester 1984 ends. Applications received after this date will be processed on a space available basis.
November 1, 1983	Last day for foreign students to apply for admission to the Spring Semester, 1984.
November 1, 1983	Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1984 begins.
November 30, 1983	Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.
January 3, 1984	Begin filing period for 1984–85 student financial assistance.
January 6, 1984	Schedule of Classes on sale in Bookstore.
January 23, 1984	Spring Semester begins. General faculty conference. Spring administration of ELM, EPT, and ESLPT, required placement tests.
January 24, 1984	New Student Advising and Orientation. Department meetings, 1:00–5:00 p.m.
January 25–26, 1984	Registration.

January 30, 1984	Instruction, change of program and late registration begin.
February, 1984	1983–84 CAL Grant application deadline generally falls during early February.
February 14, 1984	Last day to apply for refund of registration fee or difference in unit payment status.
February 17, 1984	Last day to apply for degrees to be awarded June 1984.
February 21, 1984	Begin filing period for August 1984 graduation.
February 24, 1984	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, 1984	Last day to complete 1984–85 application process for financial aid consideration. (SEOG, NDSL, EOP, NS, NSL, and CW-S)
March 9, 1984	Last day to declare Basis of Grading. Last day to apply for partial refund on non-resident tuition. (See University Catalog, page 415).
April 16–20, 1984	Spring recess. Classes not in session.
April 23–May 11, 1984	Academic Advising for Fall 1984.
April 27, 1984	Last day to petition for a late schedule change or to withdraw from the University. (Serious and compelling reasons required). See Catalog page 402.
May 4, 1984	Last day to submit Master's theses and projects to Graduate Studies Office.
May 6, 1984	Annual Open House and Homecoming.
May 7, 1984	Last day to submit graduate theses or projects to Graduate Studies Office.
May 23, 1984	Last day of instruction.
May 24–31, 1984	Final Examinations.
June 1, 1984	Commencement, 10:00 a.m.
June 4, 1984	Student faculty conferences. School and department meetings for evaluation.
June 6, 1984	Semester ends; grades due.
HOLIDAYS	
February 13, 1984	Lincoln's Birthday observance. Campus open.
February 20, 1984	Washington's Birthday observance. Campus closed.
April 16–20, 1984	Spring recess. Classes not in session.
May 28, 1984	Memorial Day observance. Campus closed.



**The California
State University**

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, 16 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. Nearly 500 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.

Enrollments in fall 1982 totaled over 315,000 students, who were taught by a faculty of 18,000. 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 800,000 persons have been graduated from the 19 campuses since 1960.

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

EX OFFICIO TRUSTEES

- The Honorable George Deukmejian** State Capitol, Sacramento 95814
Governor of California
- The Honorable Leo T. McCarthy** State Capitol, Sacramento 95814
Lieutenant Governor of California
- The Honorable Willie L. Brown, Jr.** State Capitol, Sacramento 95814
Speaker of the Assembly
- The Honorable Louis "Bill" Honig** 721 Capitol Mall, Sacramento 95814
State Superintendent of Public Instruction
- W. Ann Reynolds** 400 Golden Shore, Long Beach 90802
Chancellor of The California State University

APPOINTED TRUSTEES

Appointments are for a term of eight years except for a student Trustee and alumni Trustee whose terms are for two years. Terms expire in the year in parentheses. Names are listed in order of appointment to the Board. Appointments are subject to confirmation by the State Senate.

Dr. Claudia H. Hampton (1982)
4157 Sutro Ave., Los Angeles 90008

Mr. Willie J. Stennis (1983)
3947 Landmark, Culver City 90230

Dr. Juan Gomez-Quinones (1984)
Professor, History Department
University of California, Los Angeles
405 Hilgard Ave., Los Angeles 90024

Mr. John F. O'Connell (Chairman)
(1983)
Bechtel Power Corp.
P.O. Box 3965, San Francisco 94119

Ms. Blanche C. Bersch (1984)
415 N. Camden Dr.
Beverly Hills 90210

Mr. Michael R. Peevey (1985)
California Council for
Environmental & Economic
Balance
215 Market St., Suite 930,
San Francisco 94105

Mr. John F. Crowley (1985)
1855 Folsom Street, 5th floor
San Francisco 94103

Ms. Wallace Albertson (1986)
1618 Sunset Plaza Dr.,
Los Angeles 90069

Mr. Donald G. Livingston (1987)
Carter Hawley Hale Stores, Inc.
550 S. Flower St., Los Angeles 90071

Ms. Celia I. Ballesteros (1987)

Keating Building
432 F Street, Suite 406
San Diego 92101

Mrs. Lynne Myers (1988)
514 Doheny Rd., Beverly Hills 90210

Dr. August F. Coppola (1988)
Zoetrope Studios
1040 N. Las Palmas Ave.
Los Angeles 90038

Mr. George M. Marcus (1989)
Marcus & Millichap Incorporated
2626 Hanover St.
Palo Alto 94304

Mr. Daniel J. Branfman
Associated Students Office
Sonoma State University
1801 East Cotati Ave.
Rohnert Park 94928

Mr. Blaine Quick (1983)
Blaine Quick & Associates (1983)
1152 Orange Avenue
Coronado 92118

Mr. Dixon R. Harwin (1990)
Alwin Management Company, Inc.
9300 Wilshire Blvd., Beverly Hills 90212

Mr. Thomas J. Bernard (1989)
Tomar, Inc.
776 E. Shaw, Suite 102, Fresno 93710

Mr. Roland E. Arnall (1990)
REA Companies
11878 LaGrange, Los Angeles 90025

OFFICERS OF THE TRUSTEES

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President

Mr. John F. O'Connell
Chairman

Mrs. Lynne Myers
Vice Chairman

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
Mr. Harry Harmon Executive Vice Chancellor
Mr. D. Dale Hanner Vice Chancellor, Business Affairs
Dr. Alex C. Sherriffs Vice Chancellor, Academic Affairs
Dr. Robert Tyndall Acting Vice Chancellor, Faculty and Staff Affairs
Mr. Mayer Chapman Vice Chancellor and General Counsel

THE CALIFORNIA STATE UNIVERSITY

California State College, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93309
Dr. Jacob P. Frankel, President
(805) 833-2011

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

**California State University,
Dominguez Hills**
Carson, California 90747
Dr. Donald R. Gerth, President
(213) 516-3300

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
(213) 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. W. Lloyd Johns, President
(916) 454-6011

**California State College,
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
(714) 265-5000

Imperial Valley Campus
720 Heber Avenue
Calexico, California 92231
(714) 357-3721

San Francisco State University

1600 Holloway Avenue
San Francisco, California 94132
Dr. Paul F. Romberg, President
(415) 469-2141

San Jose State University

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

1801 East Cotati Avenue
Rohnert Park, California 94928
Dr. Peter Diamandopoulos,
President
(707) 664-2880

California State College, Stanislaus

800 Monte Vista Avenue
Turlock, California 95380
Dr. A. Walter Olson, 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 20 geographic areas throughout California.

Full and part-time CSU faculty, as well as qualified experience 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; (213) 590-5696.

The statewide Admissions and Records Office may be reached by dialing the following numbers: Los Angeles and Long Beach areas (213) 590-5696; all other areas in California toll free (800) 352-5717.



**Sonoma State
University**

SONOMA STATE UNIVERSITY DIRECTORY

THE ADVISORY BOARD

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 Dr. Frederick A. Groverman (1983) Vice Chair
 Mr. Gene M. Benedetti (1984) Executive Secretary

Dr. Carl M. J. Aagaard (1984)
 Mr. Paul A. Anderson (1984)
 Mr. William Bagley (1987)
 Mr. Haskell E. Boyett (1986)
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 Mr. Kenneth Eymann (1986)
 Mr. Neil Ferguson (1986)
 Mr. Robert Kerr (1986)
 Dr. Edward Lopez (1985)
 Dr. Alexis Maximov (1984)

Mr. Michael McBride
 (ex officio alumnus)
 Mr. R. Michael Mondavi (1984)
 Mr. Robert Pantzer (1986)
 Mrs. Ruth Person (1987)
 Ms. Lois Prentice (1983)
 Mrs. Helen Putnam (1986)
 Mrs. Helen Rudee (1985)
 Mrs. Margaret Schaefer (1986)
 Mr. Henry Trione (1986)
 Mr. David Viviani (1986)
 Ms. Reggi Winner (1984)

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 Administrative Programs Specialist Bonnie J. Moody
 Assistant to the President Diane Mustaro
 Affirmative Action, Director Barbara Lesch
 Public Affairs, Director Robert Breunig
 Vice President, Community Relations and Development Carroll V. Mjelde
 Special Events, Director Gloria Oster
 University Communications, Director..... James Molica
 Institutional Research, Director Starrett Dalton
 Judicial Officer Fred Engbarth

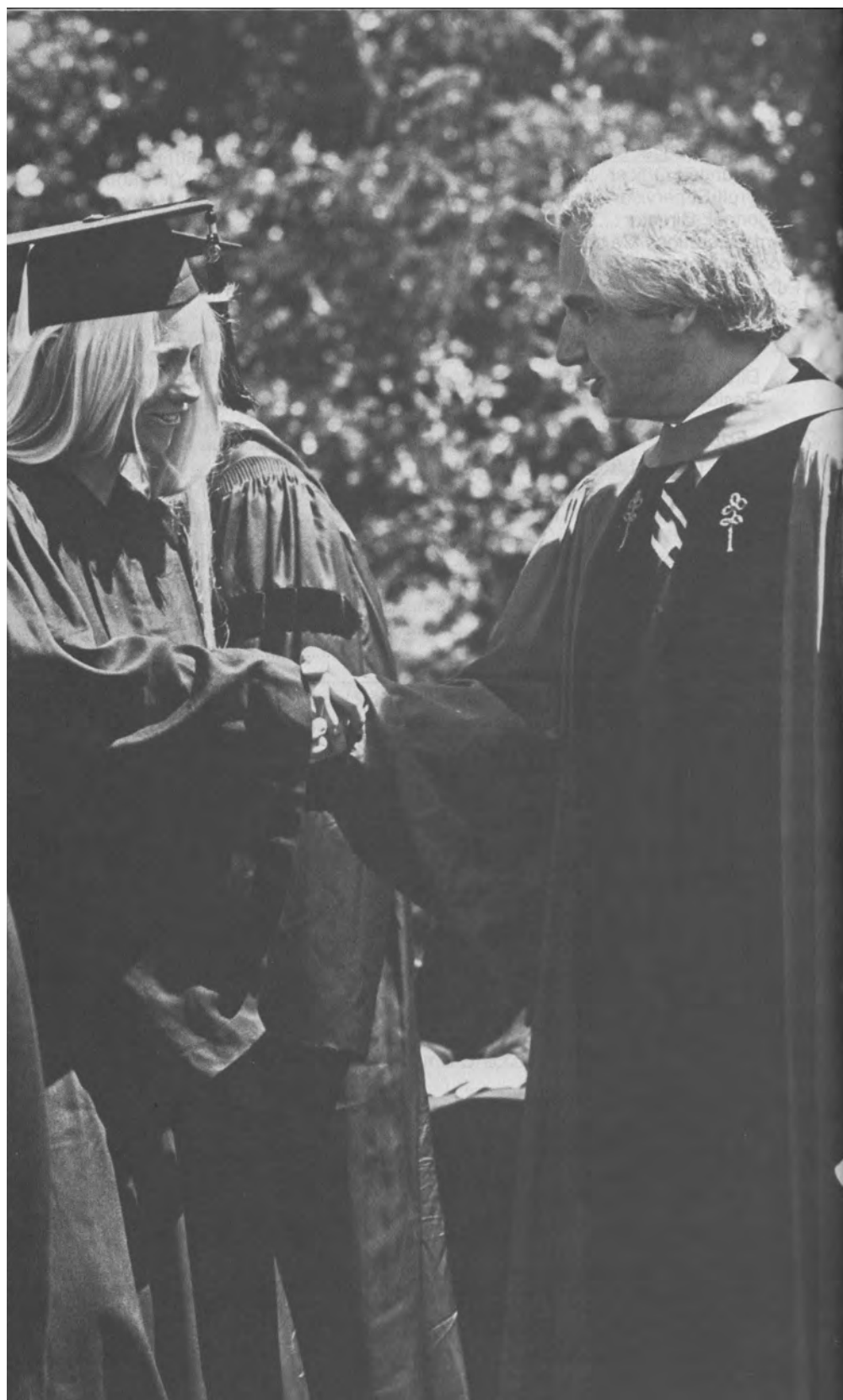
Provost/Vice President Fred H. Dorer

Assistant to the Provost Vice President.....
 Faculty Affairs Specialist Louise F. Jensen
 Dean of the School of Arts and Humanities William Babula
 Dean of the School of Natural Sciences, Acting Richard Karas
 Dean of the School of Social Sciences Jeffrey Douth
 Associate Dean for Academic Programs/Graduate Studies Ardath Lee
 Dean of Extended Education Carroll V. Mjelde
 Director of Sponsored Research David Walls
 Library Director Ruth Hafter
 Computing Services, Director Eduard Glaaser
 Instructional Resource Center, Director Eduard Glaaser

Dean of Admissions and Records Frank Tansey

School Relations, Director.....
 Registrar Frederick Jorgensen
 Financial Aid, Director George Urdzik

Director of Business Affairs	Benjamin Y. Quong
Controller/Budget Officer	William A. McCune
Accounting Officer	Yie-Fann Hao
Payroll Supervisor (Acting)	Mary Wood
Personnel, Director	I. R. "Ro" Reed
Plant Operations/Campus Planning, Director	William R. Mabry
Procurement and Support Services Officer	Joseph C. Vizi
Public Safety, Director	R. Richard Courier
Sonoma State Enterprises, Inc.	
General Manager (Acting)	Benjamin Y. Quong
Bookstore Manager	Otto K. Buckenthal
Director, Food Services	Connor Limont
Residence Halls Food Service Manager	Bob Bieber
Dean, Educational Support Services	Don Patterson
Associate Dean of Student Development	Rand Link
Associate Dean, Educational Support Services,	
University Ombudsman	Joaquin Sanchez
Director of Testing	Gerald Alves
University Tutor	Robert Sherman
Director, Office for Students with Disabilities	Anthony Tusler
Director, Educational Support Programs	William Clarke
Director, Learning Center	Rene Pagan
Director, International Student Programs	Brian Shears
Associate Dean of Students/Student Life	David Farrell
Housing and Residential Community, Director	Tim Tiemens
Intercultural Center, Coordinator	Fernando Nugent
Off-Campus Housing	Al Fortin
Reentry Services, Director	Tak Richards
Student Union, Acting Director	John Wright
Student Health Center, Director	Thomas R. Plowright



Degrees and Credentials

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. For a student 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.

1. 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.

2. 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.

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 in both of these patterns is dependent upon effective academic advising. Students are encouraged to make the fullest use of their advisors in selecting between the programs, in electing options within the Disciplinary program, and in facilitating transfer between the programs. In particular, credential candidates should consult an advisor in the Department of Education regarding fulfillment of general education requirements for both the University and for the credential. These requirements differ and both must be satisfied. Sonoma State University General Education requirements are met by certified completion of general education programs at California State Community Colleges and C.S.U. system campuses. General Education programs 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 and Colleges. Students select a general education pattern appropriate to their Catalog year of graduation (see P. 25). The general education patterns for the current year are found on pp. 25–29

Certain Sonoma State University General Education requirements may also be met through the following credit by examination programs:
College Level Examination Program (pp. 398 & 466)
College Board Advanced Placement (p. 397)
C.S.U. English Equivalency Test and Science and Math Test (pp. 39 & 466)
Departmental Challenge examinations (consult appropriate departments)

3. 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 major plans of study are found with the department listing in the University Curricula Section of the Catalog.

4. 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, *or* a grade of C or better earned in English 375 (College Composition) at Sonoma State University. 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 take care of this graduation requirement *early in their junior year*.

The test may be waived on the basis of: (1) an upper-division course in expository writing passed with a grade of C or better at another institution within the past five years; (2) an upper-division written proficiency examination passed at and certified by another institution within the past five years; or (3) writing ability previously demonstrated by publication of substantial and appropriate prose works without editorial help. Petition forms are available in the office of the Department of English.

Foreign Students

All first-time entering students who have received the major part of their secondary education in a language other than English will be required to take the English as a Second Language Placement Test (ESLPT) prior to registration.

The test will be given on August 29, 1983, and January 23, 1984, at 8:30 a.m. in Stevenson Hall, Room 1028 (Language Laboratory).

Students who, for compelling reasons, are unable to take the exam on this date should contact Department of Foreign Languages in advance, Phone (707) 664-2300 or 2351. Preregistration is required. There is no test fee.

5. 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.

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.
3. Completion of a minimum of 30 units in residence at Sonoma is required. Twenty-four of these units must be in the upper division and 12 must be in the major.
4. A maximum of 40 units of non-traditional credit may be allowed toward the degree.

24 / Degrees and Credentials

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
Community Involvement Project 295 and 395.....	6
Special Studies 495	12
Student-Instructed Courses (199 and 399)	12
College Level Examination Program credit.....	30
Community College transfer credit	70

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.

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 specialties, 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.

Candidates for a second baccalaureate degree at Sonoma who earned their first degree at a campus that is not required to adhere to the general education guidelines of Title V must: (1) have certification from a California Community College that general education Code requirements have been met (such certification is valid regardless of the date the first degree was awarded); or (2) present transcripts indicating that they have completed a program of study which is compatible with the general education guidelines of Title V; or (3) complete the General Education pattern as set forth below.

AWARDING OF DEGREES

Degrees are awarded in January, June and August. 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.

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 meet the following conditions:

(1) A minimum of 45 letter graded semester units offered for the degree must have been earned in resident study at Sonoma State University. In exceptional cases, this condition may be petitioned.

(2) The grade point average of all work completed for the baccalaureate degree must meet a minimum grade point average of 3.50.

"With Distinction" will be awarded to students who are judged by their departments to have made outstanding contributions to their disciplines. (The Department of Psychology 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.

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. Humanities	12 units
D. Social Sciences	12 units
E. Integrated Person	3 units

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

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

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.

* 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.

Upper Division General Education

Sonoma State University offers both disciplinary and thematic upper-division General Education courses. The thematic courses, focusing on the theme of Revolution, present an opportunity for students and faculty cross the campus to examine a topic of great significance to contemporary society. Students needing upper-division General Education coursework in categories A–D may choose to take the thematic courses. Prerequisites for a thematic course are completion of at least six units of lower-division work in that category and passage of the Written English Proficiency Test, or English 375 with a grade of C or better. Consult current schedule of classes for thematic offerings.

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.

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. Instruction approved for the fulfillment of this requirement is intended to impart knowledge of the facts and principles which form the foundations of living and nonliving systems. Such studies promote understanding and appreciation of the methodologies of science as investigative tools as well as the limitations of scientific endeavors. In addition, particular attention is given to the influence which the acquisition of scientific knowledge has had on the development of the world's civilizations, not only as expressed in the past but also in present times. Inquiry into mathematical concepts and quantitative reasoning and their application implies not merely basic computational skills, but also the understanding of basic mathematical concepts.

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

1. PHYSICAL SCIENCES

ASTR 100 Descriptive Astronomy (3 units)

ASTR 200 Introductory Astronomy (3 units)

ASTR 231 ¹ Introductory Observational Astronomy (2 units)

¹ meets laboratory requirement.

- CHEM 102 Chemistry and Society (3 units)
- CHEM 103 ¹ Chemistry and Society Lab (1 unit)
- CHEM 115A ¹ General Chemistry (5 units)
- CHEM 125A ¹ General Chemistry (6 units)
- GEOL 102 ¹ General Geology (4 units)
- GEOL 202 Rocks, Time and Evolution (3 units)
- PHYS 100 Descriptive Physics (3 units)
- PHYS 102 ¹ Laboratory Physics for the People (1 unit)
- PHYS 114 Introduction to Physics (4 units)
- PHYS 116 ¹ Introductory Lab Experience (1 unit)
- PHYS 209A ¹ General Physics Lab (1 unit)
- PHYS 210A General Physics (3 units)

2. BIOLOGICAL SCIENCES

- BIOL 115 An Introduction to Biology (3 units)
- BIOL 115L¹ Introductory Laboratory (1 unit)

To complete a minimum of nine semester units select additional courses from either group 1 or group 2 above or from group 3 following:

3. SPECIFIC EMPHASES

Biological Sciences:

- ANTH 201 Human Evolution (4 units)
- BIOL 116 Biology of Plants (4 units)
- BIOL 117 Biology of Animals (4 units)
- BIOL 220 ¹ Human Anatomy (4 units)
- BIOL 224 Human Physiology (3 units)
- BIOL 224L Human Physiology Lab (2 units)
- BIOL 312 Introduction to Oceanography (3 units)
- BIOL 314 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)

Select one course from group 4

4. 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)

G. ARTS AND HUMANITIES

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

Instruction approved for the fulfillment 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)

¹ meets laboratory requirement.

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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 Music Literature (3 units)
MUS 350 Music of the World (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)
FL 213 World Literature in Translation (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 * Black Humanities (4 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)
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)

The comparative perspectives requirement may also be met through the study of a foreign language. Current offerings include French, German, Latin, Russian, 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.

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 Cultural Systems (4 units)
ECON 201A Introduction to Macroeconomic Theory (4 units)
ECON 201B Introduction to Microeconomic Theory (4 units)
GEOG 202 World Regional Geography (4 units)
GEOG 203 Cultural Geography (4 units)
MAMS 219 * Mexican-American Culture (4 units)
NAMS 200 * Introduction to Native Americans (4 units)
POLS 201 Ideas and Institutions (4 units)
PSY 250 Introduction to Psychology (4 units)
SOC 201 Introduction to Sociology (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)
- 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)

E. THE INTEGRATED PERSON

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

Select one course from the following:

- Anthro 318 Human Development: Sex and the Life Cycle (4 units)
- Anthro 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)
- PSYCH 302 Development of the Person (4 units)

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

- ¹ The lower division of the Hutchins School fulfills the General Education requirements through four interdisciplinary seminars of 12 units each: LIBS 101, The Human Enigma; LIBS 102, Exploring the Unknown; LIBS 201A, In Search of Self; LIBS 201B, The American Experience; and LIBS 202, Challenge and Response in the Modern World. Completion of the four seminars in the Hutchins Interdisciplinary General Education Program provides the following units:

	<i>Units</i>
Humanities	9
Social Sciences	12
Natural Sciences *	12
Communication and Critical Thinking	6
Upper division General Education	9
TOTAL	48

*includes 3 units to be taken in the Department of Mathematics.

POST-BACCALAUREATE DEGREES

Graduate education at Sonoma provides opportunities that enable 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 a series of semesters. Students interested in obtaining a second B.A. should refer to page 24 for information.

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

RESIDENCE MASTER'S DEGREE PROGRAMS

Biology	English
Counseling	History
Cultural Resources Mgt. (Anthropology)	Management
Education (five options)	Physical Education
Curriculum	Political Science
Early Childhood Education	Psychology
Educational Administration	Special Major (Interdisciplinary)
Reading	
Special Education	

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 any way 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 an immediate 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 responsibility to see that these and other forms are filed by deadlines given each semester in the Schedule of Classes.

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. 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 15 semester units shall be in graduate (500-level) courses.
2. No fewer than 15 semester units shall be taken after admission to classified standing.
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. The Graduate Dean works in cooperation with the Graduate Coordinator of each program to see that the work of students satisfactorily meets the criteria and standards set by that program.
9. Graduate students at Sonoma State University may, at the discretion of the department, take up to $\frac{1}{2}$ 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 Department of Education 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.

Numbering of Courses

Course Numbers

- * 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.

CREDENTIAL PROGRAMS

New credential regulations for all public school personnel were established in 1970 with passage of the Ryan Act. This legislation provides for three types of credentials: Teaching, Specialist, and Services.

During the 1982-83 academic year, the Education faculty was involved in a complete rewriting of all 10 of the Ryan Act credentials for teaching and other school service. This was necessitated by new guidelines issued by the Commission for Teacher Preparation and Licensing. At the time this catalog went to press, the rewriting had not been completed. Hence all applicants for credentials in the Education Department will have to consult with the coordinator of the program to which they are applying as to courses and field experiences required under the new guidelines.

Credential Programs currently offered at Sonoma State University are:

Teaching and Specialist Credentials

- Children's Center Permit
- Multiple Subject Instruction
 - Elementary Emphasis
 - Early Childhood Emphasis
 - Bilingual Education Emphasis
- Single Subject Instruction
- Early Childhood Specialist
- Reading Specialist
- Special Education Specialist (Learning Handicapped and Severely Handicapped)
- Bilingual/Cross-Cultural Specialist

Services Credentials

- Administrative Services
- Pupil Personnel Services

Admission to the University does not constitute admission to credential programs.

Candidates for Teaching Credentials should apply directly to the Department of Education. Detailed information concerning professional course requirements and undergraduate subject matter preparation may be obtained from the Credentials Advising Office of the Department of Education. Students who plan to work toward a credential should visit the Department during their first semester at the University to request assignment to an Education advisor.

The Pupil Personnel Services Credential is offered through the M.A. Counseling program, and candidates for that credential should apply directly to the Department of Counseling. Since the M.A. degree is an integral part of the credential program, there is ample opportunity for advising with regard to the credential during the course of work toward the M.A. in Counseling (see page 115).

All credentials are issued by the State of California upon recommendation by the Department of Education of the University.

All candidates for an *initial* credential should be aware of legislation which amends the Education Code Section 44320 (b) and becomes effective January 1, 1981. This legislation reads as follows: "Prior to admission to student teaching under any professional preparation program approved by the commission, a candidate for a credential shall obtain a Certificate of Clearance from the commission which shall be issued when the commission has verified the candidate's personal identification and health status. The fee for the Certificate of Clearance shall not exceed one-half of the regular fee for a credential and shall be deducted from the fee for the initial credential applied for by the certificate holder." This requirement applies to all initial credential programs but is not limited to Multiple and Single Subject programs. A Certificate of Clearance would also be required of a candidate for an initial credential, for example, prior to admission to a field practicum for the Pupil Personnel Services Credential.

Candidates will be required to be fingerprinted. Application forms and fingerprint cards are available in the Credentials Advising Office, Stevenson Hall, Room 3079. Please contact that office if you have any questions regarding this requirement.

CHILDREN'S CENTER PERMIT PROGRAM

Students interested in pursuing a career in the field of child care will need to fulfill State Department of Education requirements in order to work in and operate child care centers. They can fulfill these requirements by taking coursework in the University. Passage of the California Basic Educational Skills Test is required for the permit.

Children's Center Regular Instructional Permit

The program is designed to assist students in completing the State requirements for this permit. The permit qualifies you as a teacher at the infancy, preschool and school-aged daycare or center level. It is required for employment in local, state and federally supported programs.

Requirements:

1. 16 general education units
2. 24 semester units of early childhood education coursework
3. 1 year of supervised field work or 2 years experience in a child development center

Children's Center Supervision Permit

Students wishing to complete requirements that enable them to qualify as director or administrator of early childhood programs must meet requirements as follows:

1. Possession of the Children's Center Regular Instructional Permit
2. A bachelor's degree
3. 12 semester units of early childhood education coursework at an advanced level
4. 2 years teaching experience
5. 6 semester units preschool administration

Individual Courses

Professional development in early childhood education for personnel working in auxiliary roles (aides or assistants), or complementary roles (social work, nutrition, health) in child development centers may be obtained by enrolling for individual courses. Completion of the full program is not required.

For further information see:

- Dr. Betty Halpern, Department of Education
- Dr. Libby Byers, Department of Education
- Dr. Nina Menrath, Department of Psychology
- Dr. Richard Zimmer, Hutchins School

MULTIPLE SUBJECT CREDENTIAL (ELEMENTARY EMPHASIS)

This credential authorizes the holder to teach in a self-contained classroom in 12th grade down through pre-school. (Since most self-contained classrooms are at 6th grade level and lower, most would teach in an elementary school.)

The program is a three-phase (29 unit) program which is sequential extending over three academic semesters, and satisfactory completion of each phase is considered prerequisite to the succeeding phase. A limited number of graduate applicants may be accommodated on a two-semester basis. Those students wishing to complete the program over a four semester period may do so.

The Teacher Preparation and Licensing Act of 1970, under which this program has been approved, requires a Baccalaureate degree in a subject other than professional education, passage of the approved State examination or its waiver. Waiver programs are offered through the following baccalaureate programs at Sonoma State

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University: Bachelor of Arts in Liberal Studies (B.A.L.S.), Environmental Studies, Hutchins School of Liberal Studies, Mexican American Studies/B.A.L.S., Mexican American Studies/Hutchins School. The candidate must seek careful faculty advising in the chosen degree major department to assure waiver status. Individuals planning a non-waiver major may obtain information regarding the State approved examination from the Testing Office, 664-2947.

ADMISSION REQUIREMENTS:

1. Junior standing (60 units completed), or above.
2. Cumulative grade point average of 2.50 or higher, or an upper division and graduate grade point average of 2.75 or higher.
3. Interviews with Department of Education faculty.
4. A spontaneous writing sample.
5. An autobiographical statement.
6. Letters of recommendation.
7. Two sets of official transcripts of all previous college and/or university work submitted to the Credentials Advising Office of the Department of Education. Check with the Office of Admissions and Records regarding official transcripts needed for admission to the University.
8. Approval of the Department of Education. Although grade point average is a consideration in the selection of candidates, emphasis is also given to extent of experience relevant to elementary school teaching and recommendations, particularly recommendations resulting from interviews, child-related experience and college coursework.

PROFESSIONAL COURSE REQUIREMENTS:

Successful completion of each phase is considered prerequisite to the next phase of the program.

Written English Proficiency Test and California Basic Educational Skills Test (CBEST) must be taken during Phase I.

Phase I

	<i>Units</i>
Ed 416 Student Teaching in Multi-Cultural Settings—Field Experience	(1)
Ed 428A Issues in Multicultural Education	(1)
Ed 429 Psychological and Social Foundations of Education	(4)

Phase II

This phase has two options.

Option 1

Ed 402 Curriculum of the Elementary School—Mathematics (Math 300 is a prerequisite to this course)	(1)
Ed 407 Curriculum of the Elementary School—Reading	(3)
Ed 409 Integrated Curriculum for the Multiple Subject Credential.....	(3)
Ed 412 Student Teaching in Reading	(1)

Option 2

Ed 402 Curriculum of the Elementary School—Mathematics (Math 300 is a prerequisite to this course)	(1)
Ed 407 Curriculum of the Elementary School—Reading	(3)
Ed 412 Student Teaching in Reading	(1)

Plus—Select 3 or more

Ed 400 Curriculum of the Elementary School—Social Studies	(1)
Ed 401 Curriculum of the Elementary School—Environmental Education	(1)
Ed 403 Curriculum of the Elementary School—Science	(1)
Ed 404 Curriculum of the Elementary School—Micro Computers in the Classroom	(1)
Ed 408 Curriculum of the Elementary School—Language Arts	(1)

Phase III

Candidate must pass the Written English Proficiency Test or an approved equivalent course and the California Basic Educational Skills Test prior to student teaching.

Ed 405A Student Teaching and Seminar	(7)
Ed 405B Student Teaching and Seminar	(8)
Ed 414 Seminar in Student Teaching	(1)

Note: Candidate must pass a course or test on the U.S. Constitution prior to university recommendation for the credential. A clear credential requires an approved, planned fifth year, including approved courses on health education/drug abuse and special education.

MULTIPLE SUBJECT CREDENTIAL (EARLY CHILDHOOD EMPHASIS)

Admission and professional course requirements for this program are the same as for the Multiple Subject Credential (Elementary Emphasis) outlined above.

The Multiple Subject Credential (Early Childhood Emphasis) program is under revision. It is anticipated that the proposed program will be approved for implementation by the 1983 fall semester.

Please see the coordinator of the Early Childhood Programs in the Department of Education for details.

MULTIPLE SUBJECT CREDENTIAL (BILINGUAL/ CROSS-CULTURAL EMPHASIS)

Admission and professional course requirements for this program are the same as those for the Multiple Subject Credential (Elementary Emphasis) outlined above, with additional requirements in language and culture.

The Bilingual/Crosscultural emphasis program is under revision. It is anticipated that the proposed program will offer a two-semester and a three semester option. The program is sequenced so that successful completion of each phase is prerequisite to entry to the next phase.

For further details regarding admission and program requirements, see the coordinator of the Bilingual Education Programs in the Department of Education.

SINGLE SUBJECT CREDENTIAL

The Single Subject Credential qualifies the holder to teach grades twelve through pre-school in a designated subject matter area. Sonoma State University offers the credential ONLY in the following designated subject matter areas among those recognized by the Commission for Teacher Preparation and Licensing.

Art	Life Science
English	Biology
Drama	Mathematics
English	Music
Journalism	Physical Education
Speech	Physical Science
Foreign Language	Chemistry
French	Physics
German	Social Science
Spanish	Mexican American Studies
	Social Science Division

Note: See each department for program and major details.

Students must complete the approved undergraduate subject matter preparation in

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the above areas OR successfully pass the State examination in the subject matter area, prior to enrolling in student teaching. The Single Subject credential program offers two options:

1. A three semester program and
2. A two semester program

The phases of the program are sequential and the successful completion of each phase is considered pre-requisite to the next phase of the program.

Admission Requirements for Three Phase Program:

- I. Phase I Admission Requirements (first semester):
 - A. All General Education requirements completed.
 - B. At least 75 semester units of the degree program completed.
 - C. No more than 20 semester units of the degree major to be completed. (Foreign Language—21 units).
 - D. Transcripts (two sets of official transcripts on file in Credentials Office, Department of Education.)
 - E. A minimum 2.5 grade point average in undergraduate course work completed; a minimum 2.75 GPA in the applicant's declared major.
 - F. Successful completion of the Written English Proficiency Test (WEPT).
 - G. Satisfactory interview ratings from both the Education Department and the subject matter department.
 - H. A spontaneous writing sample on an assigned topic to be completed the day of the interview.
 - I. An autobiographical statement.
 - J. Passage of the California Basic Educational Skills Test (CBEST)
- II. Phase II Admission Requirements (second semester):
 - A. All of the above requirements met.
 - B. A minimum of 90 semester units of the degree program completed.
 - C. No more than 9 semester units of the degree major remaining to be completed.
 - D. Successful completion of Phase I.
- III. Phase III Admission Requirements (third semester):
 - A. All of the above requirements met.
 - B. Successful completion of Phase II.
 - C. Successful completion of subject matter requirements for Single Subject major or successful completion of state subject matter examination.

Sequence of Courses for Three Semester Option:

<i>Phase I</i>	<i>Units</i>
Educ. 422A/B Secondary School Curriculum and Instruction	(1-1)
Educ. 428A Issues in Multicultural Education.....	(1)
Educ. 429 Psychological and Social Foundations of Education.....	(4)
<i>Phase II</i>	
Students taking the State subject matter examination in lieu of academic coursework for the waiver must submit passing scores on the designated subject area prior to enrolling in Educ. 424.	
Educ. 406A Teaching of Reading in the Secondary School	(3)
Educ. 406B Secondary Reading Field Experience	(1)
Educ. 424 Introduction to Student Teaching	(1-1)
(Educ. 424 requires a 3-4 hour daily block of time in schools)	
Educ. 426 Seminar in Student Teaching.....	(1)
<i>Phase III</i>	
All academic coursework must be completed prior to enrolling in Educ. 425.	
Educ. 425A/B Secondary Student Teaching	(4-8)
Educ. 426 Seminar in Student Teaching.....	(1)
Total units in Education	28

Candidates must pass a course or test on the U.S. Constitution prior to university recommendation for the credential.

Admission Requirements for Two Semester Program:

- I. Phase I Admission Requirements (first semester):
 - A. Possession of a baccalaureate degree in a designated single subject area or completion of *all* subject matter requirements in a single subject waiver program.
 - B. Successful completion of State subject matter examination in a designated single subject (does not apply to those who have completed a college waiver program).
 - C. A minimum 2.5 grade point average in undergraduate course work completed; a minimum of 2.75 grade point average in the applicant's declared major.
 - D. Successful completion of the Written English Proficiency Test (WEPT).
 - E. Satisfactory interview ratings from both the Education Department and the subject matter department.
 - F. A spontaneous writing sample on an assigned topic, to be completed the day of the interview.
 - G. At least 60 hours of successful experience as an aide or volunteer at the junior high or senior high school level documented by letters of recommendation.
 - H. An autobiographical statement.
 - I. Two sets of official transcripts on file in Credentials Office, Department of Education.
 - J. Passage of the California Basic Educational Skills Test (CBEST).
- II. Phase II Admission Requirements (second semester):
 - A. All of the above requirements met.
 - B. Successful completion of Phase I.

Sequence of Courses for Two Semester Option:

<i>Phase I</i>	<i>Units</i>
Educ. 406A The Teaching of Reading in the Secondary School.....	(3)
Educ. 406B Secondary Reading Field Experience	(1)
Educ. 422A/B Secondary School Curriculum and Instruction	(1-1)
Educ. 424 Introduction to Student Teaching	(1-1)
Educ. 426 Seminar in Student Teaching.....	(1)
Educ. 428A Issues in Multicultural Education.....	(1)
Educ. 429 Psychological and Social Foundations of Education.....	(4)
<i>Phase II</i>	
Educ. 425A/B Secondary Student Teaching	(4-8)
Educ. 426 Seminar in Student Teaching.....	(1)
	28

Candidates must pass a course or test on the U.S. Constitution prior to university recommendation for the credential.

Upon completion of an approved, planned fifth year, including approved courses on health education/drug abuse and special education, the University will recommend a clear credential.

EARLY CHILDHOOD SPECIALIST CREDENTIAL

ADMISSION REQUIREMENTS:

1. A baccalaureate degree and a valid basic California teaching credential.
2. The equivalent of two years of successful teaching experience.
3. Interview with department faculty.
4. Spontaneous writing sample.
5. Two sets of official transcripts on file with the Credentials Office in the Department of Education.

38 / Degrees and Credentials

The Early Childhood Specialist Credential program is under revision. It is anticipated that the proposed program will be approved for implementation by the 1983 fall semester.

Please see the coordinator of the Early Childhood Programs in the Department of Education for details.

READING SPECIALIST CREDENTIAL

This credential authorizes the holder to serve as a reading specialist or a special reading teacher in grades one through 12 as indicated by the Commission for Teacher Preparation and Licensing (Ryan Act). Designed primarily for teachers, the program is offered in late afternoon and evening classes.

ADMISSION REQUIREMENTS:

1. A baccalaureate degree and a valid basic California teaching credential.
2. The equivalent of two years of successful teaching experience.
3. Successful completion of a course in the teaching of reading.
4. Two sets of official transcripts on file in the Credentials Office of the Department of Education.
5. Passage of the California Basic Educational Skills Test (CBEST)

PROFESSIONAL COURSE REQUIREMENTS:

	<i>Units</i>
Ed. 507 Advanced Seminar: Curriculum and Research in Reading.....	(3)
Eng. 489 English Linguistics	(3)
Ed. 509 Organization, Administration and Supervision of Reading Instruction	(3)
Ed. 514 Selection and Evaluation of Reading Materials	(3)
Ed. 515 Seminar: Children's Literature	(3)
Ed. 517 Psychology of the Reading Process	(3)
Ed. 560A Diagnosis and Remediation of Reading Difficulties	(3)
Ed. 561 Supervised Field Experience	(3)
Ed. 568 Evaluation in Education	(3)
Ed. 574 Information Systems and Research Methods	(2)

SPECIAL EDUCATION SPECIALIST CREDENTIAL

This two-semester (Fall and Spring) Special Education program offers both the Learning Handicapped and the Severely Handicapped specialist teaching credentials. As a "block program" model is employed, only full-time students can be accepted into the program.

ADMISSION REQUIREMENTS:

1. A baccalaureate degree and a valid basic California teaching credential.
2. Successful completion of Ed. 430 (Special Education for Teachers) or its approved equivalent and documented experience in the field.
3. Interviews with Department faculty.
4. A spontaneous writing sample.
5. Two sets of official transcripts on file in the Credentials Office of the Department of Education.
6. Passage of the California Basic Educational Skills Test (CBEST).

PROFESSIONAL COURSE REQUIREMENTS:

Ed. 452 Student Teaching with Students with Special Needs	(6-6)
Ed. 453 Seminar in Student Teaching	(2-2)
Ed. 546AB Competencies in Teaching the Severely Handicapped	(3-3)
Ed. 547AB Educational Assessment of Exceptional Students	(3-3)
Ed. 549AB Competencies in Teaching the Mildly Handicapped	(3-3)
Ed. 588AB Curriculum and Materials Modification in Special Education	(3-3)

New credential programs and requirements for existing programs in special education are continually being considered and reviewed. All prospective credential candidates should contact the coordinator of special education for current information. Persons interested in obtaining the Resource Specialist Certificate should contact the coordinator in special education.

BILINGUAL/CROSS-CULTURAL SPECIALIST CREDENTIAL

The Bilingual/Cross-Cultural Specialist Credential is under revision. It is anticipated that the proposed program will be approved for implementation by the 1983 fall semester.

Please see the coordinator of the Bilingual Education Program in the Department of Education for details.

ADMINISTRATIVE SERVICES CREDENTIAL

This credential authorizes the holder to serve as a superintendent, associate superintendent, deputy superintendent, principal, assistant principal, supervisor, consultant, coordinator, or in other equivalent or intermediate level positions.

ADMISSION REQUIREMENTS

1. A baccalaureate degree and a valid basic California teaching credential.
2. Three years of successful teaching experience.
3. A grade point average of 2.5.
4. Interview with Department faculty.
5. Two sets of official transcripts on file in the Credentials Office of the Department of Education.
6. Passage of the California Basic Educational Skills Test (CBEST).

PROFESSIONAL COURSE REQUIREMENTS

	<i>Units</i>
Ed. 550 Special Education for Administrators	4
Ed. 551 Curriculum in the Contemporary School	3
Ed. 552A School Personnel Management	3
Ed. 552B School Personnel Management Field Experience.....	1
Ed. 553 School-Community Relations	3
Ed. 554 School Law.....	3
Ed. 555 Research and Evaluation	3
Ed. 556 School Finance	3
Ed. 557 Student Personnel Services	3
Ed. 558 Advanced Seminar in Curriculum Development.....	3
Ed. 559 School Organization and Administration	4

PUPIL PERSONNEL SERVICES CREDENTIAL

This credential authorizes the holder to perform, at all grade levels, the service designated on the credential, which may include: Counseling; Psychology; Child Welfare and Attendance; and School Social Work.

This credential is offered through the M.A. Counseling program at Sonoma. Interested students should contact the Department of Counseling for information and application.

Passage of the California Basic Educational Skills Test is required for this credential.

FIFTH YEAR PROGRAMS

The Department of Education has a variety of options to meet Ryan Act "fifth year" requirements.

THE PROGRAM

A teacher who holds a preliminary Multiple Subject or Single Subject teaching credential is required to complete a fifth year of study in a university-approved program in order to obtain a clear credential. The fifth year is defined as 30 semester units.

The Sonoma State University program is designed for people who are currently teaching on a preliminary credential or for those who wish to complete a fifth year of study before seeking a teaching position. In order to meet the varying needs of the candidates, several alternatives have been planned. These alternatives are outlined below.

Selected courses for any alternative may not include more than 3 units of lower division courses and 6 units of extension courses. Courses taken at other institutions may not exceed 9 semester units. All courses must have written approval of the candidate's advisor. Completion of a course covering the required content in health education (including drug abuse) and a special education requirement (Education 430—Special Education for Teachers) will be required in each completed program. Each candidate's program will be based upon careful assessment of past experiences, academic achievement, professional strengths and weaknesses, and career aspirations as determined by the candidate together with the advisor.

PROGRAM ADMISSION REQUIREMENTS

1. Admission to the University as a graduate student.
2. A valid California preliminary teaching credential.
3. Completion of application form for admission to the program.
4. Candidates from other colleges must provide two sets of official transcripts of previous college work to the Credentials Office, Department of Education.

Alternative I—Continuing Student

A program designed for the person who wants to complete the fifth year without a break in the continuity of the credential program.

Comparative Culture (Recommended)	3
Curriculum/Methods	12
Content Courses.....	15
	units 30

Alternative II—Additional Major

This program is for the candidate who wishes to complete another major or prepare for an NTE subject area examination. 30 units

Alternative III—M.A. Degree and/or Specialist Credential

The candidate will complete the prescribed program for the selected area of emphasis. Programs are available in the areas of curriculum, reading, administration, early childhood education, special education, bilingual education and counseling. M.A. programs are also available in several other departments of the University. 30 units

Alternative IV—Teaching Credential

Alternative IV consists of the basic, approved Sonoma State University teacher education program. Upon receiving the baccalaureate degree a candidate may elect to complete a Liberal Arts major and/or the approved teacher credential program to meet the fifth year requirements.....30 units

Alternative V—Student Designed

After a careful assessment and analysis of the student's academic and experiential background and in line with the student's professional goals, a mutually agreed upon program may be designed by the candidate and the advisor. 30 units

FURTHER INFORMATION: please write or call

Coordinator
Ryan Fifth Year Program
Department of Education
Sonoma State University
or
Credentials Office
(707) 664-2581

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. 425); 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. 338)
Pre-Medical Program (see p. 338)

Career Minors (see p. 226)

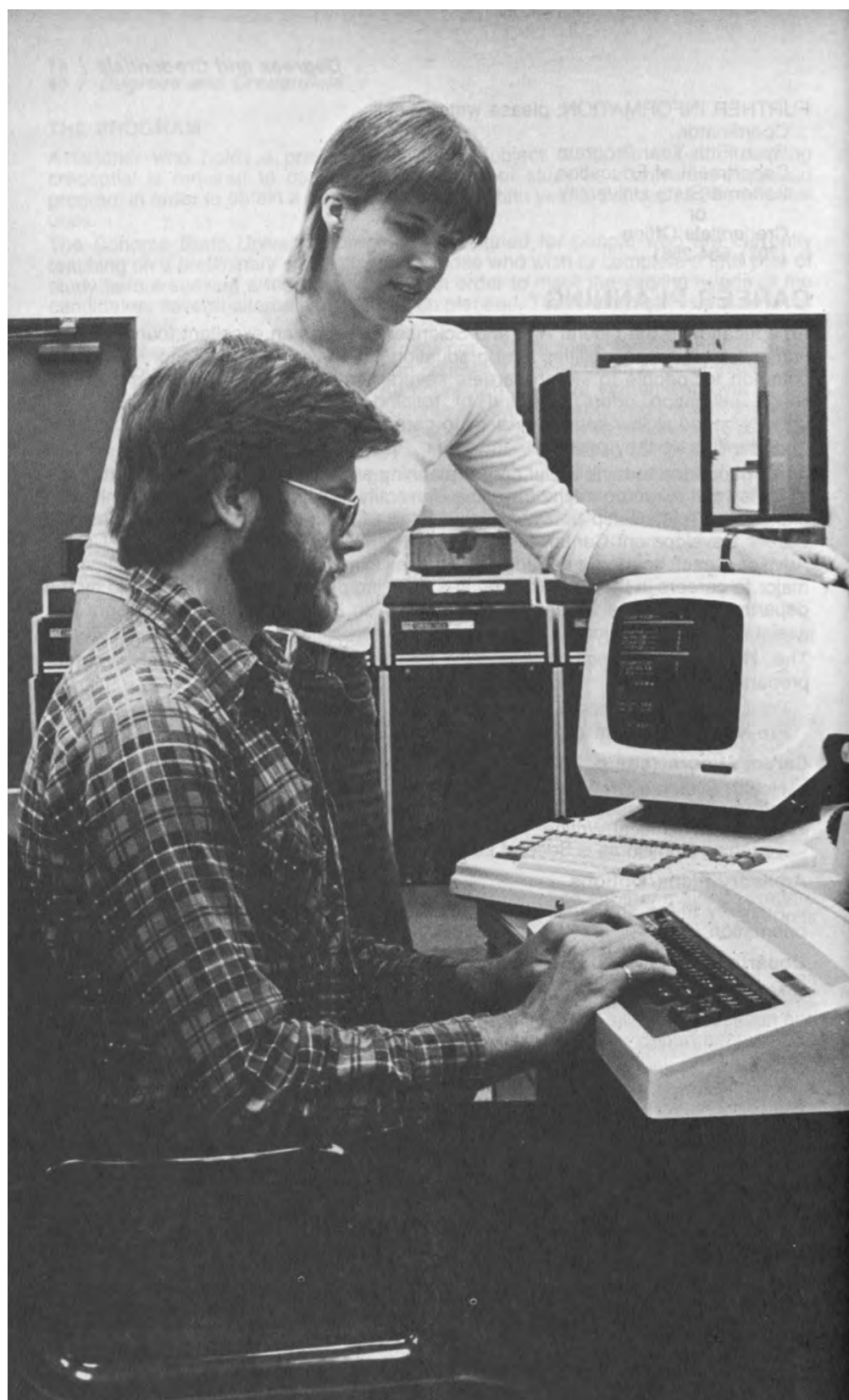
Health Systems Organization
Information & Research
Science/Technical Writing
Teaching English as a Second Language

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 DEGREE

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B.A. Concentrations:		International Business & Foreign	
Art History		Policy	
Art Studio		German History and Culture	
Biology	81	German Language and Literature	
B.A. Concentrations		History	201
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Botany		India Studies	176
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Electron Microscopy		Management	241
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Marine Biology		Finance	
Microbiology		Accounting	
Park Service		Marketing	
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Pre-Medical Technology/		Music Education	
Public Health		Performance	
Pre-Pharmacy		Popular and Commercial	
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B.A. Concentrations:		Physics	321
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Cultural Studies			

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BACHELOR OF SCIENCES DEGREE**Major Programs**

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B.S. Concentrations:	
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MASTER OF ARTS DEGREE

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M.A. Concentrations:

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Educational Administration	
Reading	
Special Education (includes)	
Learning Handicapped	
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Management	242
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Political Science	330
Psychology	345
Special Major (Interdisciplinary)	231

MASTER OF SCIENCES DEGREE

Special Major (Interdisciplinary)	231

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

ARTS and HUMANITIES

Dean: William Babula

The School of Arts and Humanities is one of three schools at Sonoma State University. The School is an unusually diverse one which combines education in the arts and humanities with a recognition of the career goals of students. In the arts, instructional programs include 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 Sonoma Film Institute, the Humanities Lecture Series, the campus radio station, and the student newspaper. The faculty of the School are committed to excellence in teaching and a strong advising program. Special emphasis is placed upon programs that combine traditional arts and humanities majors with career-oriented minors. Such programs include Art with Management, English with Science-Technical Writing, Foreign Languages with International Studies, Music with Computer Theory, American Multi-Cultural Studies with Criminal Justice Administration 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 an uncertain and changing future.

NATURAL SCIENCES

Acting Dean: Richard Karas

The curriculum offered in the School of Natural Sciences meets not only the professional needs of students planning a career in science or mathematics, but also the needs of students in fields as diverse as the arts or business. For example, students studying art may benefit from courses in optics (which includes the study of light and color), lasers and holography (a technology with extensive artistic possibilities), and physiology. Similarly, students planning careers in fields such as management, law, or urban planning may find courses in mathematics, statistics, or computing highly useful. Besides courses useful for career preparation, the School of Natural Sciences offers a rich selection of studies which will enhance one's entire life. One may elect physical activity, astronomy, or geology courses; each will provide a basis for life-long pursuits and enrichment.

Students planning careers in science or mathematics may follow high-quality programs in any of the School's seven departments. Past 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 opportunities. In keeping with expressed student and community interest, the School of Natural Sciences now offers degree programs in Computer Science.

In addition to strictly departmental programs, the School 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 health profession schools. Sonoma State students have won admission to such graduate programs at rates well above national averages (roughly twice the national rate for medical school admissions, for example).

The School of Natural Sciences is staffed with a dedicated faculty of professional scientists and mathematicians. We are proud of the education we provide and of the accomplishments of our students.

SOCIAL SCIENCES

Dean: Jeffrey Douth

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 skilled 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 coursework 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.

AMERICAN MULTI-CULTURAL STUDIES

Department Chair: James E. Gray

Faculty: Billy Browning, Forrest Davis, Herminia Menez, Marcia Robinson

Department Office: Nichols Hall 214, phone (707) 664-2486

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

The department offers a B.A. in Afro-American Studies, with a multi-cultural perspective. The B.A. program is sufficiently flexible to allow for a cross-disciplinary concentration on a particular ethnic group or for a cross-cultural examination of issues and topics. Courses are designed to serve both of these orientations.

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.

BACHELOR OF ARTS IN AFRO-AMERICAN STUDIES

Major:	<i>Units</i>
General Education	49
Core requirements	24
Electives	10
Total needed for Major	36
Supporting Electives	39
Total needed for Graduation	124

CORE REQUIREMENTS

	<i>Units</i>
AMCS 315 Ethnic Arts Music & Dance	4
AMCS 335 Black History	4
AMCS 300 Afro-American Musical Heritage/Jazz.....	4
AMCS 405 The Family Comparative Perspectives or	
AMCS 433 Aging and Ethnic Minorities.....	4
AMCS 345 Folklore and Ethnicity.....	4
And add one of the following:	
AMCS 425 Men/Women: Power in Interpersonal Relations.....	4
WOMS 470 Sexism and Racism in the United States	4
MAMS 445 Chicano History	4
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 EMPHASIS:

	<i>Units</i>
AMCS 300 Afro-American Musical Heritage/Jazz.....	4
AMCS 471 Afro-American Children's Literature.....	4
AMCS 345 Folklore and Ethnicity.....	4
AMCS 305 Contemporary Black Music	4
AMCS 390 Ethnic Theater	3
AMCS 392 Images in Film	4

50 / American Multi-Cultural Studies

	<i>Units</i>
AMCS 315 Ethnic Arts & Music	4
AMCS 320 Performing Arts Workshop	2
Total	12

SOCIAL SCIENCE EMPHASIS

AMCS 330 Introduction to African History	4
AMCS 335 Black History	4
AMCS 405 Comparative Perspective	4
AMCS 420 Sexism and Racism in the United States.....	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:

	<i>Units</i>
AMCS 315 Ethnic Arts, Music, Dance	4
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:

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 ethnicity was established in the United States.

255. Black Humanities (4)

An introduction to the Black experience through the study of Afro-American folklore, literature, philosophy, religion, art, music, and dance.

300. Jazz History

A survey of jazz music from its African origins to the present. The course will examine folk, music, blues, spirituals, and the influences of European music in the contemporary expansion of jazz as a cultural medium.

301. Experimental Courses (1-4)

Refer to current schedule of classes.

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. Course may be repeated for credit.

335. Black History (4) (Topics subject to change) (Cross listed as History 354)

An examination of the social, economic and political evolution of Blacks 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.

356. Language and Ethnicity (4)*

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)

A historical study of representative and significant films tracing the evolution of Black 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.

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.

* Topics subject to change; may be repeated for credit.

52 / American Multi-Cultural Studies

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.

425. Men/Women: Power in Interpersonal Relations (4)

An examination of "support systems" and techniques designed to improve interpersonal interactions and to establish viable career and social recognition and satisfaction. The emphases are on the individual and the building of "character pride and confidence." The course may be repeated for credit.

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.

435. African Literature (4)

An examination of contemporary and traditional African literature, especially the works of the following authors, e.g., Chinua Achebe, Doris Lessing, Cyprian Ekwensi, James Ngugi, etc.

440. Counseling Strategies (4)

This course will involve a systematic study of strategies for counseling ethnic minorities from both a theoretical and practical perspective.

451 History of Western and Southern Africa (4) (Cross listed as History 430)

A study of the contemporary political and cultural issues confronting the governments of Western and Southern Africa and the historical roots of the problems. The international significance of these regions will be examined through the economic and military importance which the "super powers" place on their strategic materials and locations.

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.

480. Senior Seminar (4)

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

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.

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.

ANTHROPOLOGY

Department Chair: Mildred Dickemann

Department Office: Stevenson 2026, Phone (707) 664-2312

Faculty: James Bennyhoff, David A. Fredrickson, Sue T. Parker, David W. Peri, R. Thomas Rosin, Shirley Silver, Albert L. Wahrhaftig

As a liberal arts education, the study of anthropology provides individuals with a broad perspective for viewing themselves and others which reveals coherence in the apparent arbitrariness of human society. It is invaluable as career training for research professions and vocations involving human services and planned change, such as: cultural resource management, environmental planning, nursing, education, public health, administration, law, and community development.

The core curriculum for the major includes the four subdisciplines of anthropology: socio-cultural anthropology, archaeology, anthropological linguistics, and biological anthropology. Culture area courses provide a base for cross-cultural comparisons, both prehistoric and contemporary, with an emphasis on American Indian societies. Cross-specific comparisons are investigated in courses on primate biology and behavior—both human and non-human. Ecological approaches to the analysis of human biological and cultural behavior are emphasized. An additional focus is the application of method and theory to the analysis of the problems and institutions of industrial as well as of traditional societies.

Guided by the principle that research and teaching are inseparable at the university level, the Department encourages students to develop competencies in research consistent with professional standards of achievement. Field and laboratory training are provided at both the undergraduate and graduate levels in course instruction, in the department's Archaeology and Ethnographic Laboratories, and in conjunction with faculty research projects, public service contracts, and internships. Students often present the results of these activities in professional meetings, research publications, and public documents.

Graduate level curriculum and public contract work in Cultural Resources Management provide an opportunity for professional training that can lead to careers in various public and private agencies. Students interested in graduate work in Cultural Resources Management should contact the Department Chair and/or the Graduate Coordinator for information.

Special facilities include the: Physical Anthropology Laboratory; Ethnographic and Primate Film Library; Human Relations Area Files; and computer services. The Archaeological Laboratory maintained by the Department is the Regional Archaeological Center for North Coast Counties of the State of California and includes collections, site records, maps, photographs and manuscripts. This laboratory is unique in providing to undergraduates an active program of site surveying, excavation, and specialized processing techniques such as obsidian hydration. The archives of the Ethnographic Laboratory currently house eight collections (consisting of documents, tapes, photographs and maps) of ethnographic, ethnobiological, historical, sociological and linguistic material concerning Indian and non-Indian populations in Northern California.

Students wishing to design interdisciplinary programs, integrating Anthropology with other sciences or the humanities, are welcomed by the Department.

Degrees Offered: B.A. in Anthropology and M.A. in Cultural Resources Management

BACHELOR OF ARTS IN ANTHROPOLOGY**General Anthropology Major**

	<i>Units</i>
General Education	49
Anthropology Courses	40
Foreign Language and/or Electives.....	35
TOTAL	124

COURSE REQUIREMENTS

Anth 201—Human Evolution

Anth 203—Cultural Systems

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

Anth 300—History of Anthropological Theory.

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

An upper division course in Archaeology.

An upper division course in Cultural Analysis and Theory *or* an Ethnographic Area

An upper division course in Biological Anthropology

An upper division course in Anthropological Linguistics

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

Major in Anthropology with a Concentration**B.A. IN ANTHROPOLOGY WITH A CONCENTRATION
IN ARCHAEOLOGY**

This concentration, a 40 unit major with 16 units of supporting subjects, 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 Requirements (32 units):
 - a. Anthropology 300. History of Anthropological Theory (4)
 - b. Anthropology 345. Human Ecology (4)
 - c. Anthropology 382. Language Change (4)
 - d. Anthropology 302. Human Ethology and Sociobiology (4)
 - e. Anthropology 321. Archaeology and Society (4)

or:

 - Anthropology 332. Prehistory of California (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 528. Method in Cultural Resources Management (4)
 - Anthropology 499. Anthropology Internship (4)
2. Supporting Courses—While not required for completion of this concentration, 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 Interpretation (4)
 - Geography 385. Introductory Cartography and Graphics (4)
 - History 363. The Redwood Empire (4)

B.A. IN ANTHROPOLOGY WITH A CONCENTRATION IN HEALTH AND ILLNESS

This plan, involving 40 units in the major, and 13 to 16 supporting units (a total of 53–56 required units) 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: Requirements (32 units):
 - a. Anthropology 300. History of Anthropological Theory (4)
 - b. Anthropology 302. Human Ethology and Sociobiology (4)
 - c. Anthropology 318. Human Development (4)
 - d. Anthropology 345. Human Ecology (4)
 - e. Anthropology 350. Applied Anthropology (4)
 - f. Anthropology 357. Medical Anthropology (4)
 - g. Anthropology 441. Ethnographic Field Methods (4)
 - h. One additional course in cultural analysis, an ethnographic area or linguistics, to be chosen in consultation with the major advisor (4)
2. Required 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:

Anth 201—Human Evolution and Anth 203—Cultural Systems

In addition at least one course must be chosen from each of the following groups:

Biological Anthropology or Archaeology;

Cultural Analysis and Theory or Linguistics;

Ethnographic Areas.

With the approval of the advisor, substitution can be made employing advanced anthropology courses.

TEACHING CREDENTIAL

Students seeking a teaching credential may elect Anthropology as their single subject academic major under the Ryan Act. All majors contemplating a career in secondary social science education should see page 353 for Ryan Single Subject Social Science Program Requirements. Students contemplating a career in elementary education who major in Anthropology are required to pass the Common Examination of the National Teacher Examination to obtain the multiple-subject credential. Contact Credentials Office for further information.

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

Cultural Resources Management includes the identification, evaluation and preservation of cultural resources, as guided by cultural resources legislation and scientific standards within the planning process. The term cultural resource includes "Any building, site, district, structure, object, data or other material significant in history, architecture, science, archaeology or culture" (33 CFR 305.4(d)).

The primary objective of a Master's Program in Cultural Resources Management is to produce professionals equipped with (1) the techniques necessary for fulfilling job responsibilities in CRM and related positions and (2) a grounding in research and theory sufficient to recognize and suggest appropriate utilization of scientific data accrued in the process of job performance.

The Program provides its graduates with the following:

- i. Training and experience in developing projects and programs in Cultural Resources Management.
- ii. 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.
- iii. 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.
- iv. Training in and experience with anthropological techniques of field and laboratory analysis, and archival and museum preparation.
- v. 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 Department of Anthropology.
 - c. Submit a specimen of the candidate's written work (term paper, technical report, article or equivalent) to serve 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. 359 for requirements).
3. Admission by Sonoma State University to Classified Postbaccalaureate Standing. The Graduate Coordinator 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 Coordinator
Department of Anthropology
Sonoma State University
Rohnert Park, CA 94928

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.

<i>Course Pattern</i>	<i>Units</i>
Anthro. 500—Proseminar	4
Hist. 501—Seminar in Public Historical Studies	4
Anthro. 502—Seminar in Ecology and Prehistory	4
Anthro. 503—Seminar in Cultural Resource Management.....	4
Anthro. 504A/B—Thesis	6
Supporting Courses	<u>8</u>
	30

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

ANTHROPOLOGY COURSES

LOWER DIVISION COURSES

Introductory Courses

*** 201. 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.

202. Prehistory (4) (Fall) 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.

* Fulfills General Education requirement in Biological Science.

**** 203. Cultural Systems (4) (Fall & 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.

UPPER DIVISION COURSES

300. History of Anthropological Theory (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.

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.

*****318. Human Development (4) (Fall) (Cross-listed with Psych. 409—Developmental Psychology) Parker**

Evolutionary and cognitive perspectives on play and motor, perceptual, emotional and intellectual aspects of human development.

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. Archaeology of Mesoamerica (4) (Fall) Bennyhoff

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) (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.

** Fulfills General Education requirement in Social Science.

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

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.

343. Peasant Societies (4) (Fall) Rosin

Examination of the economic, social and political nature of peasant societies. Attention to peasant values and personality and the transition of peasants into the modern world.

345. Human Ecology (4) (Fall) 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) Peri

The comparative study of systems of production, distribution and exchange and consumption in human societies characterized by different resources and subsistence modes (hunting and gathering, horticulture, agriculture, etc.). Emphasizing the similar functions served by different institutions such as Kula Ring and the Potlatch in the non-western and simple societies.

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

An anthropological examination of religious phenomena in cross-cultural perspective. 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. Culture Change (4) (Spring) Staff

Investigation of case studies and discussion of formal theories of culture change with special attention to the growth of revitalization movements and to theories of cultural evolution.

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) (Spring) Dickemann

A cross-cultural investigation of women in human societies, the biological and socio-economic 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) (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 for 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.

363. Ethnography of Mesoamerica (4) (Spring) Wahrhaftig

An introduction to the area in which Aztec, Maya, and other civilizations emerged. Particular emphasis on contemporary community studies and their contribution to an understanding of local communities as a persisting basic unit of sociocultural organization.

370. 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 non-literate traditions of the area.

Anthropological Linguistics

380. Language and Culture (4) (Alternate 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; the development of social and regional dialects, pidgins, creoles, lingua francas; the social processes underlying areal, typological and genetic classification; how language families are established; how to reconstruct histories of languages with no written traditions; how knowledge of linguistic prehistory offers insights into cultural prehistory.

Prerequisite: Linguistics 200 or junior standing.

386. American Indian Languages (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. Ethnography of 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 & Spring) Coordinator: Rosin

An opportunity for experience in applied anthropology, involving the application of anthropological method and theory to community service work. Approval of a project of anthropological relevance, and consultations with an advisor in the department are required.

Prerequisite: Majors only. Consent of instructor required.

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

399. Student Initiated Course (1-4) Staff

Student initiated and instructed courses on topics which extend or fill gaps in current departmental offerings.

Methods

400. Anthropology Praxis (1-4) (Fall & 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) (Fall) Fredrickson, Bennyhoff

Survey of laboratory methods in archaeology, using California materials, including cataloging and analysis of archaeological site constituents. Emphasis upon research design and interpretation. (Lecture 2 hrs., Lab 2 hrs., Special Projects 2 hrs.) May be repeated once for credit.

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

Field methods in archaeology, including archaeological site survey and excavation techniques; emphasis upon research design and archaeological ethics. (Lecture 2 hrs., Lab 2 hrs., Special Projects 2 hrs.) May be repeated once for credit.

441. Ethnographic Field Methods (4) (Spring) Staff

Field methods in ethnography, including techniques of sampling, interview, life history and participant observation. Special attention to the problems of rapport, and the political and moral implications of field research. May be repeated once for credit.

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

Training in elicitation of linguistic data for purposes of phonological, morphologic-syntactic and semantic analysis.

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 & Spring) Staff

Prerequisite: Senior standing or consent of instructor.

495. Special Studies (1-4) (Fall & 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.

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.

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499. Anthropology Internships (1–4) (Fall & 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. Credit will be given for a seminar or tutorial and 3 hours work per unit. 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) (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) (Fall) 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 & Spring) Staff

Planning and execution of a research program culminating in the completion of a thesis. (6 units maximum for 504A plus B).

528. Methods in Cultural Resources Management (4) (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.

595. Special Studies (1–4) (Fall & 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.

Prerequisite: Graduate level standing, approval of advising faculty member and Department Chairman.

598. Teaching Assistant in Anthropology (1–4) 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 & 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. Credit will be given for a seminar or tutorial and 3 hours work per unit.

ART

Department Chair: Susan Moulton

Faculty: Kathryn Armstrong, Marsha Bailey, Mary Bates, Pegan Brooke, Gary Denmark, John Doane, Leland Gralapp, Robert Gronendyke, Walter Kuhlman, Susan McKillop, William Morehouse, Bob Nugent, Margaret Rattle, Anthony Reveaux, George Rodetis, Inez Storer, Shane Weare.

Department Office: Art 128, Phone (707) 664-2151

The study of art makes possible for students a deeper appreciation of their cultural heritage, clarification of attitudes and values, and a fuller realization of their own potentialities. This philosophy, along with the key assumption that a grasp of the history and theory of art is indispensable to the studio major, just as involvement in creative studio activity is invaluable to the student of art history, has resulted in an integrated core curriculum of fundamental studies that provides necessary training for careers in art and for graduate level work.

Students may concentrate in either Art History or Studio. Within the latter concentration, emphases are available in Painting, Sculpture (Clay, Wood, Metal), Printmaking (Relief, Intaglio, Lithography, Silkscreen), Photographic Arts (Photography, Multi-Image Projection, Film), Drawing, or an Interdisciplinary Option. For the highly motivated senior, an Intermedia "Block Program" may be discussed with departmental advisors.

A program for students working toward a teaching credential is included within the curriculum, as are courses appropriate for general education requirements.

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

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. Photographic Arts
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 IN ART

Major

CONCENTRATION: ART HISTORY	<i>Units</i>
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 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	<i>Units</i>
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	<i>Units</i>
Art 418AB—History of Modern Art	6
Art 404–419—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 212–217—Film History Courses
- Art 318—Contemporary Art
- 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.

CONCENTRATION: STUDIO	<i>Units</i>
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

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

in studio and associated areas which allow for the development of an emphasis in one or more of the following: Painting, Sculpture, Printmaking, Drawing, Photographic Arts and Interdisciplinary Option

Freshman and Sophomore Years		<i>Units</i>
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—Beginning Photography		
Art 220—Beginning Painting		
Art 222—Beginning Watercolor		
Art 229—Beginning Pottery		
Art 230—Beginning Clay Sculpture		
Art 231—Beginning Wood Sculpture		
Art 232—Beginning Metal Sculpture		
Art 238—Beginning Papermaking		
Art 240—Beginning Relief and Intaglio		
Art 242—Beginning Lithography		
Art 244—Beginning Silkscreen		
Art 270—Beginning Experimental Art		
Art 285—Beginning Filmmaking		
A minimum of 3 courses selected from among these studio courses * ..		6
Subtotal		22
Sophomore or Junior Year		<i>Units</i>
Art 418AB—History of Modern Art		6
Junior and Senior Years		<i>Units</i>
Art 302—Intermediate Drawing		
Art 304—Intermediate 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—Intermediate Painting	
Art 322—Intermediate Watercolor	
Art 420—Advanced Painting	
Art 422—Advanced Watercolor	
Art 495—Special Studies in Painting	
Art 498—Selected Topics in Painting	
Any Combination to total **	12

† A 3 unit substitution of Art 212, 214 or 215 should be made by the studio major whose Area of Emphasis is Photographic Arts.

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

** Each course may be repeated for credit.

Sculpture:

Art 334—Metal Casting	
Art 335—Intermediate Clay Sculpture	
Art 336—Intermediate Sculpture	
Art 430—Advanced Clay Sculpture	
Art 431—Advanced Sculpture	
Art 495—Special Studies in Sculpture	
Art 498—Selected Topics in Sculpture	
Any Combination to total **	12

Printmaking:

Art 340—Intermediate Relief and Intaglio	
Art 342—Intermediate Lithography	
Art 344—Intermediate Silkscreen	
Art 440—Advanced Relief and Intaglio	
Art 442—Advanced Lithography	
Art 444—Advanced Silkscreen	
Art 495—Special Studies in Printmaking	
Art 498—Selected Topics in Printmaking	
Any Combination to total **	12

Drawing: #

Art 302—Intermediate Drawing	
Art 304—Intermediate Life Drawing	
Art 401—Advanced Life Drawing	
Art 402—Advanced Drawing	
Art 495—Special Studies in Drawing	
Art 498—Selected Topics in Drawing	
Any Combination to total **	12

PHOTOGRAPHIC ARTS:

Art 308—Intermediate Photography	
Art 385—Intermediate Filmmaking	
Art 387—Multi-Image Projection	
Art 458—Advanced Photography	
Art 470—Adv. Experimental Art—Film Topic	
Art 485—Advanced Filmmaking	
Art 487—Advanced Multi-Image Projection	
Art 498—Selected Topics in Photographic Arts	
Any Combination to total **	12

Recommended as Electives For All Studio Majors:

Art 318—Contemporary Art
Art 338—Intermediate Papermaking
Art 385—Intermediate Filmmaking
Art 401—Advanced Life Drawing
Art 404–419—All Art History Period Courses
Art 432—Advanced Mixed Media
Art 438—Advanced Papermaking
Art 450C—Contemporary Criticism
Art 458—Advanced Photography

** Each course may be repeated for credit.

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

Art 460—Gallery and Museum Methods
 Art 470—Advanced Experimental Art
 Art 491—Art Colloquium
 Art 497—Selected Topics—Lecture
 Art 498—Selected Topics—Studio

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 is required. Consult art advisor.

Freshman and Sophomore Years	<i>Units</i>
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	<i>Units</i>
Drawing (any 300 or 400 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

In general, the basic course requirements for the Sonoma State University Art major will satisfy the essence of the Scope and Content guidelines stipulated by the Ryan Act, and accepted for waiver status by the California Commission for Teacher Preparation and Licensing in 1974. The undergraduate program in art and in education is meant to fulfill a breadth of experiences for the teacher candidate.

Because of the need for the generalist art educator in most public schools situations, the student interested in the Secondary Single Subject Credential should make every effort to gain a strong basic expertise in both two and three dimensional art, methodology, and art history and appreciation as well as a good acquaintance with the technology, conceptualization and philosophies of art instruction.

Credential candidates for Pre-school and Early Childhood, Elementary Education and Special Education are strongly urged to elect art courses with reference to particular specializations or towards a concept of overall curriculum enrichment for the Multiple Subject Credential.

The following program is constructed to consist of a four year pattern; however students would be able to complete their Education Department requirements upon completion of the B.A. Degree in a fifth, or graduate, year. Electives outside the major would thus amount to 42 units in the undergraduate course work.

Basic Major Requirements:	<i>Units</i>
Drawing: (4 units lower division, 5 units upper division)	9
Art History: (Art 210, 211, 418AB)	12
Art Fundamentals.....	6
Upper Division Studio Courses with 12 units in an area of concentration (Including Art 200 and Art 400)	18
Total	45
General Education	49
Electives.....	14
and	
Education	26
TOTAL	124
ART MINOR—STUDIO	<i>Units</i>
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) 404–417	8
Studio Courses (min. 1)	3
	20
Recommended Electives:	
Upper Division Studio or Criticism Courses	

CAREER MINOR—ARTS MANAGEMENT

The Arts Management Career minor is currently being developed in conjunction with the Departments of Art, Management, Music and Theater Arts. See departmental advisor.

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)

Studio practices. A studio course emphasizing tools and materials of the artist, color theory and application of techniques in various media, in both two and three dimensions. 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.

*** 208. Beginning Photography (1-4)**

A studio introduction to basic black and white photographic processes. Techniques of handling the camera, exposure control, lighting, film processing, enlarging, and finishing for presentation.

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.

214. History of Classic World Cinema (3)

An introduction to the motion picture as a cultural art form from its beginnings in 1895, the silent era of Chaplin, Griffith and Eisenstein to the growth of Hollywood and the development of the sound film. Prerequisite: none.

215. History of Contemporary World Cinema (3)

An introduction to the motion picture as a cultural art form from the maturity of the sound film in "Citizen Kane" (1941), authorship of Renoir, Hitchcock and Kurosawa to current trends in international film production. Prerequisite: none.

216. American Film in the Thirties (3)

A cross-sectional study of the developmental, stylistic identity of the American film through the first decade of the sound era. Examination of the genres of narrative continuity, documentaries, animation and experimental film.

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

217. American Film in the Forties (3)

A cross-sectional study of American film in the maturity of the sound film and through World War II. Examination of the genres of narrative continuity, documentaries, animation and experimental film.

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 co-requisite: 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, joining (mechanically, welding, etc.) and finishing. Prerequisite or co-requisite: Art 101 and 102 or equivalent.

*** 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 Relief and Intaglio (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 technical methods, including paper, film art, glue, tusche, acetate-photo stencils, use of color and visual images. Prerequisite or co-requisite: Art 101 and 102 or equivalent.

270. Beginning Experimental Art (1-4)

Exploratory work in a variety of media not traditionally considered as fine art media. Experience in application of these media as means for creative individual expression; emphasis is on experimentation rather than production. Prerequisite or co-requisite: Art 101 and 102 or equivalent.

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

285. Beginning Filmmaking (1-4)

Basic studio techniques for planning, scripting, shooting, and editing film in Super 8mm. Class demonstrations and exercises in camera and projector operation, editing, splicing, and viewing film. Prerequisite or co-requisite: Art 101 and 102 or equivalent.

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 101 and 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.

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.

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) Department Faculty

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 202, 204 or equivalent.

*** 308. Intermediate Photography (1-4)**

Continued study development of photographic skills as a basis for the personal creative endeavor. Various processes derived from and expanded upon basic black and white technology each semester. Prerequisite: Art 208 or equivalent.

318. Contemporary Art (3)

A survey of painting, sculpture and associated arts from 1945 to the present. Emphasis on sources, styles and concepts in the contemporary art scene, from a critical rather than historical point of view. Does not substitute for Art 418ABC.

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.

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

*** 334. Metal Casting (1-4)**

A studio course covering safety and use of foundry equipment. Topics to include mold construction, sand casting, wax and clay properties, plaster, tuff, styrofoam, metals, investment, patina, chasing and cleanup of cast metal. Prerequisite: Art 230 or 232 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, water images, body casting and large scale works.
Prerequisite: Art 238 or equivalent.

*** 340. Intermediate Relief and Intaglio (1-4)**

A studio course on the intermediate level in various printmaking aspects, including woodcut, linocut, embossing, engraving, collograph, 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 including stencil methods, exploration of paper, direct glue stencil, positive and negative, lacquer film and photo stencil. Lecture, demonstration and studio work. May be repeated for credit up to a maximum of 12 units.
Prerequisite: Art 242

385. Intermediate Filmmaking (1-4)

Continued studio work with super 8mm, planning, scripting, shooting and editing.
Prerequisite: Art 285.

387. Multi-Image Projection (1-4)

Studio practice in creation, composition and control of projected imagery from both cameraless and photographic image origins. Emphasis on audio-visual coherence through slide/tape productions. Prerequisites: Art 101, 102 and 208.

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.

* Laboratory fee, payable at time of class signup.

399. Student-instructed course (1-4)

See current schedule of classes for details.

400. Elementary 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 to children 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.

404. History of Printmaking (4)

A lecture course on origins of techniques of woodcut, metal engraving, etching; the historical phase beginning with Romanticism of Goya through development of lithography, recent techniques of intaglio printmaking and use of the photographic image.

407. Pre-Classical Art (4)

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

408. Greek Art (4)

History of Greek art and architecture from the 7th century B.C. to the 4th century A.D.

409. Roman Art (4)

Etruscan and Roman art and architecture to the time of Constantine.

410. Early Christian and Early Medieval Art (4)

Christian art from its origins to ca. 1050, with emphasis on the figural arts.

411. Romanesque and Gothic Art (4)

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

413. Northern Renaissance Art (4)

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

414. Baroque Art (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 (4-4)

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

417A. Oriental Art (4)

The arts of India, China, and Japan from their beginnings until the Seventh Century A.D.

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417B. Oriental Art (4)

Art of the Far East from the year 1000 to the present. Emphasis on sculpture and painting.

418A. History of Modern Art (4)

A survey of painting and sculpture in the Western World from the French Revolution through the Nineteenth Century.

418B. History of Modern Art (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 (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)**

Emphasis on 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.

*** 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.

*** 432. Advanced Mixed Media (1-4)**

Studio and field work in the manipulation of ideas and images. Using the wider environment and varied materials for expression. May be repeated for credit up to a maximum of 12 units.

Prerequisite: Advanced standing.

*** 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.

*** 440. Advanced Relief and Intaglio (1-4)**

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

Prerequisite: Art 340 or equivalent.

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

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

Advanced 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. Advanced Photography (1-4)**

A studio course, with emphasis on contemporary photography and student critiques in conjunction with in-progress darkroom work. Objectives are to foster the development of critical thinking and to explore the student's vision and creative resources.

Prerequisite: Art 308 or equivalent.

460. Gallery and Museum Methods (4)

An advanced lecture and activity course in methods and techniques of gallery and museum practices.

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.

485. Advanced Filmmaking (1-4)

A studio course emphasizing techniques for completing films in Super 8mm. Emphasis may vary each semester from individual projects to group productions.

Prerequisite: Art 385.

487. Advanced Multi-Image Projection (1-4)

Design, production and presentation practices in communicative slide/tape shows. Expanded screen formats and multiple-projector arrays with sound. Introduction of multi-media elements. Interfacing and collaboration with installations, performances and information media. Prerequisite: Art 387.

491. Art Colloquium (1-3)

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

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

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 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: Art 460. May be repeated for a total of 8 units.

595. Special Studies (1–4)

For postbaccalaureate art students. Consent of instructor. Available for CR/NC only.

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

ASTRONOMY

Department Office: Darwin 121, phone (707) 664-2119

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 14, 10 and 8-inch telescopes 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 Department of Physics and Astronomy regarding their programs.

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

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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.

301. Celestial Navigation (3) (Spring)

Lecture, 3 hours.

The celestial sphere; diurnal motion and time. Basic navigational techniques; use of charts and compass. Theory of nautical astronomy; celestial positioning techniques; the nautical almanac; sight reduction tables. Use of the sextant; identification of the navigational astronomical bodies.

Prerequisite: Mathematics 107 or equivalent.

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.

304. The UFO Phenomenon (3) (Spring)

Lecture, 3 hours.

An introduction to the scientific study of UFO's. The history of the phenomenon; the nature and reliability of the data; the "UFO experience"; data collection techniques, analysis, and interpretation within the framework of contemporary concepts of physics and astronomy; implications for society.

Prerequisites: Astronomy 100 or Physics 100, or consent of instructor.

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 ultra-violet 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 college 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 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.

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.

BACHELOR OF ARTS IN LIBERAL STUDIES (B.A.L.S.)

The B.A.L.S. Program is designed to provide students with the opportunity to earn a bachelor's degree in studies broader than those traditionally presented within one discipline. It offers a flexible, yet integrated curriculum for students with a wide variety of academic backgrounds, work experience and acquired skills. The goal of the program is to stimulate serious, well-coordinated exploration in the areas of English, the Humanities, Social Sciences and Natural Sciences. The program also meets the academic requirements of the Multiple Subject Credential programs under the Teacher Preparation and Licensing Law of 1970 (Ryan Act).

Major Requirements:

The major requirements for the B.A.L.S. program are the same as the Multiple Subject Option requirements within the Hutchins School of Liberal Studies. Those requirements stipulate that students must complete 36–40 upper division units in the four areas of English, the Humanities, Natural Science/Mathematics, and the Social Sciences. For specific course requirements contact the Provost, Hutchins School of Liberal Studies, Cluster Schools Building, room 44, or call (707 664-2491). Students seeking a Multiple Subjects Credential should also contact the Education Department.

BIOLOGY

Department Chair: Joseph H. Powell

Faculty: John Arnold (Emeritus), Paul Benko, Joe Brumbaugh, Ralph Bushnell (Emeritus), James Christmann, Galen Clothier, Wesley W. Ebert, David Hanes, Colin Hermans, John Hopkirk, Donald Isaac, Chris K. Kjeldsen, Philip T. Northen, Thomas R. Porter (Emeritus), Charles Quibell, Robert Sherman, Joyce Yamada.

Department Office: Darwin 125, Phone (707) 664-2189

The rural location of the campus gives exceptional strength to our field programs. An unparalleled diversity of habitats including rivers, estuaries, the ocean, chaparral, redwood groves, oak woodland, thermal springs, vineyards, orchards, fresh water storage reservoirs, and geothermal steam fields are all within field-trip distance of the campus. These habitats are used extensively for field work by undergraduate classes and graduate students. This is enhanced by a nearby 160-acre nature preserve, which is managed by the department and numerous state and county parks within a 40-mile radius of the campus. The North Coast Herbarium of California; extensive lower plant, invertebrate and vertebrate collections; greenhouses, animal facilities; an electron microscope and an oceangoing vessel are all available for classroom use and research.

The Biology Department provides a congenial atmosphere engendered by small classes which allow students to acquire extensive experience with laboratory instruments and to develop a close relationship with the faculty.

In addition to our excellent field programs the department offers training leading to careers in medicine and health related fields. The cooperation of nearby medical facilities, practical experience with instrumentation and the assistance of the Health Professions Advisory Committee have contributed to a high success rate in students' admittance to programs in medical technology, professional and graduate schools.

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

AQUATIC BIOLOGY
BOTANY
ECOLOGY
ELECTRON MICROSCOPY
GENERAL BIOLOGY
MARINE BIOLOGY
MICROBIOLOGY
PARK SERVICE

MEDICAL SCIENCE
PRE-DENTISTRY
PRE-GENETIC
PRE-MEDICAL
PRE-MEDICAL TECHNOLOGY/
PUBLIC HEALTH
PRE-PHARMACY
PRE-VETERINARY
TEACHING CREDENTIAL
ZOOLOGY

M.A. CONCENTRATIONS

THESIS

EXAM

1. GENERAL BIOLOGY
2. ENVIRONMENTAL BIOLOGY

Advisory plans for each of these concentrations may be obtained by writing or calling the department office.

BACHELOR OF ARTS IN BIOLOGY**Major**

General Education (49 units)	48
Physical science (15 units, 6 applied in G.E.)	9
Biological sciences (40 units)	40
Electives.....	27
	124

COURSE REQUIREMENTS**Lower Division**

Biol 115—An Introduction to Biology (3 units, applied in G.E.)	
Biol 115L—Introductory Laboratory.....	1
Biol 116—Biology of Plants	4
Biol 117—Biology of Animals.....	4
Biol 215—Introduction to Molecular Biology	2

Upper Division

A minimum of 29 units of upper division courses, to include one course from each of the following groups:

A. (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. (4 units)

Biol 320 General Genetics
 Biol 322 Human Genetics

C. (4 units)

Biol 324 Animal Physiology
 Biol 334 Plant Physiology

D. (4–5 units)

Biol 325 Cell Structure
 Biol 335 Plant Morphology I
 Biol 336 Plant Morphology II
 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.

MINOR IN BIOLOGY

The minor consists of a minimum of 20 units in biology with a G.P.A. of 2.0 or above. 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 Departmental Minor Advisor. The general requirements that must be met in any plan are:

Biol 115—An Introduction to Biology	3
Biol 115L—Introductory Laboratory.....	1

At least two of the following courses:

Biol 116—Biology of Plants	4
Biol 117—Biology of Animals	4
Biol 215—Introduction to Molecular Biology	2

Additional biology courses to a minimum total of 20 units, which must include at least 4 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.

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. Our Graduate Coordinator will be glad to assist in the selection of the plan to meet your goals.

Admission Procedures

1. Apply for admission to the college at the Office of Admissions.
2. Unclassified Postbaccalaureate Standing—Applicants who desire only post-baccalaureate course work and who do not intend to pursue an M.A. degree need only 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 and a 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.

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 Department of Biology 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 GRE, 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. Units completed during the term in which this status is acquired may be counted among these 15.

Advancement to Classified Standing involves the completion of a number of steps and requirements involving both the Biology Department and the Graduate Studies Office. Some of these will have been completed in the process of becoming Conditionally Classified. A full listing includes:

1. Taking the General Biology Assessment Examination during the semester of admission to Conditionally Classified Standing;
2. Conferring with the Department Graduate Coordinator to identify a possible major advisor and to obtain the required forms;
3. Obtaining a written commitment from a faculty member that he or she will serve as an advisor, after determining compatibility of interests and availability of facilities;
4. Filling out the top two lines of Form G-1/G-2 and submitting it to the Graduate Coordinator (if the department approves the candidate, on the recommendation of the Graduate Committee, the Graduate Coordinator will sign this form and transmit it to the major advisor);
5. Candidates who have submitted Form G-1/G-2 to the Graduate Coordinator by November 15 or by March 1 will be notified of the department's decision by December 15 or April 1, respectively;
6. Developing a program contract section of Form G-1/G-2 and having it signed by the advisor and two other faculty members who have agreed to serve on the advisory committee;
7. Submission of Form G-1/G-2 to the Graduate Studies Office and subsequent approval by the Graduate Dean complete the procedures for becoming officially classified.

8. After notification of advancement to Classified Status, it is the CANDIDATE'S RESPONSIBILITY to file all additional required forms.

REQUIREMENTS FOR THE COMPLETION OF THE M.A. (All concentrations require 30 units with at least a 3.0 cumulative G.P.A. and a minimum of 18 units in Biology.)

A. Thesis Concentrations

	<i>Units</i>	<i>Units</i>
1. Assessment Examination		
2. 500 level courses		15 minimum
a. Thesis	6 max.	
b. Special Studies	6 max.	
c. Non-Thesis Units (may include Special Studies).....		12 min.
d. Seminar	1-4	
3. 400 level courses (or committee approved 300 level courses)		15 maximum
4. Language or substitute		
5. Oral or written examination		
6. Thesis approval		
7. Oral presentation of thesis		

B. Examination Concentrations—General Biology Advisory Plan

	<i>Units</i>	<i>Units</i>
1. Assessment Examination		
2. 500 level courses		15 minimum
a. Special Studies	3-6	
b. Seminar	1-4	
3. 400 level courses (or committee approved 300 level courses)		15 maximum
a. Practicum	2-4	
4. Language or substitute		
5. Graduate objective examination in general biology		
6. Graduate essay examination		

C. Examination Concentrations—Environmental Biology Advisory Plan

1. Assessment Examination
2. Completion of the following as part of the B.A. program is strongly advised.
 - a. A course in the human environment such as ENSP. 301 (Human Env.), ENSP. 311 (Soc. Env.), Anthro. 203 (Cultural), or 345 (Human Ecology), Geog 303 (Cultural).
 - b. A general ecology course such as Biol 300 (Ecology).
 - c. A course in systematic biology such as Biol 330 (Plant Taxonomy), Biol 438 (Phycology), Biol 350 (Nat. Hist. of Invert.) or Biol 360 (Nat. Hist. of Vert.)
 - d. A course in intermediate Chemistry such as Chem 335 (Organic).
 - e. A course in the earth sciences such as Geol 102 (Intro), ENSP 331 (Phys. Env.), or Geog 302 (Physical).
 - f. A computer science or statistics course such as Math 120 (FORTRAN) or Math 165 (Elem. Stat.).
3. 500 level courses 15 minimum
 - a. One 500 level Ecology course 4
 - b. Biol 596 8
 - c. Biol 500 1-4
4. 400 level courses (or committee approved 300 level courses) 15 maximum
 - a. Supporting physical science courses 6-12 units

5. Professional skills requirement (substitutes for language) an additional course such as statistics, computer science, air photo interpretation, or remote sensing.
6. Graduate essay examination.

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 evolution; requirements of living systems; cellular structure and function; molecular and Mendelian genetics; the reproduction, development, structure and function of representative multicellular plants and animals; 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.

General Education Courses: Specific Emphases

† 116. Biology of Plants (4) (Fall and Spring) Kjeldsen, Powell, Quibell, Sherman

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the plant kingdom with emphasis on various forms and groups.

Prerequisite: Biology 115 and 115L or equivalent.

† 117. Biology of Animals (4) (Fall and Spring) Brumbaugh, Hermans

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the characteristics of the major groups of the animal kingdom.

Prerequisites: Biology 115 and 115L or equivalent.

† 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. Designed to acquaint the student with local plants and/or animals and aspects of their interrelationships and relationships with the environment. Specific aspects of the flora, fauna and locale to be observed will vary from semester to semester. This course may be offered with or without the laboratory at various times. 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

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.

† Laboratory fee may be charged, as published in class schedule.

† 224L. Human Physiology Laboratory (2) (Fall) Clothier

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.

225. The Human Life Cycle (3) (Fall or Spring) Department Faculty

Lecture 3 hours.

A lecture course covering various biological processes associated with the human life cycle. Topics will include sexuality, fertilization, embryonic development, birth, and developmental changes associated with infancy, childhood, adolescence and adulthood. Pertinent developments in the application of technology to medical problems related to these phenomena will also be discussed, along with the ethical and social implications of such developments. Not applicable to the major.

Prerequisite: Biology 115 or equivalent.

312. Oceanology (3) (Fall or Spring) Powell

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.

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 analyses 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) (Alternate Fall, odd years) Quibell

Lecture, 3 hours; field trips.

The geographical, ecological, and sociological origins of agricultural practices and the evolutionary origins of cultivated and domesticated plants are discussed along with the influences these have had on human history. A number of basic principles of biology and of plant domestication, as well as some analytic techniques of plant origin-analysis are also covered. 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.

Prerequisite: Biology 115 or equivalent.

† Laboratory fee may be charged, as published in class schedule.

Core Courses for Biology Majors and Minors

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. Approval of the exam, passing levels and number of units earned are determined by departmental policy (confer with the Biology Department chairman). May be used as an alternative to challenging a specific course. CSUC Science and Mathematics Equivalency Test (SMET) General Biology Equivalency Test.

Three units of credit toward the General Education requirement in Biology will be awarded for passing of this exam. Passing score is determined by the Statewide Committee. Passing of the exam does not waive the laboratory requirement.

† 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.

† 116. Biology of Plants (4) (Fall and Spring) Kjeldsen, Powell, Quibell, Sherman

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the plant kingdom with emphasis on various forms and groups.

Prerequisite: Biology 115 and 115L or equivalent.

† 117. Biology of Animals (4) (Fall and Spring) Brumbaugh, Hermans

Lecture 2 hours; laboratory, 6 hours.

An introduction to the characteristics of the major groups of the animal kingdom.

Prerequisites: Biology 115 and 115L or equivalent.

215. Introduction to Molecular Biology (2) (Fall and Spring) Benko, Christmann

Lecture, 2 hours.

A molecular approach to basic cellular biology including cellular physiology, macromolecular synthesis and regulation, cell energetics (photosynthesis and respiration), and molecular genetics.

Prerequisites: Biol. 116 or 117 and Chem. 115A 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.

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; laboratory, 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.

† Laboratory fee may be charged, as published in class schedule.

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.

Prerequisites: Biology 215 or consent of the instructor.

† 324. Animal Physiology (4) (Spring) Hanes

Lecture, 2 hours; laboratory, 6 hours.

Basic principles and concepts of general animal function.

Prerequisites: Biology 117 and 215, Chemistry 115AB or Chemistry 125AB.

† 325. Cell Structure (4) (Fall) Ebert

Lecture, 3 hours; laboratory, 3 hours.

An introduction to the study of the cellular and subcellular structure of living matter.

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.

† 335. Plant Morphology I (4) (Fall) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours.

A survey of the algae, fungi, and lichens with emphasis on comparative morphology, ecology, and evolution.

Prerequisites: Biology 116.

† 336. Plant Morphology II (4) (Spring) Kjeldsen

Lecture, 2 hours; laboratory, 6 hours.

A survey of the Bryophytes and vascular plants with emphasis on comparative morphology, ecology, and evolution.

Prerequisites: Biology 116. Biology 335 strongly recommended.

† 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, along with some practical applications of anatomical data to taxonomic and phylogenetic questions are considered.

Prerequisites: Biology 116.

† 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.

† Laboratory fee may be charged, as published in class schedule.

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† 339. **Mycology (4) (Alternate Fall) Powell**

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.

Prerequisites: 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.

† 350. **Natural History of the Invertebrates (4) (Spring) Brumbaugh**

Lecture, 2 hours; laboratory or field, 6 hours.

Identification and ecology of local invertebrate fauna. The course considers some of the environmental stresses facing the organisms and structural and behavioral adaptations that have evolved in various invertebrate groups in order to meet these stresses.

Prerequisites: Biology 117.

† 355. **Entomology (4) (Spring) Department Faculty**

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.

Prerequisites: Biology 116 and 117.

† 360. **Natural History of the Vertebrates (4) (Fall) Hopkirk, Isaac**

Lecture, 2 hours; laboratory, 6 hours, at least one weekend field trip.

Studies on the morphology, systematics, and ecology 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.

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.

Prerequisite: Biology 115 or equivalent.

† Laboratory fee may be charged, as published in class schedule.

390. Biology Colloquium (1) (Fall and Spring) Department Faculty

Lecture, 1 hour.

A series of lectures on research and issues in contemporary biology.

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) Powell

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 environment.

Prerequisites: Biology 300 and 338 or 350 or 460.

† 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).

Prerequisite: Biology 300; 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.

Prerequisites: Biol 116, Biol 117 and Biol 300 or equivalent.

† 451. Functional Morphology of Marine Invertebrates I (4) (Alternate Fall, odd years) Brumbaugh

Lecture, 2 hours; laboratory, 6 hours.

Study of the evolutionary relationships of the Lower Phyla, Echinoderms, and Protochordates with evidence drawn from comparative anatomy, comparative embryology, comparative biochemistry, and paleontology.

Prerequisites: Biology 350 or consent of the instructor.

† 452. Functional Morphology of Marine Invertebrates II (4) (Alternate Spring, even years) Brumbaugh, Hermans

Lecture, 2 hours; laboratory, 6 hours.

Continuation of Biology 451. Molluscs, annelids, arthropods, and allied minor phyla. While the two courses form a continuous sequence, either may be taken separately.

Prerequisites: Biology 350 or consent of the instructor. Biology 451 strongly recommended.

† Laboratory fee may be charged, as published in class schedule.

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† 460. Ichthyology (4) (Alternate 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.

Prerequisites: Biology 360 or 370 or consent of instructor.

465. Ornithology (4) (Alternate Spring, even years) Department Faculty

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.

Prerequisites: 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.

Fundamentals of mammalian anatomy, classification, distribution, and ecology.

Prerequisites: 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 discussion of both the classical concepts of innate behavior and experimental studies; the endogenous and exogenous mechanisms which control behavior; and ecological and evolutionary adaptations of behavioral patterns.

A consideration of the experimental techniques and instrumentation for the study of animal behavior in the laboratory and the field.

Prerequisites: Biology 324. Biology 350 or 360 strongly recommended.

† 480. Immunology (5) (Spring) Clothier

Lecture, 3 hours; laboratory, 6 hours.

The component elements of the immune response; antigens and antibodies; theories of antibody synthesis, cellular reactivities, hypersensitivity; immunogenetics.

Prerequisites: Biology 117 and 215; Chemistry 232 or 335AB. Biology 340 strongly recommended.

† 481. Medical Microbiology I (5) (Fall) Yamada

Lecture, 3 hours; laboratory, 6 hours.

Study of infectious diseases (primarily of humans) caused by bacteria, mycoplasma and rickettsia. Includes morphology, physiology, antigenic structure, determinants of pathogenicity and clinical infection. Laboratory: techniques for the isolation and identification of micro-organisms.

Prerequisites: Biology 215, 340 and 480.

† 482. Medical Microbiology II (5) (Spring) Yamada

Lecture, 3 hours; laboratory, 6 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 215, 340 and 480. Biology 481 strongly recommended.

† 484. Hematology (4) (Fall) Hermans

Lecture, 3 hours; laboratory, 3 hours.

A detailed study of the chemistry, physics, and morphology of normal and diseased blood.

Prerequisites: Chemistry 232 or 335 AB and Biology 324.

† Laboratory fee may be charged, as published in class schedule.

† 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.

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

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 standing or last semester senior 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.

† 525. Electron Microscopy (4) (Spring) Hermans

Lecture, 2 hours; laboratory, 6 hours.

A study of the techniques of electron microscopy with laboratory experience in preparation of biological materials, transmission electron microscopy, and photographic techniques of data presentation.

Prerequisites: Biology 325, Physics 210B, Chemistry 115B and consent of instructor.

† Laboratory fee may be charged, as published in class schedule.

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, Quibell, 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.)

599. M.A. Thesis (1–3)

Prerequisites: See Master's Degree requirements.

CENTER FOR PERFORMING ARTS

Associate Dean, Performing Arts: Larry Snyder

Director: Floyd William Ross

Department Office: Ives 211, Phone (707) 664-2235

The Center for Performing Arts is a department within the School of Arts and Humanities which coordinates the performance activities of music, dance and drama; 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, Chamber Orchestra, Experimental Music Ensemble, Early Music Ensemble, Concert Jazz Ensemble, Contemporary Jazz Ensemble, Jazz Workshop, Piano Ensemble, Symphonic Band, Songwriting Workshop, Opera Theatre, Drama Ensemble, Dance Ensemble, Chorus, University Singers, and Jazz Choir. In addition, a number of student-initiated projects in music, dance and drama are presented each semester, including noon concerts each week.

During the 1982-83 academic year 65 separate events were presented for a total of 125 performances with a total attendance of nearly 10,000 people for the year.

The box office, located in the lobby of Ives Hall, is open Tuesday through Friday from 9 a.m. to 5 p.m. Reservations are encouraged for all evening performances, (telephone 664-2353). Discount rates on all tickets for SSU students, faculty and staff are in effect for all performances.

CHEMISTRY

Department Chair: Donald D. Marshall

Faculty: Leslie Brooks, Fred H. Dorer, David L. Eck, Vincent Hoagland,
Marvin Kientz, Ambrose R. Nichols (Emeritus), Douglas Rustad,
Gene Schaumberg, Dale Trowbridge

Department Office: Darwin 126, phone (707) 664-2334

The Chemistry curriculum is designed to familiarize students with the concepts of the atomic and molecular world and how those concepts relate to our perception of the world around us. Variations in the curriculum provide students with suitable preparation for graduate study in chemistry, industrial positions, teaching credentials, or entry into professional programs such as medical and dental schools. Both B. A. and B. S. degree programs are offered, with an additional option of American Chemical Society accreditation of the B. S. degree.

The curriculum emphasizes experimental laboratory work, with heavy exposure to sophisticated techniques that utilize instruments such as NMR, IR, UV, Atomic absorption, and computer analysis. Laboratory work stresses independent and individualized experimentation, with critical evaluation of data as the goal of most experiments. With small classes, extensive interaction is possible between students and faculty.

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, page 467.

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 graduate chemists in industrial and governmental laboratories or desiring to enter graduate programs in chemistry leading to advanced degrees.

	<i>Units</i>
General Education	48
Major	40
Supporting Subjects.....	19
Electives or Minor	21
	128

COURSE REQUIREMENTS FOR THE B.S. DEGREE

<i>Chemistry Courses:</i>	<i>Units</i>
125AB *—General Chemistry (10 units—5 in Gen. Ed., 5 in Major)	5
335AB, 336—Organic Chemistry	10
375AB, 376AB—Physical Chemistry	10
381—Computer Programming	2
425—Advanced Inorganic Chemistry	3
494—Undergraduate Research	1

* Chem 115AB—General Chemistry plus Chem 255—Quantitative Analysis will satisfy the Chem 125AB requirement.

497—Seminar	1
Upper Division Chemistry Electives †	8
	40

Supporting Courses for B.S. Degree

	Units
<i>Mathematics:</i>	
161, 211, 261—Calculus and Analytic Geometry (3 units in Gen. Ed., 9 units in major) (Recommended sequence)	9
<i>Physics:</i>	
114, 116, 214, 216—Introduction to Physics and Laboratories.....	10
314, 316 STRONGLY recommended (5 units)	19

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 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) G.P.A. in upper division chemistry courses and advanced courses (as defined below) or receive a majority vote of the chemistry faculty.

Additional Requirements:

455. Advanced Analytical Chemistry (4) and two advanced work courses.

Adequate professional undergraduate training requires that the core material (including Physical Chemistry) be followed by approximately two semesters of advanced work in Chemistry or other Natural Science courses in mathematics, physics, computer science, statistics, molecular biology, geochemistry, and engineering presented at a level that fully utilizes concepts and techniques developed in the core curriculum. Examples of advanced work courses in chemistry are Chemistry 436, 437, 441, 445, 446, 457, 470, 481, and 496. To be acceptable as advanced work, courses taken in other Natural Science departments must be individually approved by the Department of Chemistry.

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:	Fourth Year:
General Chem . . . with Quantitative Analysis	Advanced Inorganic Chemistry ***
Organic Chemistry	Advanced Analytical Chemistry ***
Physics	Undergraduate Research Seminar
Mathematics	Advanced Work
Third year:	
Physical Chemistry	
Computer Programming **	

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.

*** These courses may be taken in the spring of the third year concurrently with Chemistry 375B.

** May be taken in the second year.

BACHELOR OF ARTS IN CHEMISTRY

Major

The B.A. degree allows broader emphasis and 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 minimal preparation for graduate study toward an advanced degree in chemistry or in biochemistry.

	<i>Units</i>
General Education	48
Major.....	33
Supporting Subjects.....	10–12
Electives or Minor	30–33
	124

COURSE REQUIREMENTS FOR B.A. DEGREE

<i>Chemistry Courses:</i>	<i>Units</i>
115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major)	5
255—Quantitative Analysis	4
310AB—Fundamentals of Physical Chemistry	4
335AB—Organic Chemistry	8
376A—Physical Chemistry Laboratory	2
Upper Division Chemistry Electives	10
	33

Supporting Courses for B.A. Degree

<i>Mathematics:</i>	<i>Units</i>
161 and 211S—Calculus and Analytic Geometry (4 units in Gen. Ed., 2 units in major) (Recommended sequence)	2
AND	
<i>Physics:</i>	
209AB and 210AB—General Physics and Laboratories	8
OR	
114, 116, 214, 216—Introduction to Physics and Laboratories.....	10
	10–12

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 or pre-professional preparation. 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 338. 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

PRE-ENOLOGY (WINE CHEMISTRY) ADVISORY PLAN

Designed for students intending to do graduate work in enology, or who plan 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.

TEACHING CREDENTIAL ADVISORY PLAN (RYAN ACT)

Chemistry majors seeking to fulfill the single subject requirements in physical science under the Ryan Act should consult with an advisor in the chemistry department. The single subject program has been developed for students desiring to teach in the secondary schools in California. Complete the B.A. degree, Education, and General Education requirements and the following courses: Geol 303, 304, Astr 200, and Biol 115.

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—Introductory Toxicology (3) (Fall) Eck

Lecture, 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. This course partially fulfills the Natural Science GE requirements.

102. Chemistry and Society—Introductory Wine Chemistry (Enology) (3) (Spring) Schaumburg

Lecture, 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 maturation in wooden containers. Introductory background chemistry and biochemistry will also be introduced. This course partially fulfills the Natural Science G.E. requirement.

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103. Chemistry and Society Laboratory (1) Eck

Laboratory, 3 hours.

A laboratory-demonstration course designed to acquaint the student with chemical principals and phenomena directly affecting individuals in modern society. Experiments in areas such as chemical pollutants, chemical additives, biochemical processes and chemical reactions will be emphasized. Acceptable as General Education laboratory credit.

Prerequisite: Chemistry 102 or concurrent enrollment.

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 Chem 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. Can also be used to satisfy the General Education 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

208. Scientific and Creative Glass Blowing (1)

Laboratory, 3 hours.

A discussion of the history, composition, and uses of glass. Instruction and practice in elementary glass manipulations. Given for CR/NC. A laboratory fee is charged for this course.

232. Introductory Organic Chemistry (4) (Fall) Kientz

Lecture, 3 hours; 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 (2-2) (Fall-Spring) Brooks

Lecture, 2 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 (4) (Fall) Karas, Poland

Lecture, 3 hours; laboratory, 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.

Prerequisites: Math 105D or Math 107 or equivalent; Phys 210B or 214; or consent of instructor.

Cross-listed with Phys 311.

335A. Organic Chemistry (5) (Fall and Spring) Eck, Schaumburg, 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, Schaumburg, Trowbridge

Lecture, 3 hours.

Continuation of Chemistry 335A.

Prerequisite: Chemistry 335A.

336. Organic Chemistry Laboratory (2) (Fall and Spring) Eck, Schaumburg, 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. Introductory 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 and instrumentation. This course fulfills the analytical requirement for the medical technology curriculum.

Prerequisite: Chemistry 340.

375AB. Physical Chemistry (3-3) (Fall-Spring) Brooks

Lecture, 3 hours.

Theoretical principles 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.

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376AB. Physical Chemistry Laboratory (2-2) (376A, Fall and Spring; 376B, Spring) Brooks, Rustad

Lecture, 1 hour; laboratory, 3 hours.

Physicochemical measurements with an emphasis on experiment planning and design, error analysis, instrumental techniques, report writing and presentation.

Prerequisites: Chem 125B or 255; Physics 210AB or 214 and 216; Math 261, concurrent registration or consent of the instructor; Chem 310A or 375A. Concurrent registration in Chem 375A allowed for B.S. candidates.

381. Computer Programming for Scientists (2) (Spring) Brooks, Marshall

Lecture, 1 hour; laboratory, 3 hours.

BASIC and FORTRAN V programming with emphasis on applications in chemistry and physics. Cross-listed with Physics 381.

Prerequisites: Chemistry 115B or 125B; Physics 114; Mathematics 211S.

385. Molecular Spectroscopy (2) Brooks

Lecture, 1 hour; laboratory, 3 hours.

Spectroscopic study of molecular structure using ultraviolet and infrared spectrophotometers. Identification and analysis of gases, liquids, solutions, and solids.

Prerequisites: Chemistry 255 or Chemistry 125B.

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.

425. Advanced Inorganic Chemistry (3) (Spring) Rustad

Lecture, 3 hours.

Periodic relationships, atomic structure, nature of the chemical bond, and systematic study of representative and transition elements and their compounds.

Prerequisite: 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 thermodynamics, or consent of the instructor.

41. 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 instructor.

45. Biochemistry: Structural Materials and Protein Synthesis (3) (Fall) Kientz, Hoagland

Lecture, 3 hours.

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 the instructor.

46. Biochemistry: Enzymes and Metabolism (3) (Spring) Hoagland, Kientz

Lecture, 3 hours.

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.

45. 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.

47. Environmental Chemistry (3) (Fall) Marshall

Lecture, 1 hour; laboratory, 6 hours.

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.

40. 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.

1. Applied Nuclear Chemistry and Physics (2) (Spring) Dunning

Lecture, 2 hours.

This course offers working knowledge of nuclear radiations, radioactive sources and clear 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 31.

Prerequisites: Chemistry 310A or 375A; or Physics 314 and 316 and Chemistry 115B or 125B or consent of instructor.

482. Applied Nuclear Chemistry and Physics Laboratory (2) (Spring) 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: Chemistry/Physics 481 (concurrent enrollment suggested).

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 investigation 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) Department 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

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.

COMMUNICATIONS STUDIES

Coordinator: Carl Jensen

Department Office: Nichols Hall 362, phone (707) 664-2149

The Communications Studies Major, formerly Media Studies, is an innovative interdisciplinary educational program designed to help prepare students for careers in media/communications fields or as candidates for advanced graduate study and research in those fields.

The Communications degree program coordinates three distinct study approaches to the media—practical, empirical, and critical. Practical studies combine basic training in equipment operation, production design and organization, and professional internships. Empirical studies focus on the evolution of media technology, history of media production, mass media and society, and media management. Critical studies explore mass media ethics, the media as a force for social change, and the analysis and evaluation of specific media productions.

Students are advised to follow one of the following three general advisory plans as well as to pursue an official Minor degree in another discipline as part of their academic goals:

1. *Writing for the Media*—designed for students interested in journalism and/or those interested in writing for television, movies, and radio.
2. *Sound Technology*—designed for students interested in the theoretical and practical applications of electronic music and sound recording.
3. *Media Analysis and Criticism*—designed for students who plan further work in an academic setting or who seek to explore the study of media productions from a critical perspective.

BACHELOR OF ARTS IN COMMUNICATIONS STUDIES

Major	<i>Units</i>
General Education	48
Major Requirements.....	46
Electives.....	30
TOTAL	Minimum 124

COURSE REQUIREMENTS

The Communications 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	<i>Units</i>
COMS 200 Principles of Mass Communications	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 Communications	3

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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	Units

Upon entry into the program each student shall consult with an advisor to develop a balanced and coherent pattern of 18 units in courses around one of the following advisory plans: Writing for the Media, Sound Technology, or Media Analysis and Criticism.

MINOR IN COMMUNICATIONS STUDIES

The Communications 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 Communications Studies will bring their employer in almost any area of endeavor in public institutions or private industry an important, and often desired, secondary skill in communications. 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 communications; 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 Communications Studies courses for a total of 20 units for the Minor.

MINOR CORE COURSES		Units
COMS 200	Principles of Mass Communications	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

COMMUNICATIONS STUDIES COURSES

COMS 200 Principles of Mass Communication (3)

Introduction to the nature and function of mass communications; the mechanics and psychology of mass communications; 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. Field trips to media production facilities.

COMS 202 Principles of Media Criticism (3)

The special problems of criticism created by the technologies of film, video, photography, and recording. Study of different approaches to criticism of products of media technology: technical, social, cultural, and aesthetic. Discussion of the relationship between form, content, and function when media technology operates on a mass level. Exploration of the special relationship between producer/artist and consumer in the mass media.

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. Prerequisite: COMS 201 or equivalent experience.

COMS 300 Media Management (3)

Overview of the social, political, and economic context of media organizations and groups and their special problems of management. Review of organizational goals and the needs of creative individuals.

Prerequisites: COMS 200, COMS 201.

COMS 301 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.

Prerequisites: ENGL 372, COMS 201. Cross-listed with Sociology 331.

COMS 302 Media and Technology: A Study in Interdependence (3)

A historical study of media production through lecture. The shaping force of technology as it affects both the evolution of mass media in society and the design and realization of specific works of photography, film, video, and sound recording. Exploration of the close inter-relationship between the potentialities and limitations of available equipment and the operation of the mass media.

Prerequisites: ENGL 372, COMS 201, COMS 202.

COMS 355 Small Systems Video (3)

A beginning course in the operation and use of ½-inch Porta Paks and portable small "studio" 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.

Prerequisite: COMS 265.

COMS 401 Senior Seminar in Communications (4)

Advanced overview of major issues in mass communications for senior students. Research and discussion of critical topics in mass communications, 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 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 producing and directing radio programs. Lecture and laboratory experience in producing, directing, and broadcasting individual and group radio productions.

Prerequisites: COMS 265, COMS 365.

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

Faculty: Allan Cruse, J. W. Frasca, Robert Plantz
Department Office: Darwin 128, phone (707) 664-2368

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 with two options possessing a common core. The core curriculum is an integration of topics from the fields of computer science and data processing. It provides the student with a solid background in fundamental concepts and techniques. The student will choose one of the options which will further define the area of preparation.

A. Computer Systems Option. This option is designed to prepare students for graduate study or work at the systems level with a computer firm. The option requires supporting coursework in physics, digital electronics, and microprocessors, as well as coursework in mathematics which gives the student a firm background in the mathematics used in the design and analysis of algorithms and in systems analysis.

B. Computer Applications Option. This option, which is highly flexible, combines study of computing fundamentals with study in another discipline to which computing can be applied.

Both options offer course sequences in computing hardware, systems, data, and languages. Students in the program have access to a rich array of computing facilities and software. In addition to the facilities provided by the campus computer center, as described on page 420, the department of Physics and Astronomy provides laboratory facilities in analog and digital electronics, and microprocessor applications.

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

COMPUTER SYSTEMS OPTION

The Computer Systems option is intended to prepare students for professional careers in the computer industry or for graduate work in Computer Science. The program emphasizes computing theory, software design, and electronics. Supporting courses in mathematics and physics are required. The curriculum which comprises this option meets the guidelines established by the Association for Computing Machinery (A.C.M.)

MAJOR	<i>Units</i>
General Education	48
Major	37-40
Supporting Courses	29
Electives.....	6-9
TOTAL	124

COURSE REQUIREMENTS

	<i>Units</i>
150 Computer Programming I	4
151 Computer Programming II.....	3
158C Introduction to COBOL.....	2
or	
158F Introduction to FORTRAN	
250 Assembly Language Programming	3
255 Programming Languages	3
350 Introduction to File Processing	3
354 Data Structures and Algorithm Analysis	3
Hardware Sequence (See below)	7
One Additional CIS Sequence (Systems, Data or Language)	3-6
Electives (CIS courses or CIS Applications courses defined below; minimum of two courses).....	6
TOTAL	37-40

SUPPORTING COURSES

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
Physics 114 Introduction to Physics I	4
Physics 214 Introduction to Physics II	4
Physics 311 Elements of Electronics	4
TOTAL	29

COMPUTER APPLICATIONS OPTION

The Computer Applications option is intended to prepare students for professional careers as data processing specialists in industries such as banking, insurance, and energy, as well as in the public sector. The courses required for this option provide a sound foundation in Computer Science together with upper division work in an outside "area of concentration," selected in consultation with a faculty adviser. Students who elect this option will also take either an advanced seminar or internship course in which expertise in computing and in the area of concentration is applied to a senior project. The Computer Applications curriculum meets the proposed guidelines of the Data Processing Management Association (D.P.M.A.).

MAJOR

	<i>Units</i>
General Education	48
Major	60-64
Supporting Courses	6-7
Electives.....	4-9
TOTAL	124

COURSE REQUIREMENTS

150 Computer Programming I	4
151 Computer Programming II.....	3
158C Introduction to COBOL.....	2
or	
158F Introduction to FORTRAN	
250 Assembly Language Programming	3
255 Programming Languages	3

350	Introduction to File Processing	3
354	Data Structures and Algorithm Analysis	3
	Two CIS Sequences (Systems, Data, Hardware, or Language)	9–13
	Outside Concentration (Courses in another discipline or disciplines; at least 12 units must be upper division)	20
	Electives (CIS or CIS Applications, minimum of two courses)	6
	Senior Seminar or Internship	4
	TOTAL	60–64

SUPPORTING COURSES

Math 217	Topics in Calculus for Management and the Social Sciences..	3
or		
Math 161	Calculus and Analytical Geometry I	4
Math 242	Discrete Structures	3
	TOTAL	6–7

COMPUTER SCIENCE SEQUENCES

Hardware

Physics 312	Elements of Digital Electronics	4
Physics 412	Microprocessor Applications	3
	TOTAL	7

Systems

CIS 430	Systems Analysis	3
CIS 450	Operating Systems	3
	TOTAL	6

Data

CIS 460	Database Management Systems Design	3
CIS 470	Software Design and Development	3
	TOTAL	6

Language

CIS 452	—Compiler Theory and Construction	3

CIS APPLICATIONS COURSES

Physics/Chemistry 381	—Programming for Scientists	2
Geography 386	—Computer Mapping and Graphics, Application of Computer Graphics	3
Politics 363A	—Computer Aided Statistical Analysis	2
Politics 363B	—Advanced Computer Aided Statistical Analysis	2

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. For the available computing facilities, please see the section on Computing Services (p. 420). Approval of the minor plan should be obtained by the junior year at the latest in order that the minor be properly planned.

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Required Courses for the Computer Theory and Applications Minor (12 units)

1. CIS 150 Computer Programming I (4 units)
2. CIS 151 Computer Programming II (3 units)
3. CIS 158C Introduction to COBOL (2 units)
or
CIS 158F Introduction to FORTRAN (2 units)
4. CIS 255 Programming Languages (3 units)

Electives (at least 8 units, including at least 6 units of upper division):

	<i>Units</i>
Chem 381 (or Physics 381) Programming for Scientists	2
* CIS 158C Introduction to COBOL	2
* CIS 158F Introduction to FORTRAN	2
Math 217 Topics in Calculus for Management/Social Sciences.....	3
CIS 250 Assembly Language Programming	3
CIS 354 Data Structures and Algorithm Analysis	3
CIS 450 Operating Systems	3
CIS 452 Compiler Design and Construction	3
Math 454 Automata, Computability and Formal Languages.....	3
Mgt 218 Introduction to Computer Data Processing	4
Mgt 318 Introduction to Systems Management	4
Mgt 319 Information System Design for Management	4
Mgt 418 Intermediate Systems Management	4
Mgt 458 Operations Management	4
Phys 312 Elements of Digital Electronics	4
Phys 412 Microprocessor Applications.....	3
Pols 534 Organizational Computer Usage	4
Psy 442 Computer Applications in Psychology.....	6

GRADING POLICY IN THE DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE

A student majoring in Computer Science must take all of his/her courses required for the major as defined above in the traditional grading mode. This includes courses taken as part of the Outside Concentration in the Computer Applications Option, electives in CIS or CIS Applications, CIS Sequences and Supporting Courses. Two exceptions to this rule are CIS 496 Senior Seminar, which may be taken in the CR/NC grading mode, and CIS 497 Internship, which must be taken in CR/NC grading mode.

COMPUTER AND INFORMATION SCIENCE COURSES

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. Same as Math 150.

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. Same as Math 151.

Prerequisite: Math/CIS 150 or consent of instructor.

* May be used as an elective if not counted as a required course. At most, 3 units may be selected from appropriate sections of the following: Math 495—Special Studies; Math 499—Internship in Mathematics; Mgt 495—Special Studies; Mgt 499—Internship in Management.

158C. Introduction to COBOL (2)

A first course in 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 MATH/CIS 158C and Mgt. 217.

Prerequisite: One year high school algebra. Cross listed with MATH 158C.

158F. Introduction to FORTRAN (2)

Special emphasis will be placed on programming style. The top-down and structured approaches will be used. FORTRAN is a science-oriented programming language.

Prerequisite: Any one of Math 105C, Math 106, Math 121, Math 131, or consent of instructor. Cross listed with Math 158B.

250. Assembly Language Programming (3)

Study of assemblers. Computer organization and elementary data structures.

Prerequisite: Math/CIS 158F or Math/CIS 150 or Chem 381 or Physics 381 or consent of instructor. Cross listed with Math 250.

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, and SIMULA. Programs will be run covering cryptography, text analysis, and language translation.

Prerequisite: Math/CIS 151. Cross listed with Math 255.

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: Math/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: Math/CIS 151. Cross listed with Math 350.

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: Math/CIS 151, 250 and Math 242. Cross listed with Math 354.

430. Systems Analysis (3)

Introduction to the techniques of systems analysis: analysis of complex technical problems into basic elements and subsystems, evaluating the relationships of these elements and subsystems, solution of problems by means of integrated systems.

Prerequisite: Math/CIS 151.

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.

Prerequisites: Math/CIS 250 and Math/CIS 354 or consent of instructor. Cross listed with Math 450.

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452. Compiler Design and Construction (3)

Translation of arithmetic expressions. Formal models of grammars, Parsing. Possibly constructing a simple compiler. Topics covered could be chosen from: analysis and comparison of several languages; formal grammars and the languages they generate; compiler construction; lexical and syntactic analysis; code generation; the relation of context-free languages to pushdown automata; ambiguity.

Prerequisite: Math/CIS 255 and Math/CIS 354 or consent of instructor. Cross listed with Math 452.

460. 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: Math/CIS 350.

470. Software Design and Development (3)

Formal techniques of software design and development. Topics covered will include: formal models of structured programming, stepwise refinement and reorganization, segmentation, top-down design, organization and management of software development teams. Students will be required to work in teams in the organization, management, and development of a large software project.

Prerequisite: Math/CIS 354.

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: Consent of instructor.

495. Special Studies (1-4)

Prerequisites: A lower division CIS course and consent of instructor.

496. Senior Seminar (4)

Independent student projects designed to integrate knowledge of computer and information science with outside concentration.

Prerequisite: Senior standing in CIS curriculum.

497. Internship (4)

Student projects conceived and designed in conjunction with off-campus organization or group. The internships should provide on-the-job experience in an applications area related to the student's outside concentration. Computer hardware or computer time required for the internship must be provided by the off-campus organization. Graded CR/NC only.

Prerequisite: Senior standing in CIS curriculum.

COUNSELING

Department Chair: John T. Palmer

Faculty: Mark Doolittle, Ben Karr, Fred Moore, Carolyn Saarni, Sara Sharratt

Department Office: Nichols Hall-220, phone, (707) 664-2544

The 60-unit graduate program in Counseling offers an opportunity to study the essentials necessary for entry into the profession of counseling including marriage, family & child counseling and/or student personnel services.

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.

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, 535, and 545. 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.

ADMISSION REQUIREMENTS

- A. A baccalaureate degree—preferably in the behavioral sciences, and optimally, one with sound preparation in psychology. Specifically, a recent course (or demonstrated competency) in basic statistical analysis is a prerequisite for admission to Counseling 513. In addition, students are urged to have taken good basic courses in classical personality theory, abnormal behavior, developmental psychology, etc.
- 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.

MASTER'S DEGREE REQUIREMENTS

CORE COURSES

	<i>Units</i>
Couns 501 Seminar: Counseling Theory and Practice.....	4
Couns 502 Seminar: Contemporary Clinical Applications of Counseling Theory.....	4
Couns 503 Seminar: Dynamics of Individual Behavior.....	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
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OPTION I—MARRIAGE, FAMILY AND CHILD COUNSELING

Couns 525 Seminar: Tests and Measurements	4
Couns 540A Seminar: Marriage and Family Problems and Adjustments	4
Couns 540B Seminar: Marriage and Family Problems and Adjustments	4
or	
Couns 535 Seminar: Counseling Approaches with Children.....	4

Couns 545	Seminar: Family Law and Professional Ethics	4
Couns 570	Seminar: Cross-Cultural Awareness in Counseling	4
Couns 580	Seminar: Sex Counseling	4
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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

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	3
Electives.....		5
		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.

APPLICATION PROCEDURES

Interested persons can obtain the standard state-wide application form from the Admissions Office of the State University, or community colleges. Since students are accepted to the Counseling Program only once a year, students are urged to submit applications during the month of November for admission the following fall.

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.

COUNSELING COURSES

501. Seminar: Counseling Theory and Practice (4) Karr, Palmer

An overview of the counseling relationship as well as an examination in breadth and depth of the major counseling models currently used by professional counselors.

502. Seminar: Contemporary Clinical Applications of Counseling Theory (4) Doolittle

This course seeks to develop further knowledge in models of counseling by surveying major current therapeutic modes. The format is both theoretical and experiential and will include exploration of the following models: Interpersonal, Systems/Communication, Stress/Treatment/Behavioral Medicine, Hypnosis, Cognitive and Behavioral, Brief Strategic Therapy, etc.

Prerequisite: Counseling 501 or consent of instructor.

503. Seminar: Dynamics of Individual Behavior (4) Department Faculty

A course designed to facilitate personal growth and to develop counseling skills through an in-depth exploration of the student's inner dynamics in small group settings. Attention will also be given to the assessment of the need for change in attitudes and behavior on the part of the prospective counselor.

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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 internship 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 demonstrations. 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 acquaint students with the major theories of career development and their implications for career counseling. The course will also familiarize students with career counseling strategies and sources of occupational, educational, and personal information required for career counseling. Students will be required to work with a client in exploring personal values and needs as they relate to work satisfaction and personal development.

Prerequisites: Counseling 501 and Counseling 510, or consent of 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 501 and Counseling 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.

535. Seminar: Counseling Approaches with Children (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, (2) to familiarize students with behavioral assessment in childhood, and (3) to provide students with an introduction to basic counseling skills in working with children and their parents.

540AB. Seminar: Marriage and Family Problems and Adjustments (4) and (4) Sharratt, Doolittle

A study of the theoretical 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.

Prerequisite: 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.

595. Special Studies (1-4) Department Faculty

CREATIVE WRITING

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 36-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. All faculty are published authors in their field.

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*, and the feminist writer Meridel Le Sueur.

Author Gerald Rosen whose five novels include *Blues For A Dying Nation* and *Growing Up Bronx* is currently "Writer-In-Residence" at Sonoma State.

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. 144

CRIMINAL JUSTICE ADMINISTRATION

Coordinator: James P. Driscoll
Faculty: James P. Driscoll, Kenneth K. Marcus, Homero E. Yearwood
Department Office: Stevenson 2084, phone (707) 664-2934

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.

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.

	Units
CJA 301 Criminal Justice and Public Policy	4
CJA 330 Government and the Rule of Law	4
CJA 365 Management in Public Agencies	4
CJA 405 Civil Liberties and the Constitution	4
CJA 425 Criminology	4
CJA 450 Punishments and Corrections.....	4
CJA 490 Senior Seminar: Criminal Justice Administration.....	4
CJA 495 Special Studies	4
CJA 499 Internship	4
TOTAL	36

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 Internship 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 managerial 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 managerial problems in criminal justice agencies.

375. Current Issues

When offered, a faculty member will present a major problem area in Criminal Justice Administration for research analysis.

405. 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 class will study the rights and immunities guaranteed by the Constitution in general and the civil liberties, rights, and freedoms protected by the Bill of Rights in particular.

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. Cross listed with Sociology 447.

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.

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.

Prerequisites: Senior standing and/or consent of instructor.

495. Special Studies (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 (2)

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

Coordinator: Richard Van Gieson
Faculty: Gerald Egerer, Victor Garlin, Sue Hayes, Barry Ben-Zion
Department Office: Stevenson 2042, phone (707) 664-2366

Economics studies the ways in which people are organized in economic systems for the production and distribution of wealth and income. The Economics program has two basic objectives. One is to provide students with a liberal arts education that includes a well-defined philosophical grasp of major economic and social institutions, ideas and problems. The second goal is to meet the expectations of graduate schools of business, economics, and law, and the expectations of employers that students of Economics will possess the technical skills necessary to research and analyze problems and issues. Thus, majors receive training in micro-economic and macro-economic theory, applied statistics, analytical methodologies, and models.

All of the faculty have served as practicing economists with various public agencies or private firms and bring to their teaching a rich background of theory along with practical experience in policy issues and problems. The relatively small classes, informality, and close personal contact with instructors are particular strengths of the Department.

The Economics curriculum is designed both for students who will seek employment in the public or private sector upon graduation, and for those who wish to pursue graduate studies in Economics, business, law, planning, health care, and other fields. Economics majors should consult the department advisor early in their major to plan a program that meets their goals upon graduation, whether it be immediate employment or graduate training.

The Economics Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in Economics, please refer to the Appendix, pages 466–467.

BACHELOR OF ARTS IN ECONOMICS

Major

	<i>Units</i>
General Education	48
Economics Courses.....	40
Electives.....	36
TOTAL	124

COURSE REQUIREMENTS

	<i>Units</i>
1. All majors are required to take the following courses.....	24
Econ. 201A,B—Introduction to Economics.....	8
Econ. 304—Macroeconomic Theory	4
Econ. 305—Microeconomic Theory	4
Econ. 317—Descriptive Statistics for the Social Sciences (or Mgt. 315)	4
Econ. 495—Special Studies	4
2. In addition, all majors will take the following elective courses	16
Two 300 courses in economics	8
Two 400 level seminars in economics	8
Total Units in Major	40

The Department offers majors a number of interesting 300 level elective courses, requiring only a background in principles of economics.

In addition, the majors can take 400 level seminars in such fields as: Resource Economics, American Economic History, Labor Economics, Economic Development, Urban Economic Planning, Public Finance, Radical Economics, and Economic Forecasting.

MINOR IN ECONOMICS

Units

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	20
1. Econ. 201A,B—Introduction to Economics	8
2. Econ. 304—Macroeconomic Theory and Econ. 305—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 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.

ECONOMICS COURSES

201A. Introduction to Macroeconomics (4)

An examination of the basic characteristics of the American economy and the principles that determine its performance. 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.

300. Economic Issues of the Eighties (4)

A course designed to provide a broad overview of many of the major economic problems confronting America in the 1980's. Modules dealing with such issues as stagflation, energy and resource shortages, government spending, productivity, monetary instability, and international trade problems, will be taught by various members of the faculty.

302. International Trade: Theory and Policy (4)

An examination of the development of the modern theory of international trade and payments, and of the available techniques for achieving equilibrium; all in relation to U.S. foreign economic policy and international economic institutions.

Prerequisites: Econ. 201A and B, or consent of instructor.

303. International Economic Development (4)

A discussion of domestic and international aspects of development problems, with emphasis on the growing interdependence of the world economy. Alternative theories of development and strategies for growth are discussed in the context of the issues and problems faced by individual nations and regions such as Latin America, the Middle East, and Asia.

Prerequisites: Econ. 201A or 201B, or consent of instructor.

304. Macroeconomic Theory (4)

A study of theories that attempt to explain the causes of fluctuations in production, employment, income, money and prices in the economy. Topics covered are: national income accounting, models of short run equilibrium and long run growth, and the macro-institutional framework of the U.S. economy.

Prerequisites: Econ. 201A or consent of instructor and Math. 117 or its equivalent.

305. Microeconomic Theory (4)

A study of theories that attempt to explain consumer behavior and decision-making by business firms in the economy. Deals with theories of demand, pricing, production, cost analysis, and competition.

Prerequisites: Econ. 201B or consent of instructor and Math. 117 or its equivalent.

308. An Introduction to Mathematical Economics (4)

The application of simple mathematics to the kind of macro- and microeconomic analysis widely used in government and business, and including elementary input-output models. Designed to provide the basic background understanding needed for other courses in Economics and Management Studies, such as Econ. 317 and Management 415.

Prerequisites: Econ. 201A and B, and Math. 106 or Math 117, or consent of instructor.

311. The Public Economy (4)

A basic introduction to the economics of the public sector designed to give the student a broad overview of the economic roles of government in our society. Emphasis on understanding of current issues about efficiency in government, programs to help the poor, and government policies to promote long-run growth of the economy.

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. proficiency exam or Math 1051 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.

322. Urban Economic Planning (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.

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.

341. Labor Economics (4)

This course deals with economic and social issues as they affect the U.S. labor market. Theoretical and empirical examination of collective bargaining, unemployment, discrimination, manpower programs and other key topics.

Prerequisite: Econ. 201A or 201B or consent of instructor.

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.

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.

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.

408. Mathematical Economics (4)

Further applications of elementary mathematics to national income and competitive market models, and emphasizing the solution of optimization problems relating to taxation, cost of production, pricing, employment, and external balance. Prerequisite: Econ. 308 or consent of instructor. Math 217 recommended.

411. Seminar in Public Finance (4)

A seminar devoted to the needs of students seeking careers in the public sector. Topics include: budgeting, systems analysis, government investment, and resource allocation in the public sector.

Prerequisite: Econ. 305 or 311 or consent of instructor.

419. Seminar in Econometrics: Computer Applications

A seminar devoted to the use of statistics in economic analysis. Special problems of statistical inference encountered in economic relationships. Computerized methods to measure, test, and simulate economic models. Applications using actual economic data.

Prerequisites: Econ 304 or 305, and Econ 317 or its equivalent.

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. 304 or 305 or consent of instructor.

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.

484. Seminar in Macroeconomic Policy (4)

Seminar devoted to explorations of economic policy issues that require macroeconomic theory for their analysis. Topics may include income and growth policies in the United States and other countries, and the application of formal macroeconomic models to develop policy alternatives.

Prerequisites: Econ. 304 or its equivalent. Non-majors who have not taken Econ. 304 or its equivalent may enroll with the consent of the instructor.

485. Seminar in Microeconomic Policy (4)

Seminar devoted to exploration of economic policy issues that require microeconomic theory for their analysis. Topics may include studies of industrial structure and performance, antitrust policy, and government regulation of markets.

Prerequisites: Econ. 305 or its equivalent. Non-majors who have not taken Econ. 305 or its equivalent may enroll with the consent of the instructor.

488. Economics and Law of Business 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. 304 and 305.

489. History of Economic Thought (4)

An exploration of the historical development of fundamental economic theory. Theories of the past: Classical Age (Smith, Malthus, Ricardo); early models (y. Thunen, Cournot, Walras); Marginalist revolution (Jevons, Menger, Marshall) and its later extension to non-pure competition (Robinson, Chamberlin); revolution in macroeconomics (Keynes, Hicks); quantitative revolution (Tinbergen, Kuznets, Leontief, Kantorovich, Klein).

Prerequisites: Econ. 304 and 305.

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 (4)

Intended for advanced students working as tutors for economics courses. Will consist of a two hour weekly faculty directed seminar in teaching methods and discussion of concepts plus scheduled tutoring activities by the students. May not be taken more than twice.

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

Department Chair: Jayne DeLawter

Faculty: Libby Byers, Thomas Cooke, Jayne DeLawter, George Elliott, Robert Fletcher, Herbert Fougner, Robert Fuchigami, Bernice Goldmark, Betty Halpern, Sally Hurtado, Bjorn Karlsen, Duncan MacInnes, Carroll Mjelde, Deborah Priddy, Charles Rhinehart, Alexander Sapiens, Brian Shears, Thalia Silverman, Harold Skinner, David Thatcher, Eva Washington, Jean Young

Department Office: Stevenson 3096, phone (707) 664-2131

The Department of Education is committed to excellence in the professional preparation of teachers and educational specialists. Programs rest upon a rigorous foundation of liberal arts and sciences. Faculty possess diverse expertise and experience in dealing with the philosophical, empirical, pragmatic, historical, and political issues which pervade the study of education.

While preparation is designed mainly for public school positions, completing a program in the Department of Education provides the student with generic preparation applicable to a variety of non-teaching positions in education or related human services fields both within the public and private sectors.

At the preservice level, the student may pursue a baccalaureate degree concurrently with a basic credential program. For the professional community served by the University, the Department of Education offers a wide range of fifth year and graduate programs to accommodate individual needs.

The Education Department and Program Coordinators are located in Stevenson 3096 (664-2131).

CREDENTIALS FOR PUBLIC SCHOOL SERVICE

Sonoma State University offers courses leading to the Multiple Subject Credential with emphases in Elementary, Early Childhood, and Bilingual Education and courses leading to the Single Subject Credential. In addition to the two basic credentials, the University offers courses leading to the following Specialist Credentials: Early Childhood, Reading, Special Education (Learning Handicapped and Severely Handicapped) and Bilingual/Cross Cultural Education and to the following Services Credentials: Administration and Pupil Personnel Services. A program leading to a Children's Center Permit is also available. For detailed information regarding these credential programs see page 33.

Because of frequent changes in legal requirements, credential candidates should consult the Office of Credential Advising and Admissions, Department of Education, located in Stevenson 3079 (707) 664-2581. For information regarding the Bilingual/Cross Cultural Specialist Credential, consult the Department of Education; and for information regarding the Pupil Personnel Services Credential consult the Department of Counseling (707) 664-2544.

During the 1982–83 academic year, the Education faculty was involved in a complete rewriting of all 10 of the Ryan Act credentials for teaching and other school service. This was necessitated by new guidelines issued by the Commission for Teacher Preparation and Licensing. At the time this catalog went to press, the rewriting had not been completed. Hence all applicants for credentials in the Education Department will have to consult with the coordinator of the program to which they are applying as to courses and field experiences required under the new guidelines.

MASTER OF ARTS IN EDUCATION

The Master of Arts program in Education offers courses of graduate study to prepare teachers for specialized teaching and for curriculum and instructional leadership responsibilities in the schools. The program is a minimum of thirty units and provides for areas of concentration in: Reading, Special Education, Early Childhood Education, Educational Administration, and Curriculum. Information on current details of M.A. programs and requirements is available in Stevenson 3079 (664-2581).

ADMISSION REQUIREMENTS

- A. A baccalaureate degree from an accredited institution.
- B. A valid basic teaching credential (except where otherwise noted).
- C. 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.
- D. The aptitude portion of the Graduate Record Examination for advising purposes.
- E. The favorable recommendation of the department after completion of two courses in the program (for part-time students).
- F. Transcripts on file in Education Department.

COURSE REQUIREMENTS

A. CORE COURSES FOR M.A. IN EDUCATION *Units*

The following courses are required for *all options* in Education.

Educ. 574—Information Systems and Research Methods.....	2

Choose One:

Educ. 575A-B—Master of Arts Thesis or Project.....	4

or

Ed. 576A-B—Current Issues and Trends in Education.....	4

(Students who complete Educ. 576A/B must also complete a written comprehensive examination)

B. AREAS OF CONCENTRATION

I. Reading

Choose one:

Educ. 516—Advanced Psychology of Education	3

or

Educ. 517—The Psychology of the Reading Process	3

Educ. 507—Advanced Seminar: Curriculum and Research in	

Reading.....	3

Educ. 560A—Diagnosis and Remediation of Reading Difficulties....	3

Choose One:

Educ. 560B—Practicum in Diagnosis and Remedial Instruction in	

Reading	3

or

Educ. 561—Supervised Field Experience for Reading	

Specialists	

In addition, each student must complete twelve units of supporting coursework chosen with the advisor's approval from 400–500 level courses having an appropriate bearing on the student's objectives. Those students working toward the Reading Specialist Credential and M.A. degree simultaneously must take 33 prescribed units, not to include electives.

II. Special Education

The present M.A. program with an emphasis in special education is intended to provide additional knowledge and competence to teachers possessing a specialist credential in special education.

In addition to the core courses for the M.A. in education, students must complete at least the following courses:

Educ 569 Resource Teachers in Special Education	2-3
Educ 564 Research in Special Education	3
Educ 562 Advanced Problems in Special Education	3

Students interested in pursuing this M.A. degree should contact the coordinator of Special Education for current information.

III. Early Childhood Education

Two patterns of study are available: Pattern I for those who are possessing a valid teaching credential who are also candidates for the Specialist Credential in Early Childhood Education and Pattern II for those who wish to have the M.A. only. Both of these programs prepare people to work with children from birth to eight years of age in community sponsored programs, federal programs or agency sponsored programs. Further information about this program may be obtained from the Department of Education.

IV. Administrative Services

In addition to general admission requirements listed on page 388, students in the administrative services concentration must also have three years of successful teaching experience and successfully complete prerequisite courses: Education 550 Special Education for Administrators (4), Education 551 Curriculum in the Contemporary School (3), and Education 553 School-Community Relations (3).

<i>Required Area Courses</i>		<i>Units</i>
Education 552A	School Personnel Management.....	3
Education 552B	School Personnel Management: Field Experience	1
Education 554	School Law	3
Education 555	Research and Evaluation.....	3
Education 556	School Finance	3
Education 557	Student Personnel Services	3
Education 558	Adv. Seminar—Curriculum Development	3
Education 559	School Organization and Administration.....	4
One unit selected with advisor approval		1

V. Curriculum

This new M.A. concentration is designed to meet the needs of a variety of professional educators including the following:

1. Classroom teachers.
2. Instructors at the Community College level in programs for the preparation of teacher aides.
3. Curriculum coordinators and/or consultants in school districts.
4. High school department heads.
5. Resource teachers in schools.
6. Lead teachers in nongraded or team-teaching clusters.
7. Demonstration teachers and project coordinators.
8. Coordinators of school-wide instructional materials-media resource centers.

<i>Required Area Courses</i>		<i>Units</i>
Education 550—Special Education for Administrators.....		4
WITH ONE COURSE SELECTED FROM EACH OF THE FOLLOWING FOUR BLOCKS:		
<i>Block A</i>		<i>Units</i>
Education 502—Advanced Seminar: Curriculum in Mathematics		3
Education 507—Advanced Seminar: Curriculum and Research in Reading.....		3
Education 508—Advanced Seminar: Curriculum and Research in Language Arts		3
Education 503—Advanced Seminar: Curriculum and Research in Science		3
Education 504—Advanced Seminar: Curriculum and Research in Social Science.....		3
Education 506—General Curriculum		3
<i>Block B</i>		
Education 534—Specialist/MA Integrated Curriculum in Infant Programs through 3rd Grade (0–8 years of age)		3
Education 535—Curriculum Development in Secondary School		3
Education 536—Curriculum Development in the Elementary School		3
Education 551—Curriculum in the Contemporary School.....		3
Education 558—Advanced Seminar in Curriculum Development		3
<i>Block C</i>		
Education 510—Seminar: Educational Sociology		3
Education 511—Seminar: Comparative Education		3
Education 512—Seminar: History of Education		3
Education 513—Seminar: Philosophy of Education		3
<i>Block D</i>		
Education 516—Seminar in Advanced Psychology of Education		3
Education 568—Evaluation in Education		3
SUPPORTING COURSES:		
		<i>Units</i>
Eight units selected with advisor's approval from 400 or 500 level courses having an appropriate bearing on the student's objectives.		8
Questions regarding admission, course requirements, and further program details should be directed to the Department of Education at (707) 664-2581.		

EDUCATION COURSES

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 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.

328. Teaching to an Instructional Objective (2.0)

Guidance in lesson preparation with emphasis on direct delivery, self-evaluation and analysis of presentations. Prerequisite: Functional Spanish language skills and a participant in the Mini-Corp Program or consent of instructor.

329. The Migrant Experience (2.0)

An examination of the migrant plight in our society and educational system through literature and by a direct active contact with the migrant community. Prerequisite: Functional Spanish language skills and a participant 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 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.

400. Curriculum of the Elementary School (Social Sciences) (1)

An examination of principles, methods, and materials of instruction including audio-visual, in the elementary schools social studies curriculum.
Prerequisite: Approval of Education Department.

401. Curriculum of the Elementary School (Environmental Education) (2)

A course for pre- and inservice teachers. Includes a definition of terms, a history of conservation and current problems and 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.

402. Curriculum of the Elementary School (Mathematics) (1)

Principles, methods and materials of instruction in mathematics in the elementary school.
Prerequisite: Math. 300 and approval of Education Department.

403. Curriculum of the Elementary School (Science) (1)

Principles, methods and materials of instruction in science in the elementary school, including: (a) conservation of natural resources, (b) preservation of the environment, (c) current programs in science education. Includes audio visual.
Prerequisite: Approval of Education Department.

405A-B. Student Teaching Multiple Subject Credential and Seminar (7-7)

Full-time teaching experience in an elementary school under the guidance of a cooperating teacher.
Prerequisite: Approval of Education Department.

405C-D Student Teaching Multiple Subject Credential—Early Childhood Education (7-7)

Student teaching in the primary and intermediate grades.
Prerequisite: Admission to Early Childhood Education Credential Program.

406A. The Teaching of Reading in the Secondary School (3)

An overview of 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 Education Department or admission to the Single Subject Credential Program.

406B. Secondary Reading Field Experience (1)

An observation/participation field experience designed to provide the teacher candidate with preliminary acquaintance with and conception of pedagogical skills, knowledge and insights through classroom activities in a reading instruction setting.

Prerequisite: Approval of Education Department or admission to the Single Subject Credential Program.

407. Curriculum of the Elementary School (Reading) (3)

Principles, methods, and materials of instruction in the teaching of reading in the elementary school, including audio-visual. Field experience required.

Prerequisite: Approval of Education Department.

408. Curriculum of the Elementary School (Language Arts) (1)

Principles, methods, and materials of instruction (including audio-visual) for elementary school writing, spelling, speaking and listening.

Prerequisite: Approval of the Education Department.

409 Integrated Curriculum for the Multiple Subject Credential (3)

The theory and practice of an integrated curriculum utilizing the content areas of math, science, social science and language arts.

Prerequisite: Admission to the Elementary Program.

410. Second Language Pedagogy (2)

This course addresses current and past methods of teaching a foreign/second language. Theories of first/second language acquisition and learning are addressed. The influence of linguistic theories upon second language teaching practices and goals are examined. Other topics covered in this course 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)

This course is 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.

Requirement: Concurrent enrollment with Education 407—Curriculum of the Elementary School (Reading).

413 Integrated Curriculum—Bilingual Education (2)

A course focusing on the dynamics and operation of the integrated curriculum including the design of curricular models.

413B Integrated Curriculum—Bilingual Education—Field Experience (1)

Field experience with an integrated curriculum in a bilingual setting.

414. Seminar in student-teaching (1)

Progress and problems in student-teaching. Discussion and workshops designed to

enhance career and professional development.

Prerequisite: Concurrent enrollment with Education 405.

415A Social and Psychological Foundations for Cultural Diversity (2)

Classroom techniques and materials that provide for diversity in pupil abilities and that also consider ethnic and socio-economic factors.

415B Social and Psychological Foundations for Cultural Diversity (1)

Field experience (30 hours). Assignment in a culturally diverse educational setting which provides a "hands on" experience with ESL teaching methods with LEP/NEP students.

416. Student Teaching in Multi-Cultural Settings—Field Experience. (1)

Prerequisite required.

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. The course will include 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, while Part B is related specifically to candidates' particular subject matter.

424. Introduction to Student Teaching (1) (1)

An initial observation/participation field experience designed to provide the teacher candidate with preliminary acquaintance with and conceptions of pedagogical skills, knowledge and insights through classroom school-wide activities.

Candidates must spend a minimum of nine weeks observing in an assigned school, including one week of supervised student teaching. May be repeated for credit. 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: Admission to the Single Subject Credential Program; approval of coordinator; successful completion of the University approved undergraduate subject matter and/or major degree requirements or successful completion of State Subject matter examination.

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: Approval of Education Department.

428. Issues in Multi-Cultural Education (1)

This course provides a base for understanding and exploring the diversity of thought, communication and being. It also provides a base for understanding the nature of philosophies, policies and procedures which govern educational practices in the multi-cultural classroom.

Prerequisite: Permission of the Department 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.

432. Seminar: Nursery School Curriculum (2-3)

Experiences in which all students are trained to develop skill in the use of material and media to integrate all aspects of the curriculum. May be applied toward Children's Center Permit.

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. Intergroup Relations in Early Childhood Education (3)

Educating teachers of young children about specific goals and objectives for inter-group relations. An examination of careers, skills and knowledge necessary for the early childhood educator in schools and in other public and private settings.

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 Credential, 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: Consent of Special Education Coordinator.

453. Seminar in Student Teaching (1)

Discussion of progress and problems for student teachers in special education. (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.

461A. Helping the Handicapped Child in the Regular Classroom (3)

Study of the issues, problems, and techniques related to helping students with special educational needs in the regular classroom.

461B. Helping the Handicapped Child in the Regular Classroom (3)

Follow up of issues, problems, and techniques related to helping the student with special educational needs in the regular classroom.

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.

495. Special Studies (1-4)

Students wishing to do independent study will need to make a contract with the instructor during the first week of classes. This may be done only after successful completion of at least two courses in the Department. The student must complete the standard SSU form and secure the required approvals.

502. Advanced Seminar: Curriculum in Mathematics (3)

A study of programs, trends and issues as reflected in the new mathematics framework for grades K-12. 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.

503. Advanced Seminar: Curriculum and Research in Science (3)

Readings in research literature on methods, materials, principles of learning and psychological factors in the teaching of science. Study of trends and controversial issues in science teaching.

Prerequisite: Educ. 403 or equivalent. Approval of Education Department.

504. Advanced Seminar: Curriculum and Research in Social Sciences (3)

Readings in the research literature on the teaching of social sciences with particular

emphasis on the integrative approaches. Study of inquiry methods in social sciences.
Prerequisite: Educ. 400 or equivalent. Approval of Education Department.

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: Permission of the Coordinator of Early Childhood Education.

506. Advanced Seminar: General Curriculum (3)

Studies in the research, theories, and philosophies of curriculum construction in selected subject areas.

Prerequisite: Approval of the Education Department.

507. Advanced Seminar: Curriculum and Research in Reading (3)

Readings in the research literature on the reading process (beginning and proficient reading) and methods and materials for teaching of reading. Study of trends and controversial issues in reading and reading instruction.

Prerequisite: Educ. 407 or equivalent. Approval of Education Department.

508. Advanced Seminar: Curriculum and Research in Language Arts (3)

Readings in the research literature on oral and written language acquisition, language functions and forms, and methods and materials for teaching language arts.

Prerequisite: Educ. 408 or equivalent. Approval of Education Department.

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 Education Department.

510. Seminar: Educational Sociology (3)

An inquiry into alternative concepts in Sociology, their relation to education, and their consequences for teaching; the role of the school as an institution in a society of changing values; the social structure of the schools.

Prerequisite: Approval of Education Department.

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 Education Department.

512. Seminar: History of Education (3)

A study of major developments in the history of education in Europe and America.

Prerequisite: Approval of Education Department.

513. Seminar: Philosophy of Education (3)

An inquiry into alternative philosophies of education; their philosophic assumptions, values, ends, methods, problems, and consequences for classroom teaching; how should a philosophy of education be built?

Prerequisite: Approval of Education Department.

514. Selection and Evaluation of Reading Materials (3)

Evaluation of commercially published and teacher prepared instructional materials and devices for use in reading instruction.

Prerequisite: Approval of Education Department.

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 Education Department.

516. Seminar in Advanced Psychology of Education (3)

Study of psychological theories and research relevant to teaching and learning in the public school classroom.

Prerequisite: Approval of Education Department.

517. Psychology of the Reading Process (3)

Research and theories of the psychological, sociolinguistic, physiological, neurological, and educational aspects of the reading process.

Prerequisite: Approval of Education Department.

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 Bilingual Education (2)

A brief review of theories of language development, culture and cognition and culture and teaching. Students will develop curriculum materials for bilingual students in various subject areas and for various levels. They will also evaluate existing materials and learn ways to adapt them in the bilingual classroom. The course will be 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.

532. Bilingual Program Development and Implementation (4.0)

A survey of existing bilingual programs and the criteria used in designing them. Specific attention will be given to community needs assessment, working with parents and paraprofessionals, proposal writing, community development, and bilingual program evaluation.

533. The Teaching of Reading for the Bilingual Child (2)

Techniques for teaching reading to bilingual children. Students will review current theories and analyze current methods and materials.

534. Specialist/MA Integrated Curriculum in Infant Programs through 3rd Grade. (0–8 years of age) (3)

A multi-discipline 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 Credential, 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 Education Department, and/or M.A. program.

537. Seminar: Developmental Approach to Reading (3)

A study of various systems of teaching reading to young children, infancy–8 years. Course will include 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 Supervisor Permit.

539. Research in Early Childhood Education (3)

Current topics in Early Childhood Education. Seminars will focus upon current research related to the education of young children. Each student will identify an area of study and prepare an outline for Master's project or thesis. Course may be taken concurrently with Education 574.

Prerequisite: Consent of the instructor.

541. Education of the Emotionally Disturbed (1–3)

Theoretical discussions and practical applications of techniques used in the education of the emotionally disturbed.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

542. Mental Retardation (2–3)

Intensive study of problems and issues related to mental retardation.

Prerequisite: Admission to Special Education Program.

543. Instructional Strategies in Special Education (2–3)

Intensive study of the instructional process.

Prerequisite: Admission to Special Education Program.

544. Language Disorders and Development (2–3)

Study of the causes and remediation of speech and language disorders. Some field work with small groups and individuals required.

Prerequisite: Admission to Special Education Program.

545. Counseling and Rehabilitation of People with Handicaps (2–3)

Study of counseling techniques for coping with the problems of exceptionality as it affects children, siblings and parents. Some field work required.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430 and admission to Special Education program.

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.

548. Learning Disabilities (2–3)

Introduction to various theories, issues, and problems related to learning disabilities in children.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

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.

550. Special Education for Administrators (4)

Human Diversity: The learner with special needs, emphasizing assumptions underlying P.L. 94-142, special programs, discriminatory labeling processes, efficacy of segregated classes, normalization, developmental view of human performance as it relates to modal patterns of development and deviations thereof, and learning/reading disabilities. Includes one unit field experience assignment.

Prerequisite: Admission to Administrative Services Credential Program or M.A. in Education Curriculum program.

551. Curriculum in the Contemporary School (3)

Students in this course will identify curricular problems in the schools, critique proposals and programs for meeting these problems, analyze trends in curriculum, report in-depth studies of curriculum and methods in each discipline, and evaluate alternative plans for classroom and school-wide organization for instructional improvement. Includes consideration of cultural diversity: knowledge of and attitudes towards Black, Chicano, Native American, and Asian-American cultures emphasizing value systems, the community, classroom environments and curricula.

Prerequisite: Admission to Administrative Services Credential Program or M.A. in Education Curriculum program.

552A. School Personnel Management (3)

Knowledge of the principles underlying personnel practices and procedures, and skill in applying those principles in the work situation. Criteria and standards for the selection, evaluation, retention and promotion of employees; effective recruitment practices. Knowledge of laws and regulations for school personnel.

Prerequisite: Admission to Administrative Services Credential Program.

552B. School Personnel Management (1)

Field Experience for 552A.

553. School-Community Relations (3)

The relationship of the school and community. Role of community agencies, as they relate to the schools. Dissemination of information, teacher involvement in community life, the use of volunteers within the school curriculum. Includes one unit field experience assignment.

Prerequisite: Approval of Education Department.

554. School Law (3)

Introduction to the legal structure of public and private education in the United States. Consideration will be given to school finance, relation of teacher and civil liberties, curriculum control and school integration. The legal implications of grading, tracking, special education, school education and pupil records will also be discussed.

Prerequisite: Admission to Administrative Services Credential Program.

555. Research and Evaluation (3)

Identification of sources of research in education; interpretation of research findings in layman's language; mastery of techniques of initiating, implementing, evaluating and interpreting research programs; design and evaluation of school-wide testing programs.

Prerequisite: Admission to Administrative Services Credential Program.

556. School Finance (3)

A study of the financial structure of school districts, laws relating to school finance, sources of income, planning and utilization of income, budget procedures, program budgeting, expenditure control, accounting procedures.

Prerequisite: Admission to Administrative Services Credential Program.

557. Student Personnel Services (3)

Objectives and organization of school guidance programs; methods of interviewing and counseling; personal, academic and vocational counseling; group guidance activities; counseling with parents; interpretation of test results; referral resources; guidance records; other student personnel services; student government, student activities.

Prerequisite: Admission to Administrative Services Credential Program.

558. Advanced Seminar in Curriculum Development (3)

Analysis of determinants of curriculum—the individual, contemporary society, the structure of the various disciplines—as their impact is modified through application of learning theory and through philosophical commitment; development of a unit of study based on synthesis of these operational principles; evaluation of the dynamics of all curriculum determinants.

Prerequisite: Educ. 551.

559. School Organization and Administration (4)

School district organization; current issues, trends, and practices in school administration. Synthesis of the strands constituting the educational program. Relationship of the total school experience and contemporary life outside the school. Includes a one unit field experience assignment.

Prerequisite: Admission to the Administrative Services Credential 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 will be identified and discussed.

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 M.A. students. Particular emphasis is placed on the assessment of community programs. Students also assist in organizing a conference on some aspect of special education.

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 Education Department.

569. Resource Teachers in Special Education (3)

A basic need has arisen in the public schools due to the current trend to mainstream students formally placed in special education programs. This course is designed to prepare special teachers in techniques and methods for helping special students in the regular class.

Prerequisite: Consent of the instructor.

574. Information Systems and Research Methods (2-3)

Information systems and principles of research; methods of organization and presentation of research data; selection, design and reporting of original investigations.

Prerequisite: Approval of Education Department.

575A. Master of Arts Thesis (2)

Credit/no credit grades only.

Prerequisite: Approval of Education Department.

575B. Master of Arts Thesis (2)

Credit/no credit grades only.

Prerequisite: Approval of Education Department.

576A. 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 (1) currently in a state of change, (2) controversial, and (3) interdisciplinary within the broad scope of education.

576B. Current Trends and Issues in Education (2)

A follow up of 576A during which time the student will develop an in-depth study of a selected trend or issue in Education.

588AB. Curriculum and Materials Modification in Special Education (3) (3)

Analysis of curriculum and materials modifications.

Prerequisite: Admission to Special Education Program.

593. Seminar: An Interdisciplinary Approach to the Learning Environment (3)

An interdisciplinary analysis of the American school system in terms of the variant values of the controlling, client and personnel groups involved in it, and the sources of their values (including their perception of themselves, their own needs, and of others involved in institutional interactions with them).

595. Special Studies (1-4)

ENGLISH

Department Chair: Eugene Soules

Faculty: William Babula, Martin Blaze, David Bromige, Robert Coleman, Nirmal-Singh Dhesi, Gerald Haslam, Richard Hendrickson, James Kormier, Hector Lee (Emeritus), William Lee, Dorothy Overly, Don Patterson, James Ragan, Mary Rich (Emeritus), Alan Sandy, Janice "J.J." Wilson

Department Office: Nichols Hall 362, phone (707) 664-2140

English, with its various areas of study, is one of the most comprehensive and "liberalizing" of the liberal arts. It provides a familiarity with the written documents that define our past and gives meaning and purpose to our present; it gives knowledge about the nature and function of communication, and about the sources and structure of language; it improves our ability to communicate effectively in written and oral forms; it stirs the creative impulses in all of us; 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.

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.

College Level Examination Program (CLEP)

The English Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in English, refer to the Appendix, pages 466–467.

BACHELOR OF ARTS IN ENGLISH

Major

Literature Concentration

	<i>Units</i>
Introduction to Literary Analysis: 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, 308, 318, 329, 352, 366, 375, 407, 418.	
Areas of Specialization (English, American: one period course required; other courses to be selected from period, author, and genre courses. (See department advisor for detailed course sequences.)	12
Electives.....	6
TOTAL	36

Creative Writing Concentration

Introduction to Literary Analysis: Seminar (English 301)	3
Survey Course.....	3
To be selected from English 237, 238, 239, 240.	
Shakespeare (English 339 or 439)	3
Upper Division Course in Writing	3
To be selected from English 303, 307, 308, 318, 329, 352, 366, 375, 407, 409, 418 429.	
Introductory Genre Courses.....	3–9
To be selected from English 367, 369, 371, 373.	
Advanced Genre Course	3
To be selected from English 470, 472, 474.	
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	36

Media/Communication Concentration

Introduction to Literary Analysis: 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
Electives (See department advisor for detailed course sequences.).....	15
TOTAL	36

With advisor's consent, the student may include in the elective group 3 units of CIP 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:

	<i>Units</i>
Individualized Self-Developed Program	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
Electives in literature or writing courses	6–12
TOTAL	36

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, 3 units)

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 as "conditionally classified" or as "classified."

ADMISSION TO CANDIDACY

For a change from "conditionally classified" 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.

TEACHING CREDENTIAL PROGRAM

The California Commission on Teacher Licensing and Credentialing has approved the following programs for credentials in English, English/Journalism, English/Speech, and English/Drama as "Waiver Programs" in lieu of the National Teachers Examination. Those wishing a single subject credential in one of the programs should consult an English Department advisor for specific course requirements.

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 GPA 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:

	<i>Units</i>
I. English 379 Study of Language	3
II. English 491A Workshop in 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), <i>or</i> Youth in Literature (English 343)	
C. Genre: (367, 369, 371, 373)	
IV. Electives *	6
TOTAL	20

ENGLISH PROFICIENCY TEST

The University offers 99-level courses in English for students who do pass the English Proficiency Test at an appropriate level. Please see page 396 for additional information.

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. 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 CR/NC. Course credit is not applicable toward graduation. Prerequisite: Completion of the English Placement Test.

100. Credit by Examination (3-6)

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.

* 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).

103. Learning Strategies (2)

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.

199. Student-Instructed Course (3)

A student-initiated course on specific literary topics taught by graduate students and supervised by English Department faculty.

211. Explorations in Language and Literature (1-3)

An experimental course that will include subjects not normally offered in the regular curriculum. See class schedule for current topics.

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. Course credit is dependent upon successful completion of the WEPT. Prerequisite: Completion of English 101 or equivalent.

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.

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.

302. College Composition: Adjunct (1-3)

A course for non-English majors to receive tutorial help in writing reports and research papers for subject matter courses they are currently taking. Training includes prewriting, basic writing and editing skills, organization, documentation, and style. Given on a credit/no-credit basis. Does *not* fulfill the WEPT requirement. Consent of instructor required.

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.

304. Reading Skills: Adjunct (1-3)

An individualized and small-group approach to reading skills improvement, using reading materials assigned to the students in their other college courses.

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.

322. Information Services and Strategies (3)

This course will provide a generalized introduction to information services available in the United States and Europe. It is designed to develop skills in conventional search procedures, and is an overview of on-line search strategies and manipulation of data. Required of all students enrolled in the Information Careers Minor.

329. Script Writing (Stage-Film-TV) (3)

Prerequisite: English 375 or consent of instructor. May be repeated for credit.

336. Studies in World Literature (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)

An experimental 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.

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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)

An experimental 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)

Prerequisite: English 375 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. Successful completion of this course (a grade of C or better) fulfills the college WEPT requirement. May be repeated for credit.

377. Film Studies (3)

An analysis of film narrative from aesthetic, theoretical, and sociological perspectives. Topics include American Film Genres, American Film Comedy, Hero in American Film, etc. May be repeated for credit.

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 (2-3)

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.

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.

428. From Script to Screen (3)

A course designed for adapting short screenplays to screen by utilizing limited production techniques—from pre-production to post-production. The class will adopt the collaboration format by bringing screenwriters together with student actors, directors, and camera technicians in order to produce individual short scenes. Cross-listed with Theatre Arts 428. Prerequisites: English 329 or consent of instructor.

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.

437. Studies in Early American Literature (3)

Close study of topics unique to American Literature before 1850. See class schedule for current offering. Course may be repeated for credit.

438. Studies in Later American Literature (3)

Close study of topics unique to American Literature since 1850. See class schedule for current offering. May be repeated for credit.

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. Contemporary Women Novelists (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.

Prerequisite: Consent of instructor.

454. Studies in Folklore (3)

Types and forms of 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.

477. Small Systems Video (3)

A beginning course in the operation and use of ½-inch Porta Paks and portable small "studio" equipment. Consent of instructor required.

479. 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. Prerequisite: English 477 (Small Systems Video). Permission of instructor for all others. May be repeated for credit.

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. (May sometimes be offered at 382.)

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.

491A. Seminar in Writing Techniques (3)

A Seminar devoted to researching, discussing, and demonstrating various theoretical approaches to the composing process.

491B. Practicum in Teaching Writing (2)

Recommended that this course be taken in conjunction with 491A. Theoretical approaches to the teaching of writing put to practice in college, junior college, and public school classes.

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.

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.

531. Seminar: Genre (3)

A specific genre will be selected for study in depth. See class schedule for current offering. May be repeated for credit.

Prerequisite: Consent of instructor.

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.

598. Special Studies Seminar (3)

599. Thesis and Accompanying Directed Reading (3 or 6)

Prerequisite: English 500 and classified status.

ENVIRONMENTAL STUDIES AND PLANNING

Provost:

James C. Stewart

Faculty:

Joe Armstrong, Lawrence Livingston, Jr., J. Bruce Macpherson, Jean Merriman, Stephen A. Norwick, Steven C. Orlick, Walter J. Rohwedder, Alan Siegle, Kenneth M. Stocking (Professor Emeritus)

Department Office: Cluster Schools 18, Phone (707) 664-2306

The School of Environmental Studies and Planning is one of the three 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 profession and for positive action in their own lives in order to help maintain and enhance the quality of the human environment as well as the natural environment.

All students receive a common core of upper-division instruction related to ecology and the environment based upon knowledge from the biological and physical sciences, the social sciences, and the humanities. This broad understanding is then focused upon a particular area of environmental concern through a student's concentration in a study plan. Career-oriented study plans are offered in the areas of environmental education; natural resources and parks; energy studies; water quality studies; health and the environment; and 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 a double major or a major and a minor in conjunction with traditional disciplines to prepare themselves for specific environmentally-oriented careers.

As part of their course of study, all students complete a senior project or internship of their choice. Internships with public and private agencies have been especially helpful for students intending to work in planning, natural resource management, parks, water quality, and environmental education.

Graduates who obtain the Bachelor of Arts in Environmental Studies and Planning are prepared for careers in a wide variety of governmental agencies, in teaching, and in business and industry. Many also elect to pursue further studies in graduate school.

BACHELOR OF ARTS IN ENVIRONMENTAL STUDIES AND PLANNING

ADMISSION REQUIREMENTS

Upon applying to Sonoma State University, a student may declare a major in the School of Environmental Studies and Planning. A student seeking admission should:

1. Have junior standing. Freshmen and Sophomore students may declare a major in Environmental Studies and state an emphasis. It is desirable for them to take one course in our School each semester.
2. Have completed all or nearly all general education requirements.
3. 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 and Planning.)

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 courses 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 Studies: Two semesters of 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: Detailed statement of requirements available by writing to the School office.

ENVIRONMENTAL STUDIES CONCENTRATION

REQUIREMENTS FOR THE B.A. DEGREE (Applies to all Study Plans)

<i>Core Requirements</i>	<i>Units</i>
* ENSP 301—The Human Environment	3-4
* ENSP 321—The Biological Environment	3-4
* ENSP 331—The Physical Environment	4
Plus one of the following three courses depending upon student's study plan:	
ENSP 310—Introduction to Planning	4
ENSP 311—The Social Environment	3
ENSP 334—Fundamentals of Energy Use.....	3
<i>Other Requirements for the Major</i>	
ENSP 341—Current Issues	2
ENSP 441—Current Issues	2
** ENSP 490—Senior Project or 499-Internship	4-8
Electives in Environmental Studies & Planning	10-16
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 generally 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 of twenty units of specialized course work planned with the aid of an advisor is required.

PLAN II. Environmental Education

Our major, in combination with other academic courses and the

* 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, 492 or 499, and must be part of an emphasis of at least 20 units.

professional education program, meet 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 with our broad-based major 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 Studies

This study plan is designed to prepare students for careers or further studies in the fields of energy planning in government, energy management and conservation in industry, energy efficient architecture, solar energy applications, and energy related businesses.

PLAN VI. Health and the Environment

Designed to prepare people for work in fields related to public health, occupational health and safety, industrial waste management, environmental pollution control, and related fields.

PLANNING EMPHASIS

Students in the Planning Emphasis follow a pre-professional curriculum in planning as a whole, and then develop a specialization in planning through a program of electives.

PLAN VII. City and Regional Planning

The comprehensive planning process as a means of shaping the future physical environment of urban communities and natural regions, taking account of relevant socio-economic factors and physical factors.

MINOR IN ENVIRONMENTAL STUDIES AND PLANNING

The purpose of the minor in environmental studies and planning is to help people from traditional disciplines to apply their expertise to environmental and planning problems. A minimum of 20 units is required. Each person should design a course of study to maximize environmental awareness in disciplines related to his or her major interest. We recommend the following course of study to most people:

Environmental Studies 301, 311, 321, 331, 341, plus four units of environmentally and/or planning oriented classes in fields outside the division of which their major department is a member, or six units from the offerings in the School of Environmental Studies and Planning.

ENVIRONMENTAL STUDIES AND PLANNING COURSES

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.

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301. The Human Environment (3) (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

A study of wilderness, changes in it and dangers to species which result from these changes.

306. Rights of Living Things (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.

307. 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.

Prerequisite: Junior level.

308. Environmental Awareness Through Education and Media (3) (Fall) Department Faculty

The development of environmental values in schools and the media. A practical and theoretical review of various visual, oral and written techniques. Outside community involvement is required. Field trips.

309. Energy, Education and the Environment (3) Rohwedder

Course designed to consider the scope and purpose of Environmental Education; development of Energy/Environmental Education curricula; programming for schools and education centers; and, educational and interpretive techniques.

310. Introduction to Planning (4) (Fall) Orlick

A comprehensive survey of urban and environmental planning; their historic precedents, evolution, and present practices in the U.S. Emphasizes governmental planning for community development and open space preservation, and current and evolving implementation techniques.

311. The Social Environment (3) (Fall and Spring) Department Faculty

The processes by which man relates to his social environment; regional ecological problems and the processes involved in their solution; environmental politics, law, management, economics, and sociology. Prerequisite: At least two courses in the social sciences, including introductory economics.

312. Social Environment and Planning, Independent Study (1-4) (Fall and Spring) Department Faculty

(See 302 description.)

Prerequisite: ENSP 311 or its equivalent.

313. Classical Studies in Environmental Literature (3) (Fall and Spring) Department Faculty

A survey of selected major texts of the environmental movement, e.g., H. D. Thoreau's *Walden*, John Muir's *Mountains of California*, Aldo Leopold's *Sand County Almanac*, and others. Lecture/discussion concern natural and social environments in which these works were written and the political and cultural results of the environmental movement in each of its major periods.

Prerequisite: Completion of G.E. literature and philosophy requirements.

314A. Architectural Design and Energy Efficiency (3) (Fall) Department Faculty

Basic architectural graphic skills and design considerations for small energy conserving buildings. Designed for those without prior instruction in architectural graphics.

314B. Architectural Design and Energy Efficiency (3) (Spring) Department Faculty

Application of energy conserving design principles to individual dwellings and building groupings. Site planning for varieties of building types and for difficult terrain. Retrofitting existing buildings to make them energy efficient. Prerequisite ENSP 314A or previous experience in architectural graphics.

315. Environmental Impact Reporting (3) (Spring) Orlick

An introduction to the environmental impact assessment process: preparing, managing and reviewing environmental impact reports. Survey of California Environmental Quality Act, National Environmental Policy Act, and requirements and guidelines for environmental impact reports and environmental impact statements.

316. Planning Theory and Methodology (3) (Spring) Department Faculty

An introduction to basic analytical and methodological skills utilized in urban and environmental planning. Group preparation of a plan for a Sonoma County community involving application of these techniques. Lectures, discussions, field trips and project presentations.

318. Land Resources Planning (3) (Fall) Orlick

A survey of resource and land use planning in Sonoma County: mineral, gravel, timber, geothermal and agricultural resources. Aimed at imparting an understanding of the resources of the county—their physical nature, ecological context, use, environmental impacts and public regulation.

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 judgement criteria selected to compare their relative merits.

321. The Biological Environment (3) (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.

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322. Biological Environment Independent Study (1–4) (Fall and Spring) Department Faculty

(See 302 description.)

Prerequisite: ENSP 321 or its equivalent.

323. Native Plants, Indians, Survival (3) (Fall and Spring) Stocking

Past and present uses of plants of various biotic communities of this region. Field trips. Lecture 2 hours, 3 hours lab.

Prerequisite: a course in basic botany or ENSP 321.

*** 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).

325. 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.

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. Different topics each semester.

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 equivalent.

331. The Physical Environment (4) (Fall and Spring) Norwick

Lecture 3 hours; laboratory 3 hours.

Problems and challenges in environmental control; air, water and soil ecology and pollution; solid waste and recycling; the flow of material and energy in ecosystems. Computer models of feedback in simple systems are used to develop an understanding of environmental problems. Field trips.

Prerequisites: 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) 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.

334. Fundamentals of Energy Use (3) (Fall) Rohwedder

Natural and human-made systems in terms of energetic principles. Energy considered as a fundamental measure of organization, structure, and transformation in systems. Analysis of current energy trends and future possibilities. Lectures, student presentations.

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

337. Solar Energy, Direct Uses (3) (Fall) Rohwedder

The derivation of the basic formulae used in designing solar devices and systems. Emphasis is on heat transfer/flow, flat plate collectors, and practical applications. Prerequisite: Requires strong algebra background, Physics 210A recommended.

338. Water Policy and Politics (3) Norwick

A review of the laws and political history of water rights and water quality protection, with an emphasis on the history of water use and abuse in California.

Prerequisite: Completion of California State and Local Government G. E. Requirements.

341. Current Issues in Environmental Studies (1) (Fall) Department Faculty

Regularly 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.

344. Energy Forum (1-2) (Spring/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.

353. Transportation Planning (3) (Spring) Orlick

The automobile as a major energy user, compared with alternative strategies. The background of our transportation planning; what we can do to move from domination by automobiles.

354. Selected Topics in Housing (4) Department Faculty

Course content varies from semester to semester. Topics may include: providing housing for low to moderate income groups; understanding the politics of housing; and exploring international housing issues. May be repeated for credit with consent of instructor.

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.

357. Land Development Controls (4) (Spring) Livingston

Conflicts between environmental preservation objectives and inclusionary housing policies will be examined. Seminars, guest speakers, individual research and classroom debates.

Prerequisite: ENSP 310 or consent of instructor.

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.

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366. System Dynamics and DYNAMO (2) Norwick

A review of major uses of computer models of social and bio-physical systems for understanding complex systems. System Dynamics method using simulation language DYNAMO will be emphasized but other methods and languages will be introduced. Practical applications for energy studies, regional and city planning, and environmental impact prediction will be emphasized.

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.

409. Developing Environmental Education Materials (3) (Spring) Department Faculty

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 308 and 309, or consent of instructor.

*** 411AB. Planning Workshop (4) (Fall) (Spring) Orlick**

Practical experience in land use planning for city, suburban and rural areas. Group preparation of plans involving environmental resource potentials and constraints, design considerations, economic and social concerns, citizen participation and political processes. (4 units applicable to Senior Projects)

Prerequisite: ENSP 310 and ENSP 316, or consent of instructor. Course fee charged each semester.

437. Passive Solar Design (3) (Spring) Rohwedder

Fundamentals of passive solar design analysis, including: Attached Sunspaces, Trombe Walls; Roof Ponds; Direct Gain; and Indirect Gain Systems. Shading devices and life-cycle costing will also be covered. Prerequisites: ENSP 337, Math 107 or 108.

*** 437L. Solar Laboratory (1-2) (Spring) Rohwedder**

Laboratory application of theoretical principles covered in ENSP 337 and ENSP 437. Hands-on involvement, data and analysis, and hypothesis testing. Prerequisites: ENSP 337, or equivalent *and* concurrent enrollment in ENSP 437 or consent of instructor.

441. Current Issues in Environmental Studies (1-1) (Fall and Spring) Department Faculty

For seniors (See 341)

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.

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.

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

**492AB. Design with Nature, A Coordinated Senior
Project (1-4) (1-4) Department Faculty**

Coordinated Senior Projects involve a group of several faculty members and approximately twenty students interacting as scholars on a common problem.

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

Department Chair: William Guynn

Faculty: Mary Arnold, Russian and ESL; Philip Beard, German; Sterling Bennett, German and Classics; Aaron Berman, Spanish and ESL; 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: Earl Couey

Department Office: Stevenson 3016, Phone (707) 664-2351

The programs and courses of the Department of Foreign Languages make the languages, literatures and cultures of France, Germany, India, Spain and Spanish America, and of ancient Greece and Rome, accessible to students. Given the need for linguistic competency and cultural sensitivity in the multilingual, multicultural domestic and international spheres in which students will live and work, language is taught as an integral part of its complex cultural context, and both programs and courses are designed to complement academic work in many 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, Classical Greek, 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.

ACADEMIC AND CAREER PLANNING

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 Languages 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.

The Department of Foreign Languages has a packet of materials developed jointly with the Career Development Center giving detailed, specific information on career opportunities. It is highly advisable that students combine a major or minor in Foreign Languages with a major or minor in another discipline.

DOUBLE MAJORS AND MINORS

Coursework, minors, and majors in Foreign Languages complement specialized knowledge and expertise in other academic areas. The structure of departmental major programs facilitates planning of double majors and minors. In addition to majors and minors offered by other departments, there are interdisciplinary minor programs of special interest to Foreign Languages students, including the INTERNATIONAL STUDIES MINOR (p. 235) the INFORMATION CAREER MINOR (p. 229), and the minor program in LINGUISTICS: TEACHING ENGLISH AS A SECOND LANGUAGE (p. 228).

In the California State University system, a major must have a minimum of 24 units, 12 of which must be upper division (300–400); a minor must have a minimum of 12 units. Since most major and minor programs at Sonoma State University exceed these unit minimums, all of the units in excess of the minimum may be counted toward fulfillment of requirements in other, complementary programs. The programs in

Foreign Languages are designed to maximize your academic potential to successfully complete double majors and minors.

SPECIAL CURRICULAR FEATURES

Features of the Foreign Languages curriculum which can provide valuable pre-professional training and experience include courses in Foreign Languages for Specific Purposes (e.g. Spanish for the Health Professions, Commercial French), a program of Internships in the public and private sectors, and opportunities for field work, study, and employment abroad.

Faculty in French, German, India Studies, and Spanish offer specialized courses in music and folklore, which involve both analysis and participation.

INTERNATIONAL PROGRAMS

Through the International Programs of the California 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, Mexico and Québec are among the many international study options available. (For more information, see p. 236.)

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 GPA 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 Modern Language Association 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 freshman 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 Department of Foreign Languages will assist students in selecting

the appropriate course level. The following schedule is recommended:

	<i>Courses Numbered</i>
1. Fewer than 2 years of high school study	101
2. Two years of high school study	102
3. Three years of high school study	201
or	
any other 200 course except.....	202
4. Four years of high school study.....	202
or	
any other 200 course except 201	

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 Chairman 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.

COURSE CHALLENGES

Students may challenge courses, as provided in the University procedures (see p. 398). Courses may be challenged only during the semester when they are offered. It is essential that students interested in this possibility consult instructors of the courses they wish to challenge at the start of the semester.

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.

FOREIGN LITERATURES IN TRANSLATION

FL213 Foreign Literatures in Translation (3)

Introduction to selected works of world literature with emphases 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 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. 23.

The University accepts the parity of the ESL 99 class and the English 99 course; foreign students who pass ESL 99 will then be required to enter and pass the regular sequence of English 101, English 275, the Written English Proficiency Test, or English 375.

97 AB English as a Second Language (3-3)

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, and 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. Does not count toward the baccalaureate degree.

99 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 the 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.

Does not count toward the baccalaureate degree.

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

French 301–302	Advanced Grammar and Composition	8 units
French 310–311	Junior Seminar	8 units
French 325	Phonetics	4 units
		20 units

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	
	<i>OR</i>		
	French 405	Writing Workshop	4 units
Electives:	6 or more units selected from the following:		

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Anthropology 380 Language and Culture
 Anthropology 382 Language Change
 Linguistics 310 Phonological Analysis
 Linguistics 311 Grammatical Analysis
 Linguistics 356 Speech Communities in Contemporary Society
 Linguistics 390 Introduction to Indoeuropean

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 Comparative Ethnic Folklore
 Anthropology 203 Cultural Anthropology
 Anthropology 342 Organization of Societies
 Anthropology 343 Peasant Societies
 Anthropology 350 Art in Cultural Context
 Art 410 Early Christian and Early Medieval Art
 Art 411 Romanesque and Gothic Art
 Art 413 Northern Renaissance Art
 Art 414 Northern Baroque Art
 Art 416 Eighteenth Century Art
 Art 418A History of Modern Art
 Art 418B History of Modern Art
 Art 419 Modern Architecture
 History 321 European Thought and Culture
 History 322 European Social History
 History 412 France: People, Power and Culture
 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.

Unless stated otherwise, all courses are conducted in French.

FRENCH CREDENTIAL WAIVER PROGRAM

The following program is the required course work for the Ryan Act teaching credential in FRENCH. The program is accepted by the State Commission for Teacher Preparation and Licensing.

Note: Equivalent course work from other institutions of higher learning may be substituted, upon review by the Department of Foreign Languages and Literatures.

Prerequisites: Completion of four semesters of basic skills, or equivalent. (16 units)

French 301–302	Advanced Grammar and Composition	8 units
French 310–311	Junior Seminar.....	8 units
French 325	Phonetics	4 units
	10 units of upper division electives	10 units
		30 units

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 College.

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) Yr

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.

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350. Advanced Conversational French (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 404 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 of investigation in a given semester will be chosen from one of the following subjects: Popular art and the popular mentality; French regional culture; the French literature and history of Sonoma County and the Bay Area; 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 on local and European waterways, and in a full range of paid summer internships abroad.

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

	<i>Units</i>
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 units

STUDY CONCENTRATIONS

- I. *International Business and Foreign Policy*
- II. *German History and Culture*
- III. *German Language and Literature*

CONCENTRATION I: INTERNATIONAL BUSINESS AND FOREIGN POLICY

	<i>Units</i>
Basic Requirements	34
Area requirements: 20 units from among the following courses, to include courses from at least <i>two</i> of the three disciplines listed. (<i>Required</i> courses marked with an asterisk *.)	
1. <i>Economics</i>	
*Econ 302 International Trade: Theory and Policy	4
Econ 403 Seminar in Economic Development	4
Econ 495 Special Studies	1–4
2. <i>Management Studies</i>	
Mgmt 476 International Finance	4
*Mgmt 493 Introduction to International Business	4
Mgmt 495 Special Studies	1–4
Mgmt 498 Multinational Corporations and the Third World	4
3. <i>Politics</i>	
Pol 315 Democracy, Capitalism and Socialism	4
*Pol 342 International Politics and Foreign Policy	4
Pol 351 Totalitarianism and Authoritarianism	4

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Pol 345	Model United Nations	4
Pol 444	U.S. Foreign Policy	4
Pol 447	Third World and Communist Foreign Policies	4
Pol 495	Special Studies	1–4

CONCENTRATION II: GERMAN 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. <i>German</i>		
*Ger 306	German Civilization and Culture.....	4
*Ger 310	Germany Today.....	4
2. <i>History</i>		
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. <i>Sociology</i>	(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 432	Seminar: Sociology of the Arts.....	4
Soc 495	Special Studies.....	4
4. <i>Anthropology</i>	(Consult instructor and major advisor regarding appropriateness of these courses in any given semester)	
Anth 342	Organization of Societies.....	4
Anth 352	Culture Change.....	4
Anth 353	Psychological Anthropology.....	4
Anth 380	Language and Culture.....	4
Anth 382	Language Change.....	4
Anth 495	Special Studies.....	4
5. <i>Hutchins School of Liberal Studies</i>		
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 (4–4)

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.

The German language will be used extensively in all German courses except where noted “taught in English”. In upper-division literature courses, primary emphasis will

be placed on the students' expression of ideas, not on the external form which this expression might take.

GERMAN CREDENTIAL WAIVER PROGRAM

The German Major program constitutes the required course work for the Ryan Act teaching credential in GERMAN. The program is accepted by the State Commission for Teacher Preparation and Licensing. Additional work in linguistics for Ryan Act credential candidates is provided under the German 495 course rubric.

Prerequisites: Completion of four semesters of basic skills, or equivalent. Note: Equivalent course work from other institutions of higher learning may be substituted, upon review by the Department of Foreign Languages.

GERMAN COURSES

101. First-Year German (4)

The course 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. Faster students may earn credit for 102 in same semester. 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. Faster students may earn credit for 201 during same semester. 102L (language lab) must be taken concurrently. Students should also enroll in 150 and/or 250.

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. Beginning Conversation (2)

Practice in free conversation, games, and songs. For first-year students.

Prerequisite: enrollment in 101 or 102, or equivalent experience.

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 reading and discussion program begun in 201, supplemented by a regular schedule of written work. The class will also undertake a group project (such as a poetry reading, dramatic performance, or film) for public display at semester's end.

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.

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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.

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 to Students: 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 (both in German) of current and recent material from German newspapers and magazines. Film, slides, and recorded music will also be used.

Prerequisite: Completion of German 202 or equivalent.

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.

376. Mastering German (1-4)

A flexible framework for active improvement of German language skills outside classroom and laboratory hours, designed for students who already possess some German fluency and wish to supplement their study by a total immersion experience. Activities, supervised directly by faculty, include field trips, regularly scheduled social events, extended excursions; German spoken exclusively. CR/NC only.

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 its 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 its 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 its 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 translations 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.

GREEK AND LATIN

GREEK COURSES

101-102. Beginning Homeric Greek (3-3)

A college level course in Beginning Homeric Greek designed to give students at the end of one year a reading knowledge of Classical Greek from the Homeric Period. This course offers an excellent basis for students wishing to go on to Attic Greek. Students will begin reading portions of *The Iliad* after the first month; Plato and Euripides are added in the second semester.

Prerequisite for 102: 101 or equivalent.

495. Special Studies (1-4)

Advanced readings in Homeric and Attic Greek.

Prerequisite: 101-102 or equivalent and consent of the instructor.

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; 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 study of many different aspects of Indian and other Far Eastern Asian cultures and students can also delve into specific areas of interest. The major combines easily with many minors, providing students with great flexibility in exploring their own interests.

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.

Major

The major consists of 36 units. At least 16 of these must come from the “basic list.” India Studies 301 A and B must be included among these 16 units. 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.

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.

We recommend to students planning to go to graduate school to structure their area specialty in India Studies for Distinction in the major and to 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

Anthropology 203—Cultural Systems	4
Anthropology 343—Peasant Societies	4
Anthropology 493—Seminar in Cultural Anthropology	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	4

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.

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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 learning 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 time 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 (1-4) I and II

RUSSIAN

RUSS 310. Selected Topics in Russian Literature (3)

From time to time a course in Russian literature in translation may be offered. Topics will vary and cover the areas of literary and cultural trends in the 19th century, from Pushkin to Chekhov, or in the 20th century from the immediate pre-revolutionary decade to the present day, or of major authors, e.g., Tolstoy and Dostoevsky, or the Soviet Russian Nobel Prize Winners in literature: Sholokhov, Pasternak and Solzhenitsyn.

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

* Fulfills General Education requirement in Humanities.

services may be seen in the 5% 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.

Students are advised that 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

	<i>Units</i>
* 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
* 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.

* 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.

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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 Management 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 and Culture	4
Anthropology 382 Language Change.....	4
Linguistics 310 Phonological Analysis	4
Linguistics 311 Grammatical Analysis	4
Spanish 426 Seminar in Modern Varieties of Spanish.....	3
	19
PLAN II Concentration in Hispanic Literature & Culture	
Spanish 401 Studies in Literature, Culture and Folklore of Spain	3
Spanish 403 Studies in the Literature, Culture and Folklore of Spanish America	3
Spanish 496 <i>OR</i> 497 Seminar in Spanish <i>OR</i> Spanish American Literature, Culture and Folklore.....	3
9 units of related courses chosen from:	
Anthropology 335, 363	
Geography 392	
History 339, 343, 411	
MAMS 340, 344, 352	
Spanish 316	9
	18
PLAN III Concentration in International Management	Units
Spanish 300 Business Correspondence in Spanish	3
Math 117 Mathematics for the Social Sciences	3
Econ 201 Introduction to Economics.....	4
Mgt 493 Introduction to International Business	4
Mgt 498 Multinational Corporations Development and Third World	4
An elective to be chosen by the student in consultation with an advisor in Management Studies	3-4
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SPANISH WAIVER PROGRAM

The following program is the required course work for the Ryan Act teaching credential in SPANISH. The program is accepted by the State Commission for Teacher Preparation and Licensing.

Note: Equivalent course work from other institutions of higher learning may be accepted, upon review by the Department of Foreign Languages and Literatures.

Prerequisites: Completion of four semesters of basic skills, or equivalent. (16 units)

Spanish 301 Advanced Composition	3 units
Spanish 303 Introduction to Spanish Phonetics	3 units
Spanish 304 Introduction to the Civilization of Spain	3 units
Spanish 309 Introduction to the Civilization of Spanish-America	3 units
Spanish 425 Spanish Linguistics.....	3 units
15 units selected from Spanish 400-497	15 units
Total units in Spanish	30 units

MINOR IN SPANISH

Completion of the *Basic Requirements* shall constitute a Minor in Spanish. Unless stated otherwise, all courses are conducted in Spanish.

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) Yr

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 and a half hours (150 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.

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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) Yr

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) (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 court 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. 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.

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.

400. Spanish Medieval and Renaissance Literature (3)

Major Spanish literary works from 1140 through the sixteenth century.

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.

420. Literature of the Golden Age (3)

Major literary works of the seventeenth century.

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, Gauchesco).

Prerequisite: Spanish 425.

430. Nineteenth Century Spanish-American Literature (3)

The poetry and prose of Spanish-America.

440. Nineteenth Century Spanish Literature (3)

The poetry, drama, novel, and short story of Spain.

445. Spanish Picaresque Literature (3)

The study of picaresque literature in Spain.

451. Great Works of Spanish Literature (3)

A selection of poetry, novels, essays and theatre from the XII to XX centuries.

453. Great Works of Spanish-American Literature (3)

A selection of chronicles, novels, short stories, and poetry reflecting a spectrum of Spanish-American literature from the Conquest to the Mexican Revolution.

454. Great Works of Spanish-American Literature (3)

A selection of novels, short stories, essays, theatre, and poetry reflecting a spectrum of Spanish-American literature from the Mexican Revolution to the present.

460. Twentieth Century Spanish-American Literature (3)

Prose and poetry of Spanish America.

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470. Twentieth Century Spanish Literature (3)

Poetry, drama, fiction and/or essay from 1898 to the present.

480AB. Don Quijote (3-3)

A detailed study of Cervantes' novel.

485. The Civilization and Culture of Spain (3)

Conducted in English. No prerequisite. Does not count toward major or minor.

490. The Civilization and Culture of Spanish-America (3)

Conducted in English. No prerequisite. Does not count toward major or minor.

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

Coordinator: Timothy A. Bell
 Faculty: Claude R. Minard, Jr., William J. Frazer
 Department Office: Stevenson 2026, phone (707) 664-2194

The student of Geography will study both the cultural and the natural environment, their interrelationship, the spatial distribution of earth phenomena, regional studies, and landscapes. As a blend of the natural and social sciences, the major 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 Department of Geography 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 the historic resource. An annual scholarship is available for a student pursuing climatological, meteorological, or oceanographical studies.

BACHELOR OF ARTS IN GEOGRAPHY

Major	Units
General Education	49
Geography Courses.....	42
Supporting Subjects.....	8
Foreign Language and/or electives	25
TOTAL	124
GEOGRAPHY CORE: (28 units)	Units
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
CONCENTRATIONS: (14 units)	
Academic Geography	Units
Upper Division Electives in Geography	14
Supporting Subjects (Chosen in consultation with the student's advisor). A course in Statistics or Computer Science is strongly recommended. Up to five (5) units of the Geography Intern Program (Geog. 499) may be utilized as a supporting course	8

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Earth Sciences

14 units from following list of courses, 8 of which must be in Geography:

Geography 305—Oceanography
Geography 310—Meteorology
Geography 360—Geomorphology
Geography 370—Climatology
Environmental Studies 333—Nature of Soils
Biology 300—Ecology
Biology 312—Oceanology
Biology 416—Biogeography
Geology 302—Geological Oceanography
Geology 303—Advanced Principles of Geology
Geology 304—Introduction to Field Mapping
Geology 306—Environmental Geology
Geology 323—Hydrology

Supporting Courses—must be non-geography courses from the above list. (8 units)

Cultural Studies

14 units from following list of courses, 8 of which must be in Geography:

Geography 320—Political
Geography 330—Historical
Geography 335—Rural
Geography 338—Social
Geography 343—Economic
Geography 345—Third World Development
Geography 350—The City
Anthropology 343—Peasant Societies
Anthropology 345—Human Ecology
Anthropology 352—Culture Change
Anthropology 441—Ethnographic Field Methods
History 364—Nature and American History
Sociology 330—Sociology of Leisure
Sociology 362—Urban Sociology
Sociology 431—Sociology of Religion
Environmental Studies 316—Planning Methodology
Environmental Studies 318—Land Resource Planning

Supporting Courses—must be non-geography courses chosen from the above list. (8 units)

MINOR IN GEOGRAPHY

	<i>Units</i>
Geography 203—Cultural Geography	4
Geography 204—Physical Geography	4
Upper Division courses	12
TOTAL	20

TEACHING CREDENTIAL

Students seeking a teaching credential may elect Geography as their single subject academic major under the Ryan Act plan and subsequent legislation. All majors contemplating a career in secondary social science education should see Page 359 for Ryan Single Subject Social Science Program requirements.

GEOGRAPHY COURSES

General **

101. Elementary Map Reading (2)

Introduction to maps and map reading for the out-of-doors. Emphasis is placed upon basic map appreciation, development of map reading skills for use in the out-of-doors, and map/compass use. Specific applications to backpacking and orienteering will be stressed. Local field trips.

***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.

311. Geography of California Wines (2)

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)

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.

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. Offered for 3 units when given at night.

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

* Fulfills General Education requirement for Social Sciences.

** Courses in this section are designed for non-majors.

† Fulfills Special Emphases (Physical Sciences) General Education requirement.

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.

Offered for 3 units when given at night.

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.

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.

Offered for 3 units when given at night.

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.

Offered for 3 units when given at night.

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.

Offered for 3 units when given at night.

* Fulfills General Education requirement for Social Sciences.

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.

Offered for 3 units when given at night.

***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.

Offered for 3 units when given at night.

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.

Offered for 3 units when given at night.

345. Third World Development (3-4)

A view of the development process and its operation in various Third World nations. Industrialization patterns, ecological considerations, and attempts at international economic cooperation are some of the topics which will be examined.

Offered for 3 units when given at night.

350. The City (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.

Offered for 3 units when given at night.

Regional

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.

Offered for 3 units when given at night.

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.

Offered for 3 units when given at night.

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.

Offered for 3 units when given at night.

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

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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. Offered for 3 units when given at night.

460. Seminar in Area Studies (3-4)

This course will provide offerings in special problem areas. For example: China and South East Asia, arid lands, and underdeveloped lands may be discussed. Offered for 3 units when given at night.

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. Introductory Cartography and Graphics (4) Bell

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. Senior Seminar in Geography (4) (Fall Semester only)

The seminar will provide a framework within which advanced students will apply the techniques and methodologies acquired in their area of interest (concentration) within the Geography major. Research topics or problems will be based on the student's interest, but will focus on a common area or theme.

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 (3-5)

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.

GEOLOGY

Department Chair: William H. Wright III

Faculty: Thomas Anderson, Walt Vennum, G. Davidson Woodard, Rolfe C. Erickson

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 core curriculum which concentrates on the analysis of rocks and minerals, geologic map interpretation and report writing. Techniques of field study are part of the core curriculum. Two field mapping classes are required in pre-professional degree programs. 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. Another option leading to the B.A. degree is the single subject Ryan Act Credential Program. Because of the selectivity involved in choosing a program that meets their own particular interests and goals, students should consult with a departmental advisor concerning their course load each semester.

GEOLOGY CORE COURSES	<i>Units</i>
Geology 205—Mineralogy	2
Geology 303—Advanced Principles of Geology.....	4
Geology 304—Introduction to Field Mapping	1
Geology 305—Optical Mineralogy	3
Geology 307—Igneous and Metamorphic Petrology.....	4
Geology 308—Igneous and Metamorphic Field	1
Geology 311—Stratigraphy and Sedimentation	4
Geology 312—Stratigraphy and Sedimentation Field	1
Geology 317—Structural Geology.....	4
Geology 318—Structural Geology Field.....	1
	25

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.

	<i>Units</i>
Major Courses.....	46
General Education	48
Supporting Courses	20
Electives.....	10
	124

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Course Requirements

Geology Core Courses	25
Geology 320—Field Geology	4
Geology 427—Adv. Field Geology	4
Geology 413—Paleontology	4
Upper Division Geology Electives.....	9
	46

Required Supporting Courses

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

The geology department offers two B.A. programs. A choice among them should only be made after consultation with a departmental advisor.

PRE-PROFESSIONAL PLAN

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.

	<i>Units</i>
Major Courses.....	46
General Education	48
Supporting Courses	16
Electives.....	15
	124

Course Requirements

Geology Core Courses	25
Geology 320—Field Geology	4
Geology 427—Adv. Field Geology	4
Geology 413—Paleontology	4
Upper Division Geology Electives.....	9
	46

Required Supporting Courses

Chemistry 115AB—General Chemistry (6 in G. E.)	4
Physics 209AB, 210AB—General Physics with Laboratory	8
Mathematics 161—Calculus I.....	4
	16

TEACHING CREDENTIAL PLAN

Geology majors seeking to fulfill the single subject requirements in physical science under the Ryan Act should consult with an advisor in the Geology Department for details. This program is designed for students wishing to teach in California secondary schools.

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 Department of Geology regarding required courses.

GEOLOGY COURSES

102. General Geology (4) (Fall, Spring) Department Faculty

Lecture, 3 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) (Alternate Spring) Vennum, Anderson

Lecture, 1 hour; 10-day required field trip.

A course to satisfy the General Education requirement with lab-specific emphasis. Field study of rocks, minerals, and landforms and the processes which form them. A 10-day field trip to Death Valley will be taken during spring vacation. Not intended for geology majors.

Prerequisites: Geology 102 or equivalent; concurrent enrollment acceptable.

202. Rocks, Time and Evolution (3) (Fall, Spring) Erickson, Woodard

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 week-end 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. This course is not intended for majors in geology.

Prerequisite: Geology 102 or 202 or equivalent.

302. Geological Oceanography (3) (Fall) Anderson

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.

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303. Advanced Principles of Geology (4) (Fall) Woodard

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. Required 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. Introduction to Field Mapping (1) (Fall) Woodard

Field studies done in conjunction with Geology 303. Required weekend field trips.

Prerequisite: should be taken concurrently with Geology 303.

305. Optical Mineralogy (3) (Fall) Erickson, Venum

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 Math 105C 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 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; 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 instructor.

Prerequisite: Geology 102 or consent of instructor.

307. Igneous and Metamorphic Petrology (4) (Spring) Erickson, Venum

Lecture, 2 hours; laboratory, 6 hours.

A study of the origin, nature, 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. Chemistry 115B or concurrent enrollment in Chemistry 115B.

308. Igneous and Metamorphic Petrology Field Course (1) (Spring) Erickson, Venum

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 origin and classification of sedimentary rocks. Description of recent environments of deposition and methods for interpreting the environments of deposition of ancient sedimentary rocks will be emphasized. Hand specimen and microscopic petrography in addition to other techniques for studying sedimentary rocks will be used in the laboratory.

Prerequisites: Geology 307, Chemistry 115AB.

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.

315. Geological Report Preparation (1) (Fall and Spring) Woodard

Lecture, 1 hour.

Elements of style in the organization and preparation of geological reports; the purpose and importance of the abstract; basic drafting and illustrative techniques; use and citing of bibliographic sources; preparation of a short report based on published map data.

Prerequisite: Past or concurrent enrollment in Geology 303.

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 using geological maps.

Prerequisites: Geology 303, 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: must be taken concurrently with Geology 317.

320. Field Geology (4) (Spring) Woodard

Lecture, 1 hour; laboratory, 3 hours. Two weekend field trips and terminal field project (8-10 days during Easter break required.)

Principles of geologic mapping, structural geology, stratigraphy, interpretation of geologic maps, use of surveying instruments, preparation of field reports.

Prerequisite: Geology 311.

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 107 or consent of instructor.

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.

380. Map and Air Photo Interpretation (4) (Fall) Minard

Lecture, 2 hours; laboratory, 6 hours.

Fundamentals of topographic maps and aerial photographs with emphasis on interpretation of physical and cultural elements of the landscape; includes use of maps and aerial photographs in the field.

Prerequisite: Geography 201, 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) Woodard

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) Anderson, Venum

Lecture 1 hour, laboratory 3 hours.

Introduction to the use of x-ray diffraction and powder techniques.

Prerequisite: Geology 305.

410. Geophysics (3) (Alternate Spring) Wright

Lecture, 2 hours. Laboratory 3 hours. Required field trip.

The principles of physics as they are related to the earth. Physical basis for the methods of geophysical investigation: seismology, gravity and magnetism. Application of geophysical methods of geological problems such as oil exploration and continental drift, plate tectonics.

Prerequisites: Geology 102, or 303, Math 162, Physics 114.

413. Paleontology (4) (Spring) Woodard

Lecture, 3 hours; laboratory and/or field, 3 hours.

An introduction to the morphology, taxonomy and evolution of invertebrate and vertebrate faunas and of fossil plants.

Prerequisite: Geology 102 or 303 or consent of 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 115 or 125, or consent of instructor.

424. Economic Geology of Stratified Rocks (3) (Alternate Fall) Woodard

Lecture, 2 hours; laboratory 3 hours.

Occurrence and exploitation of petroleum resources; distribution and characteristics of oil deposits; hydrocarbon traps and subsurface geologic methods; mapping techniques; lithofacies and biofacies analysis; well logging methods; correlation of strata and structural interpretation; economic geology of other hydrocarbon deposits.

Prerequisite: Completion of, or concurrent enrollment in Structural Geology; Sedimentary Petrology is recommended.

425. Economic Geology (3) (Alternate Spring) Vennum

ecture, 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, completion of Geology 320, and consent of instructor.

455. Honors Research (3) (Fall) Department Faculty

Senior research under the guidance of one or more of the Geology faculty. Prerequisite: The student must meet department standards for application and acceptance.

456. Honors Research and Seminar (3) (Spring) Department Faculty

Senior research under the guidance of one or more of the Geology faculty, together with a seminar and presentation of the results before the department. This course together with Geology 455 constitutes a senior thesis.

Prerequisite: Geology 455.

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

Coordinator: Kathleen Charmaz

Department Office: Stevenson 2084, Phone (707) 664-2561 664-2456.

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. The Gerontology Program places emphasis on studying the aging process throughout the life cycle with special attention given to the later years. Through participation in the Program, students are encouraged 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 aging, either as a volunteer, or as a career. 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 a rich opportunity to engage in first-hand research, develop conceptual analyses, and plan community projects, along with developing a strong background for career development. Those already working, either as volunteers or as staff persons in agencies or organizations serving the elderly, will find the program valuable in updating their training.

Students who plan to pursue professional degrees such as medicine, dentistry, nursing and social work will find participation in the Program to be helpful. Older individuals constitute the largest category of health care consumers and they also are a major clientele of human service agencies. Hence, students who plan to work in the health and human service fields, find their exposure to Gerontology courses to be valuable in their future careers. Students may choose to complete 1) the minor in Gerontology, 2) the requirement for a certificate in Gerontology, or they may choose to complete an individually constructed special major with a focus in Gerontology through the Special Major Bachelor's degree program or the Special Major Master's degree program. The requirements for the minor are outlined below. The requirements for the certificate program include all requirements for the minor and an additional 4-unit internship. The certificate program is open to those students who are completing a B.A. degree or who have previously received a B.A. degree. Students who wish to pursue a special major develop individualized interdisciplinary undergraduate or graduate programs. Proposals for both programs should be planned in consultation with the Gerontology Program Coordinator and the Special Major Advisor.

MINOR IN GERONTOLOGY

22 units as follows:

Required courses	<i>Units</i>
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

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, Economics Education, Legislation. Open to all students.

Gern. 319. Aging and Society (4) Charmaz

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 the social psychological implications for those aged who are poor, isolated, chronically ill, or minority group members.

Gern. 332. Death and American Culture (4) Charmaz

Analysis of the relation of cultural values to attitudes, beliefs, and practices about death. Relationships are drawn between widely held conceptions of death and the care of the dying. Study of the management of the dying process in conjunction with exploration of new ways to handle it. Special emphasis on examining the meaning of death to the dying person as well as to family and friends.

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 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.

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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.

HISTORY

Department Chair: Daniel Markwyn

Faculty: Robert Brown, Theodore Grivas, Dennis Harris, LeVell Holmes, Donald Johnson, Robert Karlsrud, Albert Laferriere, Han-sheng Lin, Peter Mellini, William Poe, Glenn Price, Stephen Watrous, Alice Wexler, D. Anthony White

Department Office: Stevenson 2070, Phone, (707) 664-2313

History is an integrative discipline at home both in the humanities and in the social sciences. It allows students to reflect upon and to 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. History promotes perspective, encouraging its students to go beyond self, subculture, and culture to the multiplicity of ways in which humanity has organized itself, interacted, and explained its existence. Those who are aware of the difficulties of past societies can better understand both the limitations of humankind and the possibilities for human change. History allows, in the words of David Riesman, "an imaginative extension of the real world" which enriches individuals by lifting them "beyond the sensuous and practical immediacy" of their present existence. And it provides knowledge of the sources of one's thoughts, aspirations, and organizational patterns, as well as of the accomplishments in which one shares as an inheritor of and participant in a common cultural tradition.

The History program is designed both to provide the basis for an excellent liberal arts education and to meet the variable needs of individual students. Within the specific requirements of the major, students receive basic instruction in the history of their own society and that of other inhabitants of the globe. They are also introduced to the methods of historical inquiry, to differing philosophies of history, and to historical writing. Beyond these requirements, it is the intent of the program to enable students, in consultation with department faculty, to design an education in the discipline which meets their needs and interests. Course offerings provide the opportunity for study of selected areas and periods as well as for individual creative research.

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.

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 the Appendix, pages 466-467.

BACHELOR OF ARTS IN HISTORY

Major

Each student plans the 40 unit major program in consultation with a departmental advisor.*

* Courses graded CR/NC or ABC/NC may not be used to fulfill major requirements.

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COURSE REQUIREMENTS

A. Lower Division Survey Courses (all courses or transfer equivalents required):	<i>Units</i>
History 251 **	0-3
History 201 and 202 **	3
B. Applications Course	
One course from among the following: History 100, 348, 365, 463, 497	2-4
C. Research and Philosophy of History	
History 391	4
History 498 or 499	4
D. Block Elective Courses (must be in the upper division)	
<i>Breadth:</i> Each major shall complete at least one course in each of the categories I-III below, and at least one course in each of the categories A-C below. A minimum of 3 courses.....	12
<i>Concentration:</i> Each major shall complete at least three courses in a single category I-III or A-C. A minimum of 2 courses	8

	<i>United States</i>	<i>II Europe</i>	<i>III Africa Asia Latin America</i>
A. Ancient Classical Medieval Renaissance Reformation	Courses designated I A	Courses designated II A	Courses designated III A
B. Early Modern	Courses designated I B	Courses designated II B	Courses designated III B
C. Modern	Courses designated I C	Courses designated II C	Courses designated III C
E. Elective Courses			2-7
Total History Units Required			40
F. General Education Courses			49
G. 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 THE HISTORY OF "THIRD WORLD" SOCIETIES

Students may develop a specialization in the history of "third world" societies within the history major through advisement and petition. Interested students should consult Professor Tony White, Department of History.

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. Department of History.

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."

** Courses used to fulfill general education requirements may not be used to satisfy major unit requirements.

TEACHING CREDENTIAL

Students seeking a teaching credential may elect History as their single subject academic major under the Ryan Act. All majors contemplating a career in secondary social science education should see Page 359 for Ryan Single Subject Social Science Program Requirements. Students contemplating a career in elementary education who major in History are required to pass the Common Examination of the National Teacher Examination to obtain the multiple-subject credential and should consult an Education advisor.

MASTER OF ARTS IN HISTORY

REQUIREMENTS FOR ADMISSION TO CANDIDACY

1. A Bachelor's 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 Department of History.
6. Favorable recommendation for admission to candidacy by the Departmental Graduate Studies Committee after review of the complete file.

REQUIREMENTS FOR THE M.A. DEGREE IN HISTORY

1. Formal admission to candidacy for the Master of Arts 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 (<i>chosen in consultation with committee chairman</i>):	
	<i>Units</i>
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
<i>Total Units Required for the M.A. in History</i>	30
B. Field Examination Option (<i>chosen in consultation with committee chairman</i>):	
Courses at the "300" or "400" level	15

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Graduate courses at the "500" level (including grad. seminar)	12
Field Examination Reading and Research (History 598)	3
Written and Oral Field Examinations.....	0
<i>Total Units Required for the M.A. in History</i>	<i>30</i>

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

100. Approaches to History (2) (Fall, Spring) Department Faculty

Required of all majors during their first year in the department, these small classes emphasize the interpretation of evidence and the development of historical explanations through the study of a selected topic.

201. Foundations of World Civilization (3) (Fall, Spring) Department Faculty

A general survey of the growth and development of western and non-western civilization from prehistoric times to the modern era. Required of all history majors. (Staff)

202. Development of the Modern World (3) (Fall, Spring) Department Faculty

A comparative survey of western and non-western societies from early modern times to the present day. Required of all history majors. (Staff)

241. History of the Americas to Independence (3) White

A general survey of American history using the comparative approach in which the colonies of England in North America are compared to those of Spain and Portugal in Latin America from the conquest to the American Civil War. Topics include: Native American cultures, European expansion, colonial empires, economic development, slavery and race relations, literary and artistic achievements, the frontier, independence movements, political organization, religion and national character. Satisfies the state code requirement in history.

242. History of the Americas Since Independence (3) White

A general survey of American history since independence, using the comparative approach in which the major political, social, cultural, and economic developments in the United States are compared with those of Latin America. Topics include: The formation of governments, sectional conflict and civil war, expansion and international conflict, industrialization, political movements, race relations, literary and artistic expressions, the role of women, education, foreign policy and national character. 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

304. The Ancient Near East (4) Poe (III A)

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 (III B, III C)

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 (111B-111C)

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.

321. European Thought and Culture (4) Watrous (II B)

Exploration of themes and issues selected by the instructor. Topics include social and political thought, cultural and religious expression, and the various arts within a specific period of time between the Renaissance and the twentieth century.

330. Introduction to African History (4) Holmes (III B)

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 (111C)

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. Modern Latin America (4) White (III C)

A study of the major political, social, economic and cultural developments in Latin America since independence. Includes major political movements, national leaders, economic development, the Catholic Church, the role and status of females, art and literature, cultural values, and relations with the United States.

340. History of Mexico (4) White (III B, III C)

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.

343. The United States and the Third World in the 20th Century (4) White (IC)

A study of the relations between the United States and the developing countries of Asia, the Middle East, Africa and Latin America, including inter-governmental relations, activities of the C.I.A., and the role of U.S. corporations in international relations.

345. Revolution in the Modern World (4) White (III C)

A comparative analysis of major revolutionary movements in this century, including their historical roots, phases of development, the role of ideas and intellectuals, the role of personalities, external factors and the results of such movements.

348. Creative History: Writing Historical Fiction (4) White

A class project involving the researching for and writing of historical fiction on people or events during a specific historical event or period. After reading and discussing novels on the period or society involved, anthropological studies on the culture and historical accounts of the event or period, the class will write and assemble an anthology of short stories on the topic selected that particular semester.

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.

360. History Through Photography (2) Mellini

The uses of photography in the study of local history and historic preservation. A project course devoted to exhibition development, photographic techniques, and surveys of the college service area. Includes laboratory and field experiences. May be taken twice for credit.

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 (4) Markwyn, Harris

An application of historical methods to the field of local history. Attention will be given to methods of collecting, preserving, cataloging and interpreting evidence and to the role of the college in the study of local history.

364. Nature and American History (3) Markwyn

Examines attitudes toward nature in America from the age of exploration to the present. Topics include the idea and the reality of the wilderness in American culture, nature in American literature and art, settlement and land policies, and the growth of the conservation and the environmental movements.

365. Oral History (3) Harris

Practical experience and discussion of the problems of collecting and transcribing "oral history" from long-time residents of the North Bay region. Cross-listed as LIB 381.

370. History Forum (2) Department Faculty

An afternoon lecture series utilizing the expertise of departmental faculty, the campus community and outside experts. See class schedule for specific topic each semester. 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.

375. Special Topics in American History (2-4) Departmental Faculty

Includes such courses as "American Labor History," "American Thought and Culture," and "Religion in American History." Consult the class schedule for the specific course each term and the Department of History for course descriptions.

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 (III A)

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.

398. Prehistory of the East Mediterranean and Europe (4) Poe (III A)

This course will emphasize the cultural development from the introduction of domestication of plants and animals to the various political, religious and social developments associated with what is called the rise of civilization.

400. Greece and the Aegean (4) Grivas, Poe (II A)

Historical developments in the eastern Mediterranean region from the establishment of the Minoan civilization on Crete through the Roman intervention and the end of Greek independence with an emphasis on the role of cultural interchange in the growth and shaping of Greek civilization.

401. History of Rome (4) Laferriere, Poe (II A)

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 (II A)

"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 (II A)

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. Europe, 1650–1789: The Age of Absolutism and Enlightenment (4) Brown, Watrous (II B)

European history from the mid-seventeenth century to the beginning of the French Revolution. Major topics include the rise of modern science, the development of industrial capitalism, the formation of the enlightened absolutist state and the coming of the French Revolution.

405. Europe, 1789–1914: The Age of Dominance (4) Brown, Laferriere (II C)

European history from the outbreak of the French Revolution to the start of World War I. Major topics include the impact of the French Revolution on Europe and the world, the growth of liberalism and socialism, European cultural diversity and the causes of World War I.

406. Contemporary Europe, 1914–Present: The Age of the Masses (4) Laferriere (II C)

An examination of European history during the twentieth century. It is an era when millions of men and women participate in the political, social and economic life of the nations in which they live. The masses play a role in democracy, socialism, totalitarianism and war, at times helping and at other times hindering the solution of problems which they help create.

407. War and Peace in Twentieth Century (4) Brown (II C)

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 (II B)

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 (II C)

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 (II A, II B)

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 (II B, II C)

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 (III C)

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 (I C)

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. Crosslisted with Economics 432.

435. History of China (4) Lin (III C)

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 (III A)

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 (III C)

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 (III B)

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.

440. Ancient and Colonial Mexico (4) White (III A, III B)

A history of the Mexican people from early Indian groups to Mexican independence in 1821. Includes Maya and Aztec cultures, the Spanish conquest, New Spain, the colonial church, cultural developments, the fate of the Indian, the evolution of a mestizo culture, the role of women, and the Hidalgo-Morelos revolt of 1810.

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 (I C)

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 (II C)

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.

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450. Colonial America to 1750 (4) Markwyn (I B)

A study of the social, political, and economic foundations of American society from the age of exploration to the middle of the eighteenth century. Topics include European backgrounds, relations with native peoples, and political and social change.

451. Revolutionary and Republican America, 1750–1815 (4) Markwyn (I B)

A study of the people and institutions of the United States from their revolutionary origins through the “second war of independence.” Topics include the effects in America of the Great Awakening and of European thought, the independence movement, the Constitution of 1787, ideological and social differences, and territorial expansion.

453. American Expansion and Reform, 1815–1850 (4) Price (I B)

Expansion and sectional change, economic sectionalism and national politics, the rise of Jacksonian democracy, and social and political reform in United States history from the Peace of Ghent to the Compromise of 1850.

454. Civil War and Reconstruction, 1850–1877 (4) Price (I B)

A detailed examination of the background and causes of the Civil War, the problems of the war years, and the struggles of the Reconstruction Era.

455. Emergence of Modern America, 1877–1900 (4) Harris, Karlsrud (I B)

A study of the major political, social, economic, diplomatic, and intellectual developments in late nineteenth century America. The rise of the United States as a world industrial power, settlement of the Great Plains, the Populist Revolt, and American Imperialism.

456. The Progressive Era, 1900–1929 (4) Johnson, Harris, Karlsrud (I C)

A study of America’s great Age of Reform. The rise of urban progressivism in the 1890’s; the progressivism of Roosevelt, Taft, and Wilson; the First World War and its aftermath; prosperity and complacency in the 1920’s.

457. The Great Depression and the New Deal, 1929–1945 (4) Grivas, Johnson (I C)

A close analysis of the Great Depression years with the emphasis on Roosevelt and the New Deal. The background and results of the market crash of 1929; Hoover’s response to the depression; the various “phases” of the New Deal; the Supreme Court crisis of 1937; and America’s involvement in the Second World War.

458. Contemporary America, 1945–Present (4) Grivas, Johnson (I C)

A study of the United States and its emergence as a world leader since the Second World War. Problems and policies of America’s political leaders from Truman to Nixon with an emphasis on foreign affairs, the achievements of a liberal Supreme Court, the economics of automation, and the revolution in civil rights and civil liberties.

459. Mass Violations of Civil Liberties (4) Johnson (I B, I C)

An examination of how government officials have used authority to interfere with traditional rights and liberties of citizens, especially in periods of mass hysteria such as that which preceded the Salem witchcraft trials. The revolution in civil liberties since 1925, especially as it has affected the treatment of criminals.

463. Family History (4) Harris (I C)

Designed to give students both the skills and the opportunity to study their own history and the relationship of their family’s history to that of the larger society. Genealogical techniques, oral history, and traditional sources will be used to develop a coherent historical essay.

464. Business Enterprise in America (4) Johnson (I B, I C)

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 (I C)

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.

469. The City in History (4) Price

A study of cities beginning with their origins and their significance in the rise of civilization in the ancient world. The character of cities in the classical and medieval world is given some attention, but the major emphasis is upon the development of an urban culture in the United States from colonial times to the present. Themes include comparative studies of European and American cities, the “intellectual history of the city” and the idea of the city in western civilization and in the American mind.

471. The American West (4) Grivas (I B)

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 (I B)

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.

473. California in the Twentieth Century (4) Grivas (I C)

An analysis and evaluation of the major political, social, and economic issues in the twentieth century California.

475. American Social History to 1815 (4) Markwyn (I B)

Studies American society from the age of exploration to 1815. Topics include European influences, social mobility, class structure, social movements, generational and gender difference, race, industrial beginnings, and how they bear on the question of a distinctly American character.

477. American Social History Since 1815 (4) Karlsrud (I B, I C)

Studies American society since 1815. Topics include social mobility, class structure, race and ethnicity, the changing roles of women, and the role of such terms as “the American dream,” “Melting Pot,” and “Rugged Individualism” in the evolution of a distinctly American character.

Prerequisite: History 475 or consent of instructor.

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 Historical Methods (4) (Fall) Harris, Poe

Exploration of the application of social science theory and methodology, including quantitative analyses, to the historical study of social structure, mobility, demographic change, life-cycle, political power, voting behavior, legislative behavior, interaction of public policy and economic development, and the distribution of income and wealth. Prerequisite: History 363 or 391.

501. Seminar in Public Historical Studies (4) (Spring) Harris

Research methods (oral history, legal research, family history, government documents and sources, historical preservation, field research) and fields of public (or applied) historical studies. Prerequisite: History 363 or 391.

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.

HUMANITIES

This course counts toward the fulfillment of the General Education requirements in Category A, Communication and Critical Thinking.

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 an eye 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.

HUTCHINS SCHOOL OF LIBERAL STUDIES

Provost: J. Anthony Mountain

Faculty: Les K. Adler, Susan Barnes, Maurice Blaug, Michael Coleman, Lu Mattson, Lou Miller, Edgar Morse, Warren Olson, Frederick Rider, Jeannine Schuler-Will, Jacqueline Strain, Richard Zimmer

Department Office: Cluster Schools 44, phone (707) 664-2491

The Hutchins School of Liberal Studies is an interdisciplinary school offering an alternative General Education Program, a B.A. in Liberal Studies, and a Minor in Integrative Studies.

Hutchins has several distinctive features:

- Small, seminar-type classes (often 10 to 12 students).
- Close cooperation and a feeling of community among students and professors.
- An emphasis on active participation in one's own education, on self-motivation, and on "learning to learn."
- A diverse faculty, each member trained in more than one field of study. 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 do independent study projects.
- A unified General Education program, in which each course combines material from the humanities, the social sciences, and the natural sciences.

Hutchins 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 interests.

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 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 courses are open to students majoring in other fields, and Hutchins 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. The Hutchins major provides an especially effective framework for the integration of more specialized studies into students' intellectual, professional, and personal lives. Students receive considerable faculty help in planning such a program.

All Hutchins students may transfer at the end of any semester to another program on campus or to other accredited institutions with no loss of credit successfully completed in the Hutchins School.

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 semesters. 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, plus 9 upper division units of SSU approved General Education,*

OR

39 units of 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.

Total..... 124 units

CURRICULUM

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, 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 a written evaluation of his or her work, together with a grade of Credit or No Credit. The evaluation gives the student

* Hutchins upper division students who select the Multiple Subject Option to secure the teaching credential are exempt from this 9 unit requirement.

a detailed estimate of his or her effectiveness in each area of the course: seminar participation, understanding of the subject matter, writing abilities, and independent projects. It indicates the ways in which the student should improve in order to become an effective, life-long learner. Thus it conveys a great deal more information than does a single letter-grade. An unofficial letter-grade (A through F) will be attached to the evaluation. Although this grade will not be entered on the official record or used to compute a grade-point average, it 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.

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.

Lower Division Course Offerings

101. The Human Enigma (12)

How have humans sought to understand themselves? Are we truly social? Are we free? Drawing materials from small-scale societies, ancient Greek culture, and contemporary civilizations, the course concentrates on the growth of awareness of the self, the development of scientific and abstract thought, and the evolution of symbols and values.

102. Exploring the Unknown (12)

How do we experience the unknown? What is the basis of religious language and myths? What is the role of reason, intuition, mystical insight and science in approaching the unknown? How do personal and institutional authority arise?

201A. In Search of Self (9)

How do 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.

201B. The American Experience (3)

What are the major political, economic, social and cultural components of recent American History? How do our political institutions operate, and what influence do they have on our lives? This course satisfies the state code requirement in U.S. History, U.S. Constitution and California State and Local Government.

*** 202. Challenge and Response in the Modern World (12)**

Can the good and just society be planned and implemented? Should man control and shape his biological heritage? Can technology be made compatible with our need for a better environment? The revolutions initiated by Darwin, Marx and Freud will be studied in relation to these challenges and contemporary responses.

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 Elementary Teaching and Early Childhood credentials (see below).

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:

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

—All upper division students are required to take the CORE SEMINAR PROGRAM:

- 301A Society and Self (4)
- 301B The Individual and the Material World (4)
- 401A Human Experience and the Arts (4)
- 401B Consciousness and Reality (4)

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 done 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.

SPECIAL OPTIONS WITHIN THE MAJOR:

MULTIPLE SUBJECT OPTION: This course of study is the *Waiver Program* leading to a B.A. in Liberal Studies for the multiple subject credential described in the Ryan Act, the teacher credential law in California. Although this option is designed primarily for students who intend to seek an Elementary or Early Childhood Credential, any student desiring a liberal studies major with a broad, integrated curriculum embracing courses in the areas of English, Social Sciences, Natural Sciences and Mathematics, Humanities, and Interdisciplinary Studies may select this option. Students seeking the credential should contact the Ryan Advisor at the Hutchins School at the beginning of their first semester for assistance in planning their Multiple subject curriculum. They should also contact the SSU Department of Education for advising to complete concurrently the series of professional training courses leading to the teaching credential.

Requirements:

<i>Interdisciplinary Core Seminars</i>	10 units
Two Core Seminars to be selected from Liberal Studies 301A, 301B, 401A, 401B	8 units
Liberal Studies 302—Introduction to Independent Study	2 units
<i>English</i>	6–7 units
A. English 379—The Study of Language	3 units
or	
Liberal Studies 327AB—The English Language	4 units
and	
B. Liberal Studies—elective seminars dealing with selected issues in English	3 units

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<i>Natural Sciences and Mathematics</i>	12–13 units
Mathematics	
A. Math 106, 107, 121, 131 or 161 or equivalent transfer course (3 units); these units do <i>not</i> count toward major.	
B. Math 300—Theory of Arithmetic	3 units
Natural Sciences	
A. Lower or upper division science course in physical or biological science	3 units
B. Biology 314.....	3 units
or	
Liberal Studies 322—Microcosm-Macrocosm	4 units
(Biology 115 or its equivalent is prerequisite for all courses under B. Biology 115 can be counted as the science course described in A.)	
C. Liberal Studies 485—Science and Society	3 units
<i>Social Sciences</i>	3–4 units
Social Studies 412—Interdisciplinary Approaches to the Social Sciences.....	4 units
or	
Liberal Studies elective seminar dealing with selected issues in the social sciences.	3 units
<i>Humanities</i>	3 units
Liberal Studies 380—Exploration of Humanistic Disciplines	3 units
or	
Liberal Studies 354—Masterpieces of the Humanities	3 units
or	
Liberal Studies elective seminars	3 units
(Students who have not taken course work in fine or performing arts [Art, Music, Theater Arts, or Dance] will be advised to do so.)	
<i>Electives</i>	3–6 units
In consultation with advisor, students will select additional upper division elective courses, independent study, or internship, to complete the major of 40 units	
TOTAL MAJOR UNITS	40 units

NOTE: For the completion of the Waiver, students must, according to the requirements of the Ryan Act, complete eighteen to twenty-four units in each of the four areas; English, Humanities, Social Sciences, and Natural Sciences/Mathematics, with a total of no less than 84. These units accrue from all appropriate lower and upper division courses that the student has taken at accredited universities.

Students who complete a Multiple Subject Credential and who are working in a child care center can obtain the requisite State Children's Center Permit by taking twelve additional child-related classes in Hutchins and the University. (See catalog, under Children's Center Permit.)

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. 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 be taken in Hutchins. (See catalog under Children's Center Permit.)

INTERNSHIP/FIELD EXPERIENCE PLAN

Students considering professional careers in law, politics, the media, health

professions and business may want to consider an Internship experience. 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.). The students will arrange their program under the guidance of the Hutchins Internship Coordinator.

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* (4 units). During the first semester of upper division work the student will enroll in whichever core seminar is currently being offered (either Liberal Studies 301A, 301B, 401A, or 401B, described below). These seminars are intended to prepare the student to make informed decisions about contemporary problems in the social and scientific realms and to understand and cultivate the insights and values derived from 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* (12 units). In consultation with his or her minor advisor, the student will select interdisciplinary Hutchins courses totaling 12 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 as manifest in interdisciplinary studies.
- Senior Independent Study Project* (2 units). The student will design a final project which specifically relates his or her major field of study to integrative concerns. 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 (4)

An introduction to the complex interrelationship between the individual and society. The topics of 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 (4)

Man's approach to the material world is twofold: knowing it as object, and relating to

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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 and seek a resolution.

302. Introduction to Independent Study (2)

To be taken in the first semester of study in the upper division major.

401A. Human Experience in the Arts (4)

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 (4)

A survey of the structures of consciousness and the processes of reality construction which are fundamental to human experience and inquiry in any field whatsoever. 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 each semester. 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. May be repeated for credit.

322. Microcosm and Macrocism (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 intended for teaching credential students, is an intensive review of the grammar and syntax of the English sentence.

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: abnormal, testing, play and therapy, and social-psychological issues.

331. Alienation (3) Olson

The problem of man's "alienation" from himself, from others, and from his environment is often viewed as centrally important in our era. How serious is the malady? What are its causes? What might be done to achieve wholeness? Readings are drawn from philosophy, literature, sociology, and psychology. Authors include Beckett, Ellul, Marx, Bellow, and Buber.

332. Passages (3) Barnes and Zimmer

This course explores the new field of naturally developing adult life crises. The issues are explored through popular books such as Sheehy's *Passages*, Erickson, and various literary works, such as Lessing and Fitzgerald. It is designed to complement our offerings in child development, to show that developmentality in all ages must be considered.

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.

336. Yoga & Vedanta: An Introduction to Eastern Consciousness (3) Coleman

An introduction to the Eastern World View with special emphasis on Yoga and Vedanta. Course includes selections from the literature and philosophy of ancient India, contemporary commentaries, biographies, and scientific studies on Yoga and reincarnation.

337. Social Implications of Technological Change (3) Zimmer

This course focuses on the ways in which changes in technology change social relationships, particularly on a micro-level. The course includes site visits and emphasizes projects done in a field situation.

339. Stigma and Prejudice (3) Zimmer

This course explores the different aspects of prejudice and the stigmatizing process, from a variety of points of view—psychological, sociological, cultural, and historical, with emphasis on children and stigma. Readings include Allport, Goodman, Ellison and Goffman.

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.

348. The Florentine Renaissance (3) Olson

An interdisciplinary approach to the momentous changes occurring in Florence from 1300–1500. This study seeks to understand the Early Renaissance world view by examining Florentine beliefs, values, and attitudes as expressed in the fine arts, philosophy, literature, and politics. The city itself receives consideration as the special “world” in which the modern sensibility was born.

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 in the near future.

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.

360. 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) Rider

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) Rider

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.

371. Consciousness and History (3) Rider, Mountain

A survey of the ways in which consciousness seems to alter with time. Focuses on the relations between divine transcendence and human creativity in various periods of Western history. Materials include many of the masterpieces of Western literature, philosophy, and religious writing.

180. An Exploration of Humanistic Disciplines (3)

A study of the skills and patterns of inquiry and expression employed in philosophy, art, music, theatre, and literature, to discover the distinctive character of each. Such inquiry will be based on actual experience in the disciplines.

195. Community Involvement Program (1-4)

Students volunteer in 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.

198. Field Experience (3)

This course is designed to provide supervised field experience to students in their chosen field. May be repeated for credit.

199. Student Instructed Course (2)

May be repeated for credit.

102. Senior Project (1-4)

May be repeated for credit.

110. Independent Study for Seniors (1-4)

Prerequisite: LIBS 302 or equivalent; approval of appropriate faculty member.

May be repeated for credit.

112. 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.

115. Special Studies (1-4)

May be repeated for credit.

117A. Facets of Romanticism (3) Strain

In this course we will focus on the many ways in which the Romantic movement has been instrumental in shaping Western attitudes toward the nature of the human being, society and the physical world. We will attempt to account for the rise of this movement and assess the impact it has had on philosophy, theology, science, theories of history, social and political thought, and the arts.

120. Elective Seminars (3) Staff

These courses will be offered under different titles each semester, as new topics arise. May be repeated for credit.

121. The Light Side: Rationalism in the Western Tradition (3) Strain

Rationalism has been one of the most potent factors in the history of Western culture. This course will examine the various forms which it has taken from the ancient period to the present day in philosophy, religion, science, music, art, and the social sciences. Materials will be drawn from the works of Plato, Aristotle, Greek artists, St. Thomas Aquinas, Galileo, Descartes, Locke, J.S. Bach, the *Philosophes*, the nineteenth century Positivists, and the contemporary behaviorists. (See LIBS 423.)

422. Politics and Social Change (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.

423. The Dark Side: The Irrational in the Western Tradition (3) Mattson

While most consider the rational the crucial factor in the evolution of Western civilization, the vitality and appeal of the irrational have moved individuals to explore "the dark side of human existence." Their contribution constitutes a rich vein in our culture which is expressed in art as well as humor, Western mysticism, philosophy and psychology. Materials: Greek, Renaissance and modern drama; courtly romances; accounts by mystics; art, poetry and fiction which illuminate the unconscious; literary and psychological studies of insanity. (See LIBS 421.)

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.

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 do 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 recreation? 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) Coleman

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.

440. Theater and Ritual (3) Zimmer

This course examines the similarities between theatre and ritual in different cultures. Symbolic communication and student participation will be emphasized.

460. Workshop (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.

461. Independent Study Tutorial (1–4)

May be repeated for credit.

465. Experiencing History (4) Adler and Miller

An experimental course employing simulation techniques to recreate 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 upon sufficient demand: Creativity (Blaug, Mattson, Barnes); Discovery of the Unconscious (Adler, Barnes); 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); Religious Consciousness (Coleman); Arthur Koestler and the 20th Century (Adler); Perception and Form in the Arts (Schuler-Will); Sexuality in Historical Perspective (Rider); Transformations (Coleman); Pioneer Women (Strain); Seeing Nature Whole (Blaug); Exploring America (Miller); Energy Politics and Policies (Miller); Observing and Recording Human Behavior (Miller).

INTERDISCIPLINARY STUDIES

Coordinator: Jeannine Schuler-Will

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 the various Career Minor Programs, Special Major (B.A./B.S. and M.A./M.S.), as well as individual courses.

Career Minors:

- Human Services: Health Systems Organizations
- Information and Research
- Science-Technical Writing
- Teaching English as a Second Language

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.

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)

205. Experimental Courses (1-4)

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

345. Introduction to Peer Advising (3)

A pilot study aimed at developing and testing the effectiveness of a group of student advisors whose work in general advising of students could supplement academic advising by departmental faculty and the Office of Academic Advising.

405. Experimental Courses (1-4)

495. Special Studies (1-4) (For approved and classified Special Majors Only)

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)

Must be taken sequentially and for a total of 6 units. For classified Special Majors M.A./M.S. only.

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:

Human Services: Health Systems Organization

The Health Systems Organization 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 Organization 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—Medical Sociology) (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, 664-2456/2112)

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. American 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, 664-2840)

Science-Technical Writing

This minor will provide science majors with 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, science students with strong writing skills and the ability to put scientific 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.

Core (16 units)

- A. English 375—College Composition (3)
- B. English 322—Information Services and Strategies (3)
- C. Philosophy 354—Philosophy of Science (3)
- D. Biology 497—Special Topics (4)
- E. Physics 400—History of Physical Sciences (3), or
Liberal Studies 352—Science and Values (3)

Electives (3–4 units)—special studies course selected in consultation with the faculty advisor.

Capstone Course: Philosophy 499—Internship Program (3–6 units)

Advisor: Dr. George Proctor

(Department of Philosophy, 664-2903/2163)

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:

	<i>Units</i>
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 of Completion of the Career Minor in Teaching English as a Second Language. (N.B. a certificate is here defined as a document issued upon completion of a course of study which does not lead to a diploma.)

Fall/Spring Course Patterns in Career Minor

<i>Fall:</i> Linguistics 310	4	<i>Spring:</i> Linguistics 311	4
Liberal Studies 327A	2	Linguistics 357	4
Linguistics 441	3	Linguistics 442	3
Linguistics 499	2	Linguistics 499	2

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.

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—Applies 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 & Information Science, 664-2344/2368

Other Career Minors are being developed in Wine Marketing, Arts Management and Recording Technology. For further information on these developments, check with the Office of Academic Programs/Graduate Studies, Stevenson 1024.

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 Department of Education. 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;
 - D. 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.

Requirements for the Master's Degree

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 program 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.

INTERNATIONAL STUDY OPPORTUNITIES

The internationalization of our campus makes it possible for Sonoma State University students to learn about the diversity and dynamic interrelationships of the many cultures in our world society. The University offers a wide range of curricular options in International Studies, including both campus-based major and minor programs and a variety of opportunities for study abroad. Supported by courses in Foreign Languages, these options can either form the core of an academic program themselves, or can serve as a complement to specializations in many fields of the natural and social sciences, arts and humanities.

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 language 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. 164 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:

HISTORY OF “THIRD WORLD” SOCIETIES

This Advisory Plan enables students to pursue a course of study with a Third World focus within the B.A. program in History. For details of this curricular option, see History listings, page 201.

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:

Pacific Basin Studies

Students may design an interdisciplinary Special Major (B.A.) in Pacific Basin Studies, with emphasis on the geographic and ecological, the economic, the political, or other special aspects of the area. Such a Special Major will provide training and an integrating perspective both for members of Pacific Basin communities and for others preparing for careers in politics, government, business, or international agency service in the region. A variety of relevant courses in Social and Natural Sciences and other areas is available on campus, and at other institutions in our area through cross-registration. Opportunity for overseas study in the Pacific is available either through the California State University International Programs study centers in Japan and New Zealand, or an Independent Study Abroad project (see page 236). Students wishing to construct such a program should consult Professor Mildred Dickemann, Department of Anthropology. Guidelines for the development of a Special Major appear on pages 229–231.

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 American 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 pages 229–231.

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 pages 229–231.

INTERNATIONAL STUDIES MINOR

(School of Social Sciences)

The International Studies Minor explores world-wide commonalities and differences in the dynamics of adaptation and change within societies and across nations. It compares and contrasts the various alternative paths taken by contemporary societies and demonstrates their linkage with global economic and political processes. A capstone seminar concentrates upon the major common interests facing an increasingly interdependent world.

The international perspective of the Minor provides an analytical framework for the utilization of specialized knowledge and skills in settings where awareness of sociocultural differences is critical. It is especially recommended for students preparing for professional, managerial and service careers, and will complement majors in the social sciences, natural sciences, and foreign languages/area studies.

Requirements for the Minor

CORE COURSES (16 units)

Students should select one course in each of the four core areas. It is recommended that the sequence of core areas be followed.

1. Geographical and Ecological Foundations of Societies (4 units)

Anthropology 345	Human Ecology
Environmental Studies 301	The Human Environment
Geography 201	Man and Environment
Geography 203	Cultural Geography

2. The Functioning of Societies (4 units)

Anthropology 343	Peasant Societies
Anthropology 389	Ethnography of Communication
Linguistics 356	Speech Communities in Contemporary Society
Sociology 360	Social Organization of Western and Non-Western Societies

3. Alternative Economic and Political Routes for Contemporary Societies (4 units)

Economics 210	Capitalism and Socialism
Economics 303	Development in the Third World
Geography 320	Political Geography
Geography 343	Economic Geography
Politics 452	Third World Political Systems

4. The Problems and Prospects of Global Interdependency (4 units)

Economics 302	International Trade
History 407	War and Peace in the Twentieth Century
Management 493	International Business
Politics 342	International Politics

CAPSTONE SEMINAR (4 units)

Social Sciences 450

Seminar: Issues in Global Interdependency: Selected Topics

COORDINATOR: Prof. Robert Smith, Department of Politics
Stevenson 2070/2054 664-2179/2424

CAREER MINOR in TEACHING ENGLISH AS A SECOND LANGUAGE (TESL)

This interdisciplinary minor program prepares students to teach English to speakers of other languages abroad as well as in the multicultural, multilingual domestic context. Further information about this useful adjunct to study in many fields will be found on page 228.

STUDY ABROAD

Programs of study abroad include academic year placements in the leading universities of thirteen foreign countries in which the California State University (CSU) maintains International Programs, as well as individualized Independent Study Abroad plans and field work placements supervised by academic departments.

In the London Semester Program, students have an opportunity to spend either a semester or a full year studying in London with professors from California State University campuses. Units taken through this program are counted toward residence credit at SSU. For further details, contact the Office of Extended Education.

INTERNATIONAL PROGRAMS

The California State University (CSU) International Programs offer 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.

Students can make the year of study abroad an integral part of their overall academic plan. Specialized international training and experience in their own discipline can enable students to qualify for unique study and career opportunities in subjects such as international business (Denmark, Israel, Mexico, Taiwan), archaeology (Peru), and fresh-water ecology (Sweden). Or the programs in *International Development Studies* and *Soviet and Eastern European Studies* (Sweden) can form the core of a Special Major B.A. in International Studies (see page 234).

A wide variety of academic majors may be accommodated by the 25 foreign universities cooperating with the International Programs in 15 countries around the globe. The affiliated institutions are: 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 Ibero-Americana 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 the University of Bradford, England. Information on academic course offerings available at these locations may be found in the International Programs Bulletin which may be obtained from the International Programs representative on campus in Village 102.

Eligibility for application is limited to those students, who will have upper division or graduate standing at a CSU campus by September, 1984, who possess a cumulative grade point average of 2.75 for all college level work completed at the time of application (some programs require a 3.0 cumulative grade point average), and who will have completed required language 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 the International Students Office, Village 102 (707) 664-2582 or by writing to The California State University International Programs, 400 Golden Shore, Suite 300, Long Beach, California 90802. Applications for the 1984-85 academic year overseas must be submitted by February 9, 1984 (except for the New Zealand program where applications are due by May 15, 1984.)

INDEPENDENT STUDY ABROAD AND FIELD WORK

Students may plan Independent Study Abroad projects in collaboration with faculty from an appropriate academic department. A maximum of 6 units of credit may be earned in a given semester for study abroad conducted in this manner. It is essential that ample planning time be allowed for the design of an Independent Study Abroad project so that the necessary pre-departure preparation (course work, directed readings) may be completed, and the required campus and CSU approvals be secured. Procedural advising for Independent Study Abroad, as well as all the forms necessary for planning and submitting the proposed project, are available in the Office of International Student Programs, Village 102. Students interested in exploring the possibilities for independent work abroad should also consider the field experience courses and placements offered by several academic programs (Anthropology, Hutchins School of Liberal Studies, India Studies).

INTERNSHIPS IN INTERNATIONAL STUDIES

Summer internships abroad are arranged for qualified students through the Department of Foreign Languages (Stevenson 3016, (707) 664-2351). A summer internship in European management is available in conjunction with the CSU International Programs in Denmark.

Internships at the Farallones Institute in various aspects of appropriate technology and community development may be arranged for qualified students through the Department of Anthropology (Stevenson 2026, (707) 664-2312).

LINGUISTICS

Coordinator: Shirley Silver (Anthropology)

Faculty: Eli Katz

Department Office: Stevenson 2026, phone (707) 664-2312 664-2944

The Linguistics Minor is an interdisciplinary program designed to offer a secondary field of interest that strongly supports majors in related disciplines. The program gives the student sound basic training in general linguistic principles, together with the widest possible selection of elective courses. By this plan, the student is able to develop an interest in a particular field of linguistics as a complement to a major.

MINOR IN LINGUISTICS

20 units, 12 of which must be in the following courses:

	<i>Units</i>
Linguistics 200—Interdisciplinary Introduction to the Study of Language	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.

	<i>Units</i>
American Multicultural Studies 356—Language and Ethnicity.....	4
Anthropology 380—Language and Culture	4
Anthropology 382—Language Change.....	4
Anthropology 386—American Indian Languages	4
Anthropology 389—Ethnography of Communication.....	4
Anthropology 482A–B—Linguistic Field Methods.....	4-4
Anthropology 490—Topical Seminars in Anthropology.....	4
English 341—Explorations in Language.....	3
English 379—Study of Language	3
English 489—Topics in English Linguistics	3
Liberal Studies 327A—The English Language	2
Mathematics 150—Computer Programming I	4
Mathematics 151—Computer Programming II	3
Mathematics 250—Assembly Language Programming.....	3
Mathematics 255—Programming Languages	3
Mathematics 354—Data Structures and Algorithmic Analysis.....	3
Mathematics 452—Compiler Design and Construction.....	3
Mathematics 454—Automata Computability and Formal Languages.....	3
Mexican American Studies 225–325—Barrio Language	4
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
Spanish 303—Introduction to Spanish Phonetics	3
Spanish 425—Spanish Linguistics.....	3
Spanish 426—Seminar in Modern Varieties of Spanish	3

NOTE: Re a minor in Teaching English as a Second Language, see Interdisciplinary Studies: CAREER MINORS 228

LINGUISTICS COURSES

200. Interdisciplinary Introduction to the Study of Language (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, syntactic and semantic components of language.

Prerequisite: Linguistics 310, or consent of instructor.

320. Context, Meaning 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.

356. Speech Communities in Contemporary Societies (4) (Fall)

Study of persistent language problems in well-established modern nations and linguistic problems of modernizing nations. Consideration of multi-lingualism and linguistic boundaries, language attitudes, political power and linguistic equality, language and socio-political institutions (e.g., schools, governmental agencies, business enterprises).

Prerequisite: Linguistics 200 or consent of instructor.

357. Dialects and Sociolects (4) (Spring)

Introduction to systematic study of dialects and sociolects (language forms spoken in particular geographical areas and/or by members of particular social classes/groups). Focus on varieties of American English, with attention given to California varieties. Emphasis on application of study of dialectal/sociolectal variation to teaching English to speakers of other languages.

Prerequisite: Linguistics 200, or consent of instructor.

390. Introduction to Indo-European (3) (Spring alternate years)

Examination of the linguistic and cultural prehistory of the Indo-European family of languages, a linguistic family covering a geographic area which stretches east to west from India to Europe. Also considered is the role the study of Indo-European languages has played in the development of the scientific study of language.

Prerequisite: Linguistics 200, or junior standing.

441. Linguistics and Second Language Teaching (3) (Fall)

The relation of aspects of linguistic theory to second language teaching theory and methodology. Discussion of the utility of descriptive and contrastive analysis. Consideration of psychological, social and linguistic aspects of second language learning, and a communication-oriented approach to second language teaching.

Prerequisite: Linguistics 200, or consent of instructor.

442. Teaching English as a Second Language (3) (Spring)

Application of linguistic principles/methodology to teaching standard American English as a second language. Introduction to ESL teaching methods/techniques. Practice in preparation/evaluation of teaching materials. For extra credit (see instructor): observation of and tutoring in ESL classes at SSU and in the University's service area. Prerequisite: Linguistics 310–311; or upper division course in the structure of English (e.g., Liberal Studies 327A—The English Language).

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.

Prerequisite: appropriate coursework in linguistics, which may be taken concurrently.

Note: It is possible to develop a special interdisciplinary major in Linguistics. Interested students should contact the Coordinator of the Linguistics Program. For students wishing to develop a comparative and historical linguistics emphasis, the following language courses are particularly pertinent:

	<i>Units</i>
Greek 101–102—Beginning Homeric Greek	3–3
India Studies 302A–B—Sanskrit	3–3
Latin 101–202—Elementary Latin	3–3

MANAGEMENT STUDIES

Department Chair: William L. Reynolds

Faculty: Sherri Anderson, Betty Collier Arrington, Michael Baldigo, Saul Eisen, Robert Girling, Wyman Hicks, George Johnson, Paul Juhl, Wingham Liddell, Wallace Lowry, Sandra Schickele, Delmar Valleau, Judith Wright.

Department Office: Stevenson 2042, phone (707) 664-2377

Management Studies is a multi-disciplinary approach to problem definition and problem solving. It is an eclectic blend of the social sciences and seeks actions which serve human purposes at personal, organizational, and social levels. As an applied social science, it emphasizes human resources. A process of working with and through people to define and accomplish goals, management stresses long-range dimensions and perspectives, and provides an excellent basis for a liberal arts education.

Each student in Management Studies pursues an individual program of study planned to meet his or her unique needs. The student and faculty advisor shall prepare an appropriate study plan and consultation shall continue regularly until graduation, with any modification made only upon the approval of the advisor.

Suggested Plans of Study

For those students seeking to specialize in certain fields, optional study plans may be developed through advisement, including (but not restricted to) the following: **Accounting; Finance; General Management; Human Resource Management; Management Theory; Marketing; Organizational Behavior.**

BACHELOR OF ARTS IN MANAGEMENT

Major

Requirements in the Major are:

	<i>Units</i>
A. Mathematics	3
1. Mathematics 106 or 107, or 121 or 131 or equivalent	
OR	
2. Three (3) units from the Mathematics 105 series (other than 105T)	
B. Economics 201A and Economics 201B	8
C. Management Studies courses	32
1. Up to eight (8) of these units can be taken in Economics courses	
(other than Economics 201A or Economics 201B)	
2. At least 16 units must be Upper Division	
D. Supporting courses	12
1. Ordinarily Upper Division	
2. Chosen from the liberal arts and sciences	
3. Approved by the student's advisor	
4. Courses credited to the student's General Education requirements	
cannot be used for supporting courses.	
TOTAL units required for the major	55

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Total Requirements for the Bachelor of Arts Degree in Management are:

	<i>Units</i>
A. General Education	48
B. Management Major (see above)	55
C. Other electives	21
TOTAL units required for the B.A. degree	124

(The student is reminded that within the 124 units required for the B.A. degree, at least 40 must be Upper Division.)

Second Baccalaureate Degree

To earn a second baccalaureate degree in Management, students must: demonstrate competence in English composition; satisfy the General Education-Breadth Requirements specified by Title V, Section 40405 of the California Administrative Code; complete thirty (30) units of residence credit at Sonoma of which twenty-four (24) must be upper division; complete the Mathematics and Economics requirements for the Management major, eleven (11) units as noted above; and complete twenty-four (24) units of Management courses of which twelve (12) units must be Upper Division.

Double Major

A student may earn a double major in Management by completion of the Mathematics and Economics requirements for the Management major, eleven (11) units as noted above and completion of twenty-four (24) units of Management courses of which twelve (12) units must be Upper Division (in conjunction with the completion of the requirements for the B.A. degree in another major).

Minor in Management

A minor in Management shall consist of twenty (20) units in Management Studies courses approved by a faculty advisor in the department. At least six (6) units must be Upper Division.

College Level Examination Program (CLEP)

The Department of Management Studies participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in Management Studies, refer to the Appendix, pages 466–467.

Evening program

Evening course offerings provide students with widened flexibility for completing requirements for the major in Management Studies.

MASTER OF ARTS IN MANAGEMENT

The Master of Arts program in Management Studies is designed to prepare its graduates for positions of leadership in organizational settings in the private sector, in government, or in the community. It provides the student with various approaches, tools, and areas of knowledge which are useful in management. The student will develop a working knowledge of contemporary management, and an appreciation of the economic, social, legal, and political trends in the increasingly complex environment in which the manager must function. Furthermore, the student will have an opportunity to focus closely upon a problem of his or her particular interest in the preparation of a thesis or project, or by taking a comprehensive examination.

ADMISSION REQUIREMENTS

A student fully admitted to the M.A. program is placed in *Graduate Standing, Classified*. On the advice of a Screening Committee of faculty members, admission is authorized by the Graduate Coordinator in the Management Studies Department. New applicants must apply to the Admissions Office and also to the Coordinator. Transcripts of the last 60 semester units taken must be provided to the Admissions Office and to the Management Graduate Coordinator for evaluation. (See appropriate sections of the catalog for admission and general requirements for all graduate students). Admission to the M.A. program is based on evidence that the student shows high promise of success in the program. Specific indicators of high promise which are considered are: (1) Candidates performance on the GMAT, (2) Upper division grade point average prior to masters admission, (3) A record of appropriate employment at increasing levels of responsibility. When using indicators (1) and (2) above, candidates showing high promise are defined as those obtaining a total of at least 1000 points based on the formula: 200 times the GPA plus the GMAT total score. Supplementary evidence that a satisfactory level of scholastic competence will be maintained will be considered.

The faculty is also concerned that the M.A. program in Management reflects a synthesis of liberal arts and sciences and career education, with support from a diversified and dedicated group of creative, socially concerned, and socially responsible graduate students.

Preparation for M.A. Program

The primary objective of the M.A. in Management is to prepare graduates for positions of leadership in organizational settings in the private sector of the economy, in government, in the community, and in non-profit enterprises. The student will develop a working knowledge of management theory and practice in the contemporary environment, and of some of the decision-making tools and behavioral skills needed for mastery of the art.

An undergraduate degree in Management is not required for admission to the program.

However, the following courses, (or equivalent courses completed at another institution) are prerequisites for admission to the M.A. program in Management and do not count toward the 30 units required for the M.A. degree.

PREREQUISITES FOR M.A. (24 total units)

- A. (4 units) *Management or Human Systems Theory*. One course chosen from the following: Mgt. 318 or 350.
- B. (12 units) One course from each of three (3) of the following fields:
 - 1) *Accounting*: Mgt. 330A or 330B or 332.
 - 2) *Legal and Societal Environment of Management*: Mgt. 425, 426, 461, or 491.
 - 3) *Finance*: Mgt. 370, 470, or 472.
 - 4) *Marketing*: Mgt. 360, 460 or 462.
 - 5) *Operations Management and Decision Theory*: Mgt. 415 or 458.
 - 6) *Human Resources and Organizational Behavior*: Mgt. 340, 344, 345, 349, 353, 444, 451, 452 or 455.
- C. (8 units) One course each from *Managerial Statistics and Economics of Management*:
 - 1) *Managerial Statistics*: Mgt. 315 or Econ. 317.
 - 2) *Economics of Management*: Mgt. 375 or Econ. 304, 305, 318 or 375.

Writing skills test. Students are asked to demonstrate writing ability in a management writing skills test for graduate students administered by the

department. Some students may be asked to take certain course work in writing as a condition for advancement to candidacy.

Conditionally Classified Standing

Students otherwise eligible for admission to the M.A. program in Management, but who have deficiencies in prerequisite preparation which, in the opinion of the Graduate Coordinator, can be met by specific additional preparation, may be admitted in *conditionally classified standing*. Such students should submit a petition to the Graduate Coordinator for advancement to classified status when those deficiencies have been removed.

Unclassified Postbaccalaureate Standing

Students not meeting the criteria for admission to the M.A. program in Management may be recommended for admission to the University in Unclassified Postbaccalaureate status. Students admitted in this status may take courses for professional growth or to prepare for the M.A. program. Students in this status may submit a petition to the Graduate Coordinator for admission to the M.A. program in Management when the criteria are met.

Advancement to Classified Standing

Students fully admitted to the M.A. program in Classified standing will complete the G1/G2 form in consultation with an advisor and the Graduate Coordinator and file it with the Dean of Graduate Studies. This form is the official record of advancement to candidacy, and includes: signatures of the Chair and the members of the student's M.A. Committee; a listing of the 30 units of coursework required for the M.A. degree and the final evaluation method agreed upon.

REQUIREMENTS FOR THE MASTER'S DEGREE

The M.A. program requires 30 semester units of *approved* post-graduate work, of which 21 units must be taken in residence, and at least 15 of which must be in 500-numbered (i.e., graduate level) courses. A minimum of 18 of the 30 must be Management studies courses. A maximum of 9 units may be transferred from other post-graduate work, subject to departmental approval. A minimum of 15 units must be taken after the student has been accepted in "classified" status.

Each M.A. student pursues a "field of concentration" in which a minimum of 14 units must be taken. These 14 units will include: two 500-level courses (8 units); one 400- or 500-level course (4 units) and two units of Mgt 599 which are applied toward the student's work on his/her thesis, project, or comprehensive examination.

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. Section 40510 of the California Administrative Code, Title V, defines in further detail the requirements for the Master's Degree. Students should also confer with the Dean of Graduate Studies.

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.

In consultation with his/her graduate advisor, each student admitted to the M.A. program must choose one of the following options as a framework for the 30 unit program of study:

- a) 28 units of coursework, plus 2 units for a thesis;
- b) 28 units of coursework, plus 2 units for a creative or investigative project;
- c) 28 units of coursework, plus 2 units for a written comprehensive examination

MANAGEMENT STUDIES COURSES

199. Student Instructed Course (1–4)

With faculty approval and supervision, advanced students may occasionally be permitted to offer selected topics as student-instructed courses. For offerings and enrollment details, check with Department office.

217. Introduction to COBOL (4)

A first course in programming using COBOL. Introductory concepts of computer systems and systems design as applied to Business Data Processing. Programming projects, including at least one from the student's field of interest.

218. Introduction to Computer Data Processing (4)

First course in the use of computers including a history and evolution of computers and programming. Programming languages and techniques with applications. New directions in computer technology. This course is designed for those students with little or no background in computer sciences.

225. Law and Society (4)

An analysis of the nature and functions of law in relation to social problems, private versus legal arrangements, legislation of morality, and the concepts of legal rights and responsibilities in a democratic society.

230. Financial Accounting Fundamentals (4)

A foundation course designed to provide a basic understanding of the fundamentals of the accounting process. Topics include the meaning and preparation of financial statements, and special reports as a basis for management decisions.

232. Accounting For Non-Accountants (4)

A course in the language of accountancy designed to provide a basic knowledge and understanding of financial statements, accounting problems, and data used in decision making. Not recommended for students intending to specialize in accounting.

245. Career Planning (3)

A course to empower individuals to design a systematic, practical and effective Life/Work Plan that is self-implemented.

300. 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.

315. Statistics for the Social Sciences (4)

Basic training in statistical analysis techniques. Application of statistical procedures

in the social and behavioral 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: Math 121 or 131.

317. Frontiers of Computer Science (1-4)

Current issues in computer science. May be repeated once for credit.

318. Introduction to Systems 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. Information Systems Design for Management (4)

To guide any work organization, information must be obtained, filed into a central data base, retrieved in decision-assisting reports, and distributed to appropriate managers. Students study the theory and practice the application of information systems management.

330A, 330B. Intermediate Accounting (4-4)

Current theory of accounting is emphasized in both courses.

Prerequisite: Mgt 230 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.

332. Managerial Accounting (4)

Course is designed to provide a knowledge and understanding of internal accounting for planning and control. Topics include capital budgeting, master planning budgeting, flexible budgeting, cost behavior patterns, responsibility accounting, cost control, direct costing, absorption costing, performance measurement, and the day by day internal reporting necessary for planning and controlling current operations.

Prerequisite: Mgt 230 or 232.

340. Theories in Human Resources (4)

Investment in human capital; i.e., rate-of-return analysis in assessment of the economic rationale for giving or getting training. Specific vs. general skill value.

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.

347. History of the Labor Movement (4)

Historical review of labor relations in the United States, with emphasis on development of the labor movement and management's response to a changing workforce.

Major issues, problems, and theories in the field of labor management relations. Case studies are used to apply and evaluate various management approaches.

349. Personnel Management (4)

Introduction to personnel practices in industrial fields; includes interviewing selection, training and counseling of employees. Job analysis, safety programs, and rating methods. Discussion of wage and salary administration.

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 the 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 230 or 232; Mgt 360.

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. Marketing Environment (4)

A comprehensive overview of the marketing system within a dynamic environment of economic, sociological, psychological, and political forces. Emphasis is placed upon critical evaluation of the role of marketing in contemporary society.

361. Advertising Management (4)

Planning for effective advertising, social impact of promotion; government regulations; role of advertising in media.

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.

365. Executive Decision Games (4)

Class will break into small groups in order to simulate business corporate executives meeting and dealing with decision making in areas such as marketing, finance, and policy. Computer simulation models may be involved. CR/NC only.

370. Introduction to Managerial Finance (4)

Consideration, at an introductory level, of the management of the company finance function. Alternate forms of the business enterprise: emphasis on the corporation; financial analysis and reporting, raising capital, financial budgeting and management, the banking system, the securities markets, and elements of international finance. Prerequisite: Mgt 230 or 232; Math 131 or equivalent; and Mgt 315, or equivalent.

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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 230 or 232.

374. Real Estate Practices (4)

Economic, financial, and legal principles of real estate; review of real estate transactions; contract, agency, and property interests; real estate valuation, investments, and management; land descriptions, statutory regulations of licensing; estate planning and conservation.

375. Money, Banking, and Management (4)

Financial systems of the Federal Reserve system, U.S. Treasury, national/international banking, and other financial institutions studied as they pertain to management objectives. Special attention given to: theory of monetary and fiscal policies; interest rates and supply of funds; and to economic interactions leading to inflation, recession, depression, growth, and stagnation. Alternative goals and policy measures examined.

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.

378. Principles of Insurance (4)

An introduction to the underlying principles of insurance, including a descriptive and analytical study of practices in the insurance industry.

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 (2)

This course provides for the teaching of special topics in Management Studies.

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 for Management (4)

An introduction to the use of models, simulation, and other quantitative methods in managerial decision making. Applications in accounting, finance, economics, and general management theory.

Prerequisite: Mgt 315 and Math. 121 or 131, or equivalent.

418. Intermediate Systems 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.

Prerequisite: Mgt 426, or consent of instructor.

425. 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.

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.

Prerequisite: Mgt 347, or 348 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.

Prerequisite: Mgt 330A and 330B, or consent of instructor.

433. Income Taxes (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 230.

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.

Prerequisite: 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.

Prerequisite: Mgt 330A and 330B.

440. Seminar in Human Resources Management (4)

Behavioral labor market theories applied to current personnel issues. Applications of human capital theory. Career progression, salary progression, performance and recruitment, all evaluated from a managerial viewpoint.

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.

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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.

Prerequisite: Mgt 344.

453. Small Business Consulting (4)

This course will focus on decision-making in functional areas of marketing, production and finance. Consulting with businesses in the community. Students, working in teams with faculty and professional backup, will help businesses solve such problems as: expansion; cost control; location studies, etc.

Prerequisites: Mgt 230 or 232, Mgt 351, Mgt 360.

455. Management of the Planning Process (4)

The organizational planning process from the perspective of managers of public and private institutions.

458. Operations Management (4)

Study of the processes and procedures used to carry out planned activities of all types of organizations. Includes the efficient and effective use of human, material, and financial resources; input and output measurement.

460. Marketing Management (4)

Decision-making in marketing through analysis, planning, implementation and control of marketing programs. Students make decisions in specific case applications concerning policies and practices of individual organizations.

Prerequisite: Mgt 360.

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)

A review, including practical applications, of the construction and analysis of marketing information to facilitate decision-making. Discussion of the use and abuse of proper research techniques, including ethical considerations.

Prerequisite: Mgt 360.

464. Consumer Behavior Seminar (4)

This course includes study and discussion of the major factors which influence consumer behavior. Topics include the development of relationships between consumer behavior and marketing strategy; the review of major determinants of lifestyle; and the analysis of the relationship of lifestyles to purchase decisions.

Prerequisite: Mgt 360.

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.

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 security characteristics and valuation; sources, selection, strategies, timing of investments, theory of portfolio management.

Prerequisite: Mgt 315 and Mgt 370.

474. Computer Simulation in Managerial Finance (4)

Students will be organized in groups to participate in a computer simulation game and make financial decisions in a firm. Application of techniques of managerial finance. Computer applications. Prerequisite: Mgt 370.

475. Real Estate Investments (4)

Lecture and discussion on various methods of acquiring, participating in, and evaluating real estate investments including both commercial and agricultural properties.

491. Seminar in Management Theory and Policy (4)

Group discussion of current issues in managerial and corporate policy, including, but not limited to marketing policy, investment policy, social responsibility, personnel policy, profit policy, etc. Prerequisite: Senior standing.

492. 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.

493. 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.

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.

498. Multinational Corporations and the Third World (4)

World economic integration effected by the multinational corporations of rich countries; international relations (both positive and negative) affected by their management. Evolution of managerial preferences for and against free trade; the multinational corporation's unique role and the Third World's unique business weapons.

499. Internship in Management (1–4)

Field experience in business or government. For upper division students in fields of their career or academic interests. Three hours per week per unit. Non-paid, with exception if appropriate. Make prior arrangements with Internship Coordinator. 4 units maximum in the major. CR/NC only.

518. Seminar in Systems Theory (4)

A scholarly evaluation of Systems Theory, embracing General Systems Theory, as a contribution to the Social Sciences.

Prerequisite: Mgt 318 or equivalent with consent of instructor.

530. Current Issues in Accounting Theory (4)

Survey of current topics, issues, and problems in accounting theory and application. Primarily intended for accounting and finance specialists interested in such topics as: income measurement; role of accountant and auditor in society; financial standards and reporting; public interest and social accounting. Topics vary to reflect current events in the accounting profession.

532. Seminar in Multinational Accounting (4)

Multinational dimensions of accounting; accounting for foreign currency transactions and inflation; transnational financial reporting and disclosure; international accounting standards and organizations; multinational taxation; and multinational information systems. Open to non-specialists by consent of instructor.

540. Seminar in Labor Markets (4)

Graduate study of definitions and analytic uses of data on labor force behavior.

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.

Prerequisites: Mgt 318, and Mgt 444.

550. Seminar in Organization and Management Theory (4)

A survey of the foundations of management theory (macrotheory) 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: Mgt 318, Mgt 350 or Mgt 450.

551. Research and Development Practicum (4)

Organizational and group processes for effective management of the research and development group. Practice and theory of goal-setting, problem-solving, decision-making, planning, evaluation, and control.

Prerequisite: Mgt 318 or Mgt 350.

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.

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: Mgt 318 and Mgt 444.

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.

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: Mgt 318 or Mgt 444.

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.

565. Seminar in Models and Simulation (4)

Students will study and discuss a variety of models that are used in management decision making. The class will be formed into small groups. Each group will participate in an executive decision game, simulating the major decisions of a profit making company.

Prerequisite: Senior or graduate standing.

570. Seminar in Managerial Finance (4)

Graduate study in the theory of finance and applied financial analysis.

Prerequisite: Mgt 370.

573. Seminar in International Finance (4)

Graduate study of institutions and interdependencies in world money markets.

Prerequisite: Mgt. 370.

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: Mgt 315 or Econ 317.

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: Mgt 318 or Mgt 350.

592. Seminar in Development of Management Theory (4)

An eclectic view of the history of management theories. Library research and class discussion. Survey of current state of the theory "jungle."

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 Studies. Maximum of 4 units may be applied toward the M.A. degree in Management Studies. Students must establish to a faculty sponsor that the work involved is clearly integral to the student's graduate studies. CR/NC grade only.

598. Seminar in Multinational Institutions and the Third World (4)

Focus on analysis of international economic forces, multinational institutions. Organizational and behavioral implications for labor and management. Topics selected from: the New International Economic Order, private banks and international lending agencies, international unions, international commodity cartels, the multinational corporation, transfers of technology, foreign aid and development planning. Emphasis on developing and improving methods of research and analysis. May be repeated for credit.

599. Master's Degree Directed Research (2)

Open only to fully classified graduate students. Provides units for preparation of thesis, project, or comprehensive examination.

MATHEMATICS

Department Chair: Thomas Volk

Faculty: William Barnier, Donald Duncan, Clement Falbo, Norman Feldman, R. H. Johnson, Frederick Luttmann, Thomas Nelson, Charles Phillips, Jean Stanek.

Department Office: Darwin 128, phone (707) 664-2368

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 the student 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. The B.S. 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. Because a degree in mathematics indicates mastery of abstract concepts, graduates are also sought after in many areas where mathematics may be of minimal importance but depth and clarity of thinking is essential.

BACHELOR OF ARTS IN MATHEMATICS

Major	Units
General Education	48
Major.....	43
Electives.....	33
TOTAL	124

COURSE REQUIREMENTS

161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major) ..	1
211—Calculus II with Analytic Geometry	4
220—Logic and Proof	2
231—Introduction to Differential Equations.....	3
261—Calculus III with Analytic Geometry	4
320—Modern Algebra	3
322—Linear Algebra.....	3
328—Foundations of Mathematics	3
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

TOTAL	44

BACHELOR OF SCIENCE IN MATHEMATICS**CONCENTRATIONS IN APPLIED MATHEMATICS AND COMPUTER SCIENCE FOR THE B.S. DEGREE**

Major	Units
General Education	48
Major.....	45 or 46
Electives.....	30 or 31
	124

COURSE REQUIREMENTS**A. Applied Math Concentration**

150—Computer Programming I	4
161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major) ..	1
211—Calculus II with Analytic Geometry.....	4
220—Logic and Proof	2
or	
242—Discrete Structures	3
222—Elementary Applied Linear Algebra	3
231—Introduction to Differential Equations.....	3
261—Calculus III with Analytic Geometry	4
331—Applied Differential Equations	3
345—Probability Theory.....	3
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

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TOTAL 45 or 46

B. Computer Science Concentration

150—Computer Programming I	4
151—Computer Programming II.....	3
161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major) ..	1
211—Calculus II with Analytic Geometry.....	4
222—Elementary Applied Linear Algebra	3
231—Introduction to Differential Equations.....	3
242—Discrete Structures	3
250—Assembly Language Programming	3
255—Programming Languages	3
261—Calculus III with Analytic Geometry	4
345—Probability Theory.....	3
352—Numerical Analysis.....	3
354—Data Structures and Algorithmic Analysis.....	3
406—Combinatorics	3

Electives: All electives must be chosen from Math 320, 322, 331, 340, 431, 441, 450, 452, 454 and must be approved by a mathematics advisor

3

TOTAL 46

CONCENTRATION IN STATISTICS FOR THE B.S. DEGREE**Major**

General Education	48
Major.....	43
Electives.....	33

124

COURSE REQUIREMENTS

150—Computer Programming I	4
or	
158F—Introduction to FORTRAN	2
161—Calculus I with Analytic Geometry (3 units in G.E., 1 unit in major) ..	1
211—Calculus II with Analytic Geometry	4
220—Logic and Proof	2
222—Elementary Applied Linear Algebra	3
261—Calculus III with Analytic Geometry	4
345—Probability Theory.....	3
365—Statistical Inference	3
466—Applied Statistical Methods I	3
467—Applied Statistical Methods II	3
Electives selected from a list of courses on file with the undergraduate advisor. That list includes Math 406, 441, 465, 515 and others.....	13–15
TOTAL	43

MINOR IN MATHEMATICS

Approval of the Department of Mathematics 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.

ENTRY-LEVEL MATHEMATICS EXAM

The passing of the entry-level Mathematics Exam or Math 099 or having an equivalent approved by the Mathematics Department is a prerequisite for Mathematics courses numbered 106, 107, 111, 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 396.

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

Mathematics 295, 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: Mathematics 295, 395, 499 and any course taken as “credit by challenge examination” (see the catalog section in Regulations and Procedures).

MATHEMATICS COURSES

ALGEBRA AND TRIGONOMETRY COURSES

099. Pre-College Mathematics (2)

Study and review of arithmetic, elementary algebra and computational geometry. Completion of this course satisfies the entry level skills requirement of the CSU system. Course credit is not applicable toward graduation. There may be a fee imposed for this course.

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: Math 099 or passage of the Entry Level Mathematics Examination or equivalent.

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: Math 105T or Math 099 or passage of the Entry Level Mathematics Examination or equivalent.

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.

CALCULUS COURSES

161-211-261. Calculus and Analytic Geometry (4-4-4)

161 includes limits, continuity, derivatives including trig 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 Math 108 or consent of instructor.

211 includes the calculus of exponential and logarithmic functions, trig and inverse trig 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, trig and inverse trig 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.

261 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.

217. Topics in Calculus for Management and the Social Sciences (3)

This calculus course is designed for management 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.

Prerequisite: Enrollment in a degree program other than Mathematics or Physical Sciences. Math 131 or 106 or their equivalencies.

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.

COMPUTER SCIENCE COURSES

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. Cross listed with CIS 150.

Prerequisites: 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. Cross listed with CIS 151.

Prerequisites: Math 150 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 interacting programming language.

Prerequisites: Any one of Math 106, Math 121, 131, or consent of instructor.

158C Introduction to COBOL (2)

A first course in 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 Math/CIS 158C and Management 217. Cross listed with CIS 158C.

Prerequisite: One year high school algebra.

158F Introduction to FORTRAN (2)

Special emphasis will be placed on programming style. The top-down and structured approaches will be used. FORTRAN is a science oriented programming language.

Prerequisites: Any one of Math 106, Math 121, 131, or consent of instructor. Cross listed with CIS 158F.

222. Elementary Applied Linear Algebra (3)

A course in vector and matrix algebra applied to science and computing. Topics include linear systems, vectors, matrices, Gauss-Jordan elimination, linear programming and transformations.

Prerequisites: One semester of calculus or Math 107.

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: Math 150, and one semester of calculus. Math 151 should be taken concurrently.

250. Assembly Language Programming (3)

Study of assemblers. Computer organization and elementary data structures.

Prerequisites: Math/CIS 150, Math/CIS 158F or Chem 381 or Physics 381 or consent of instructor. Cross listed with CIS 250.

255. Programming Languages (3)

Survey and comparison of programming languages with respect to syntax, data

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structures, binding times, storage allocation, control and implementation. The languages compared may be PASCAL, FORTRAN, SNOBOL, LISP, and SIMULA. Programs will be run covering cryptography, text analysis, and language translation. Prerequisite: Math/CIS 151. Cross listed with CIS 255.

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. Cross listed with CIS 350.

Prerequisite: Math/CIS 151 and either Math/CIS 158C or Management 217.

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. Cross listed with CIS 354.

Prerequisite: Math/CIS 151, 250 and Math 242.

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. Cross listed with CIS 450.

Prerequisite: Math/CIS 250 and Math 354 or consent of instructor.

452. Compiler Design and Construction (3)

Translation of arithmetic expressions. Formal models of grammars. Parsing. Possibly constructing a simple compiler. Topics covered could be chosen from: analysis and comparison of several languages; formal grammars and the languages they generate; compiler construction; lexical and syntactic analysis; code generation; the relation of context-free languages to pushdown automata; ambiguity. Cross listed with CIS 452. Prerequisites: Math/CIS 255 and Math /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.

Prerequisite: Math 242 or consent of instructor.

OTHER UNDERGRADUATE MATHEMATICS COURSES

111. Symmetry in the Arts and Sciences (3)

The mathematical theory of symmetry in the plane and in space will be explored, with emphasis on how it aids in understanding the causes and consequences of symmetry in natural and man-made objects. A central theme will be the contribution of mathematics to other fields, such as art & architecture; engineering; mechanical devices; music and dance; evolution and anatomy, crystallography; chemical bonding and atomic structure; philosophy; and mathematical proofs.

Prerequisite: Math 099 or passage of ELM Exam 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: Math 099 or passage of ELM.

131. Introduction to Discrete Mathematics (3)

A general education course designed to give students an understanding of discrete 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: Math 099 or passage of ELM.

175. M*A*T*H Colloquium (1) (1 unit per semester; may be repeated for 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.

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.

220. Logic and Proof (2)

This course will be concerned with topics relevant to logic and proof such as: basic tautologies, quantifiers, applications of logic to algebra and calculus, counter-examples, basic set theory, functions, relations, and mathematical induction.

Prerequisite: Math 211 or equivalent or consent of instructor. Transfer students should take Math 220 during their first semester here.

230. Techniques of Problem Solving (1) (1 unit per semester; may be repeated for 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 from recent examinations in the William Lowell Putnam Mathematical Competition, sponsored by the Mathematical Association of America.

Prerequisite: Consent of instructor.

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 3 units of C.I.P. credit may be applied toward a mathematics degree.

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.

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Systems of numeration, geometry, measurement, sets, logic.

Prerequisite: Three units of college mathematics and one of the following: Math 099, passage of Entry Level Mathematics Examination, or consent of instructor.

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. Isometrics in the Euclidean Plane. Non-Euclidean geometries; construction of geometries from fields.

Prerequisite: Math 105D or Math 107 or Math 108 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.

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, Riemann 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, characteristic functions, law of large numbers, and central limit theorem.

Prerequisite: Math 211, 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: Math 158F and Math 231 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. No more than 3 units of C.I.P. credit may be applied toward a degree.

406. Combinatorics (3)

Topic 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: Consent of instructor or Math 161.

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, queueing theory, game theory, P.E.R.T. least time path analysis, mathematical modeling of industrial problems.

Prerequisite: Math 322, 345.

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.

470. Mathematical Models in Biology (3)

Mathematical analysis of topics in ecology, genetics, physiology, developmental biology and health models. Includes a study of population dynamics—predator-prey, migration and epidemics, and a study of compartmental analysis and the general process of modeling in biology.

Prerequisite: Math 217 or 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)

Field experience in mathematics, computer science or statistics. Enrollment by prior arrangement only. May be repeated for up to 3 units of credit. This course is CR/NC only.

STATISTICS COURSES

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: Math 099 or passage of ELM.

345. Probability Theory (3)

Combinatorial probability, random variables, probability densities, distribution functions, characteristic functions, law of large numbers, and central limit theorem.

Prerequisites: Math 211 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.

Prerequisites: Math 211, and Math 345 or consent of instructor.

465. Theory of Statistical Inference II (3)

General Linear Hypothesis, Multivariate Analysis, Stochastic processes.

Prerequisite: Math 345 or consent of instructor.

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.

Graduate Courses

515. Advanced Probability Theory (3)

Order statistics, time series and spectral analysis.

Prerequisite: Math 345 or consent of instructor.

520. Nonlinear Differential Equations (3)

Approximation methods for solving nonlinear differential equations. Iterative techniques. Theory of convergence. Difference equations.

Prerequisite: Math 430 or consent of instructor.

525. Numerical Analysis (3)

Selected topics in numerical analysis which are of present day interest to the applied mathematician.

Prerequisites: Math 331, and 352 or equivalent or consent of instructor.

540. Functional Analysis (3)

Topics studied are: abstract linear spaces, linear operators, topological spaces, including Hausdorff. Normed linear spaces, especially Banach and Hilbert. Minkowski functionals, differential and integral equations, L^2 kernels.

Prerequisites: Math 440 or 570 and Math 418 or consent of instructor.

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)

MEXICAN-AMERICAN STUDIES

Coordinator: Manuel Hidalgo

Faculty: Esteban Blanco, Andrea Neves.

Contributing and Part-time Faculty: Hermenia Menez, Sally Hurtado, and Roberto Ramirez.

Department Office: Nichols Hall 214, phone (707) 664-2369

The Mexican American Studies Major is designed to give students an opportunity to examine the Chicano Experience. Using an interdisciplinary approach, students study the historical, political, social, economic, educational and cultural developments which affect the Chicano community. Further, the major provides students an opportunity to examine United States society from the perspective of a linguistic, ethnic and national minority. The major is designed to provide inquiry skills necessary for a liberal arts education. The program gives students perspective and encourages them to use the information and skills to go beyond their own culture to examine the different ways in which other cultures have developed in a national and worldwide arena.

Students in the major receive the necessary broad information through the core requirements and then are given an opportunity to complete the major by selecting courses in specific areas of study. The B.A. in Mexican American Studies also provides the student an opportunity to prepare for graduate work in Chicano Studies, Education, Social Work, Law/Business and related areas in the traditional disciplines. The 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.

MAMS 219 (Mexican American Culture) and MAMS 220 (Mexican American Arts and Literature) satisfy the University's General Education Ethnic Studies Requirement.

BACHELOR OF ARTS IN MEXICAN-AMERICAN STUDIES

Major	<i>Units</i>
General Education	48
Major	40
Core Courses	20
Area of Concentration	20
Electives or Supporting Courses	36
Total	124

COURSE REQUIREMENTS

A. Core

	<i>Units</i>
MAMS 445—Chicano History	4
MAMS 451—Chicano Humanities	4
MAMS 480—Chicano Studies Seminar	4
MAMS Core Elective, select two (2) from the following courses:.....	8
MAMS 225—Spanish for Chicanos	
MAMS 303—Chicano Identity	
MAMS 325—Language of the Barrio	
MAMS 326—Bilingualism in the Chicano Community	
MAMS 354—Politics and the Chicano	

MAMS 356—Economics of the Chicano	
MAMS 374—Chicano Literature	
MAMS 405—The Mexican American Family	
MAMS 432—Chicano Community Development	
MAMS 456—Bilingual/Cross-Cultural Education	
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.

TOTAL UNITS: AREA OF CONCENTRATION (Required)	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.

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

Students should apply to the Education Department for the appropriate credential programs. (See catalog sections dealing with degrees and credential programs.)

A. Mexican American Studies/Social Science Single Subject Waiver Program

This waiver program was developed to meet the Ryan Act Single Subject waiver 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 was developed to meet the Ryan Act 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 Subjects/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:
MAMS 225 (Spanish for Chicanos) or

MAMS 325 (Language of the Barrio) 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 490—Chicano Children's Literature.....	4
MAMS 480—Chicano Studies Seminar	4

TOTAL UNITS CORE COURSES..... 28

- b. Supporting Courses: 12
 From: MAMS, Latin American Studies, Spanish, Ethnic Studies, based on consultation with advisor, transcript evaluation, and review of the Language and Culture Assessment

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. Bilingual/Cross-Cultural Specialist Teaching Credential

Please consult with the credentials section of this catalog for program requirements.

D. 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.

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.

203. Seminar in Communication Skills (3) Department Faculty

An analysis of the principles of methods of discussion skills. Emphasis upon problem solving and critical thinking as they apply to the written and spoken word. Course only offered 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.

219. Mexican American Culture (4) 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 (4) Blanco, 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 (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.

301. Experimental Courses (1-5)

303. Chicano Identity (4) Blanco

A study of the social, psychological, geographical and racial factors that explain the character and identity of Mexican Americans.

309. Mexican Guitar and Folk Songs (2) Department Faculty

A historical survey of Mexican and Chicano music. The course also includes instruction in the Mexican guitar and Mexican and Chicano folk song accompaniment (corridos). Course only offered for Credit/No Credit. (1 unit lecture, 1 unit practicum)

310. Mexican American Folk Arts and Crafts (3) Blanco

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.

325. Language of the Barrio (4) Department Faculty

A study of the origins, developments, and present characteristics of the Spanish language found in Chicano communities of the Southwestern United States. The course will focus on specialized dialects, including Calo, while also developing the students proficiency in standard Spanish.

Prerequisite: MAMS 225, Spanish for Chicanos or consent of the instructor.

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.

330. Chicano and the Law (4) Department Faculty

A historical examination of the law, the legal system and the legal heritage in the Chicano community. Students will review case law, statute law, and legal institutions, with a concentration on the recent developments in the law resulting from the Civil Rights Movement.

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.

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344. Chicano Perspectives on Mexican History (4) Hidalgo

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.

351. Chicano Thought (4) Blanco

Intellectual history of the Chicano as reflected in Nahua, European and Mexican thought, with an emphasis on contemporary Chicano thought.

352. Aztec and Maya Philosophy (4) Blanco

An analysis of the underlying philosophical explorations, assumptions and ideas of Meso-America, from ancient times to the arrival of Cortez and Christianity. A cross-cultural comparative approach will be utilized to examine its influence on the indigenous populations and their descendants in the Americas.

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 (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 (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) Blanco, Hidalgo

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.

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 (4) Cesena, Hidalgo

A study of family unity in Mexican-American culture and the roles of family members. To include: courtship, marriage, child rearing practices, changing sex roles, the migra-

tory family, etc. Also, the relationship of Mexican-American family with other institutional factors in Anglo Society.

406. La Chicana (4) Department Faculty

A historical analysis of the role played by women in Mexican-American society from Pre-Columbian times to the present.

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.

446. Research Seminar Local Chicano History (4) Hidalgo

Research seminar in local Chicano history, nineteenth and twentieth century, using primary source materials. Includes the methods and techniques of oral history. 2 unit seminars, 2 units field work.

Prerequisite: MAMS 445 or consent of instructor.

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 Humanities (4) Blanco

An analysis of the literature, philosophy, religion, art and the performing arts as they have developed in the Mexican American society. Course meets Ethnic Studies GE requirement under Humanities.

456. Bilingual/Cross-cultural Education (4)

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.

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477. Mexican American Art Workshop (1–4) Blanco

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 mural painting.

(Unit value of lecture and practicum to be announced.)

479. Chicano Art History (4) Blanco

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.

480. Chicano Studies Seminar (4) Hidalgo, Blanco

An in-depth analysis of selected topics from the area of Chicano Studies. Using current analytical models and research techniques, the students will examine a specific topic for research and presentation.

490. Chicano Children's Literature (4)

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

Department Coordinator: E. Gardner Rust

Faculty: Ellen Amsterdam, Glenn Blair, Warren Dennis, Margaret Donovan-Jeffry, Arthur Dougherty, Joann Feldman, James Frieman, Karen Gottlieb, Mel Graves, Arthur Hills, William Johnson, Carolyn Lewis, Gordon Moore, Walter Oster, Phillip Rosheger, Brenda Schuman-Post, David Sloss, Larry Snyder, Thomas Stauffer, Arthur Storch, Glen Swarts, Laxmi Tewari, Marilyn Thompson, Randy Vincent, Bonnie Williams.

Department Office: Ives 206, phone (707) 664-2324

The Music Department offers a four-year program designed to give students comprehensive preparation in theory, history and performance. Special concentrations are available in performance, music education and Jazz and Commercial Music. Free private instruction is provided to qualified students on all standard musical instruments and in voice. The Department emphasizes extensive ear-training, the development of perceptive listening skills, 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 experience in performance. While encouraged to develop advanced proficiency in their performing specialties, and to take advantage of the extensive opportunities available for solo, chamber and large ensemble performance, students are also expected to pursue a broadly diversified program of class study.

The 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.

A program for students working toward a teaching credential is included within the curriculum, as are courses appropriate for general education requirements.

The Department of Music is a fully accredited member of the National Association of Schools of Music.

Beyond the Degree

A major in music prepares students for 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 (by obtaining a music teaching credential on campus) or have chosen to teach privately (no credential required). 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 and performance; music education; music therapy; and music librarianship.

MINORS FOR MUSIC MAJORS

Students majoring in Music are encouraged to undertake a minor to increase opportunities for post-graduate work or employment. If a student is planning graduate work in music, he/she should consider a minor in Foreign Languages. Students with an eye toward business or a career in media should consider minors in Management, Recording or Communication Studies. These and other possibilities should be worked out in detail with a faculty advisor.

BACHELOR OF ARTS IN MUSIC

Major

	<i>Units</i>
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. Students planning to do graduate work in music are urged to take fourteen units in French or German.

Proficiency Expectations in Piano and Aural Skills

Entering students must either pass a challenge exam for Music 306 (Keyboard Skills Workshop) or begin immediately to develop technique sufficient to pass the course. Accomplished performers on a chordal fretted instrument may petition the faculty, in writing, for permission to substitute Music 304 (Fretboard Skills Workshop) for Music 306. In any case, students who have not developed any piano skills should expect to take at least four semesters of piano classes (Music 101, 102, 103 and 104), beginning in the first semester of work as a music major. Enrollment in an appropriate piano class is required for enrollment in theory classes.

All students wishing to enter as music majors in the junior year will be required to take a challenge exam for Aural Skills Workshop (Music 305) during their first week of instruction at Sonoma State University. Students who do not pass this test will be advised to take Music 305 or its prerequisites.

Transfer students will also be expected to take the challenge exam for Music 306 (Keyboard Skills Workshop) during their first week of instruction and will be advised to take Basic Piano classes if necessary. Normally, upper division work in music at Sonoma State University assumes keyboard facility sufficient to pass Music 306.

Lower Division Program

The core of the lower division program for music majors is a sequence of six 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 and performance will be required to take additional classes which develop skills in these areas.

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 upper division program most appropriate to their skills and needs.

Every music major will be required to complete a Senior Project of one or two units, depending on its scope. Generally undertaken during the last semester of residence, the Senior Project may take the form of directed research leading to a lecture-demonstration, a senior recital, an extended composition, or the preparation of a performing edition, etc. Students whose emphasis is performance must register for Music 491, culminating their studies in a recital.

The Performance Requirement

Music Department ensembles include Orchestra, Chorus, Chamber Singers, Chamber Music, Symphonic Band, Jazz Improvisation, Experimental Music Group, Opera Workshop, Concert Jazz Ensemble, Contemporary Jazz Ensemble, Piano Ensemble, and workshops in non-Western music.

All music majors must participate in ensembles during at least six semesters of undergraduate work. Except for the Performance Concentration, at least two semesters of this requirement must be met in vocal ensembles. At least two semesters of this work must be done at Sonoma State University.

Students enrolled in Studio Instruction must agree to perform in ensembles designated as appropriate by the music faculty, unless excused by their studio instructor.

A fee of \$10.00 per semester is charged for use of Music Department instruments and equipment.

Concert Attendance

Music majors are expected to attend a minimum of eight scheduled department concerts per semester.

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.

CONCENTRATIONS WITHIN THE 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 Musicianship and Listening Skills requirements, plus a group of upper division courses appropriate to the student's field of study. See Advisor for details.

In all cases, the student's course work will culminate in the Senior Project, a 1-2 unit course in which the student demonstrates competence in one area of specialization by means of a performance, composition, research paper, etc.

STANDARD MUSIC MAJOR**Course Requirements**

	<i>Units</i>
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Popular and Classical	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 250AB Introduction to Masterworks	3, 3
Music 305 Aural Skills Workshop	1
Music 306 Keyboard Skills Workshop	1
Music 350 Musics of the World	3
Two of the following four courses:	6
Music 351 History—Early Western Music (3)	
Music 352 History—Common Practice Period (3)	
Music 353 History—Twentieth Century Music (3)	
Music 354 History of Music in the U.S. (3)	
Music 490 Senior Project	1–2
Additional Upper Division Music Courses	4–5
TOTAL	43

MUSIC EDUCATION CONCENTRATION

The Concentration in Music Education is designed to provide the musical skills required for service as a teacher of music in the public school system.

The candidate who elects the Music Education Concentration will meet all of the core requirements of the music major for the B.A. degree in Music. The candidate will also take additional music and music education courses designed to prepare him/her for admission to the Single Subject Credential Program.

Acceptance into the credential program requires a separate application to the Education Department. This application is generally submitted during the junior year. All candidates must have a recommendation from the Department of Music and must have successfully completed Music 305 in order to be eligible for acceptance into the credential program.

In addition to the courses prescribed for the Concentration in Music Education, Music 401, 402 and 431 are strongly recommended. The student is also encouraged to select, in consultation with his/her advisor, one of the following courses as a general elective: MAMS 309, MAMS 366 or AMCS 300.

The courses listed below constitute the Music Education Concentration and the Single Subject Waiver Program in Music.

Course Requirements

	<i>Units</i>
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Popular and Classical	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 250AB Introduction to Masterworks	3, 3

Music 305	Aural Skills Workshop	1
Music 306	Keyboard Skills Workshop	1
Music 314	Orchestration and Choral Arranging.....	3
Music 350	Musics of the World.....	3
Two of the following four courses:		6
Music 351	History—Early Western Music (3)	
Music 352	History—Common Practice Period (3)	
Music 353	History—Twentieth Century Music (3)	
Music 354	History—Music in the U.S. (3)	
Music 400	Theory of the Elementary School	3
Music 415	Beginning Voice Class.....	1
Music 422	Class Instruction in Strings.....	1
Music 423	Class Instruction in Woodwinds	1
Music 424	Class Instruction in Brass	1
Music 429	Class Instruction in Percussion	1
Music 430	Choral Conducting	2
Music 450	Workshop in non-Western Music	1
Music 490	Senior Project	1
TOTAL		52

Note: Music 415, 422, 423, 424 and 429 may be taken as lower division courses (115, 122, 123, 124, 129).

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 will either be transferred to another concentration within the major or may be allowed one additional semester to make up any deficiencies.

Course Requirements

Studio: 15 units

2 semesters private instruction * (2 units) and completion of Music 197, first year jury exam (1 unit)

2 semesters private instruction (2 units) and completion of Music 297, second year jury exam (1 unit)

2 semesters upper division private instruction (2 units) and completion of Music 397, third year jury exam (1 unit)

2 semesters upper division private instruction (4 units) plus Music 491, Senior Recital (2 units)

Performing Ensembles: Minimum of 8 units. 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.

* Private instruction courses: Music 133/433, 134/434, 137/437, 138/438, 139/439, 141/441, 143/443.

Additional Courses: 28 units	<i>Units</i>
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Popular and Classical	3
Music 121 Theory III Laboratory: Ear Training	2
Music 250AB Introduction to Masterworks	3,3
Music 210 Theory and Analysis IV: Chromatic Harmony.....	3
Music 220 Theory IV Laboratory: Ear Training.....	2
Music 305 Aural Skills Workshop	1
Music 306 Keyboard Skills Workshop	1
Music 320 Theory V Laboratory: Ear Training	2
One History and Analysis course to be selected from the following with the approval of the Department Performance Option coordinator.....	3
a) Music 351 History of Early Western Music (3 units)	
b) Music 352 History—Common Practice Period (3 units)	
c) Music 353 History—Twentieth Century Music (3 units)	
d) Music 350 Musics of the World (3)	
e) Music 354 History—Music in the U.S. (3)	
TOTAL units in the Performance Option.....	51

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.

Jazz and Commercial Music Concentration students may choose to give a performance as their Senior Project. They must, however, enroll through Music 490; Music 491, Senior Recital, is restricted to Performance Concentration students.

Course Requirements

CORE COURSES	<i>Units</i>
Music 110 Theory II: Popular and Classical	3
Music 120 Theory II Laboratory: Ear Training	2
Music 111 Theory III: Popular and Classical	3
Music 121 Theory III Laboratory: Ear Training	2
Music 250AB Introduction to Masterworks	3,3
Music 210 Theory and Analysis IV: Chromatic Harmony.....	3
Music 220 Theory IV Laboratory: Ear Training.....	2
Music 262AB Recording I and II	2,2
Music 305 Aural Skills Workshop	1
Music 306 Keyboard Skills Workshop	1
Music 389AB Jazz Improvisation	1,1
Music 392 Jazz Piano	1

ELECTIVES

Select one course from each group:

HISTORICAL/CULTURAL BACKGROUND	4
Music 350 Musics of the World (3)	

Music 353	History: 20th Century Music (3)	
Music 354	History: U.S. Music (3)	
POP/JAZZ HISTORY		3
Music 318	History of Commercial and Popular Music (3)	
Music 319	History of Jazz (3)	
Two courses from this group:		
COMPOSITION AND ARRANGING SKILLS		4
Music 316	Stage Band Composition and Orchestration (2)	
Music 317	Vocal/Small Band Arranging (2)	
Music 331	Songwriting (2)	
PERFORMING ENSEMBLES		5
Senior Project		1
TOTAL UNITS REQUIRED		46

MINOR IN MUSIC

The Music Department offers two minors. Students may elect either a liberal arts 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 for a description of the Career Minors in Recording Technology and in Arts Management.) At least six units of the minor must be taken at Sonoma State University.

MINOR IN MUSIC (LIBERAL ARTS)

To complete this minor, a student must take Music 250A or B (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, all 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:		<i>Units</i>
Music 110	Theory II: Classical and Popular	3
Music 120	Theory II Laboratory: Ear Training	2
Music 111	Theory III: Classical and Popular	3
Music 121	Theory III Laboratory: Ear Training	2
Music 389AB	Jazz Improvisation I and II	1,1
Music 392	Jazz Piano	1

ELECTIVES:

Choose one course from each group:

JAZZ/POP HISTORY		3
Music 318	History of Popular and Commercial Music (3)	
Music 319	History of Jazz (3)	
COMPOSITION AND ARRANGING SKILLS		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

Diatonic harmony in both traditional and popular music. Music majors must enroll concurrently in Music 102 and Music 120 or demonstrate equivalent competencies. Prerequisites: Music 105 or equivalent, and placement test.

111. Theory III: Popular and Classical (3) Department Faculty

Further study of diatonic harmony. Introduction to harmony based on chord extensions and substitutions. Music majors must enroll concurrently in Music 103 and Music 121 or demonstrate equivalent competencies. Prerequisites: Music 110 or equivalent, 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 105 or equivalent, and placement test.

121. Theory III Laboratory: Ear Training (2) Department Faculty

Continuation of Theory II Laboratory.

Prerequisites: Music 120 or equivalent, and placement test.

122. Class Instruction In Strings (1) Sloss, Amsterdam

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

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

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, Lewis

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

Also offered for upper division credit as Music 429. May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

132. Voice Workshop (1) Lewis, Rust

This class provides an opportunity for students who study voice privately to sing for each other. Voice faculty coach students in vocal technique, interpretation, stage techniques and repertory. Also offered for upper division credit as Music 432. May be repeated for credit.

133. Private Instruction—Strings (1-2) Sloss, Stauffer, Graves, Gottlieb

Private instruction on one instrument for advanced students. May be repeated for credit.

Prerequisite: Audition.

134. Private Instruction—Woodwinds (1-2) Blair, Schuman-Post, Williams

Private instruction on one instrument for advanced students. May be repeated for credit.

Prerequisite: Audition.

137. Private Instruction—Brass (1-2) Moore, Swarts

Private instruction on one instrument for advanced students. May be repeated for credit.

Prerequisite: Audition.

138. Private Instruction—Percussion (1-2) Storch

Private instruction on percussion instruments for advanced students. May be repeated for credit.

Prerequisite: Audition.

139. Private Instruction—Keyboard (1-2) Thompson, Donovan-Jeffry, Snyder, Hliis

Private instruction on one keyboard instrument for advanced students. May be repeated for credit.

Prerequisite: Audition.

141. Private Instruction—Voice (1-2) Lewis, Rust

Private voice instruction for advanced students. May be repeated for credit.

Prerequisite: Audition.

143. Private Instruction—Guitar (1-2) Rosheger, Vincent

Private guitar instruction for advanced students. May be repeated for credit.

Prerequisite: Audition.

144. Private Instruction—Non-Western Instruments (1-2) Tewari

Private instruction on non-Western instruments for advanced students. May be repeated for credit.

Prerequisite: Audition.

148. Piano Workshop (1) Snyder, Thompson

This class provides an opportunity for students who study piano privately to play for each other. Piano faculty coach students in piano technique, interpretation, stage techniques and repertoire. Also offered for upper division credit as Music 448. 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 option.

199. Student Instructed Course (1-3)

(See Regulations and Procedures.) Topic will differ each semester.

210. Theory and Analysis IV: Chromatic Harmony (3) Department Faculty

Chromatic harmony and contrapuntal techniques. Students must enroll concurrently in Music 104 and Music 220 or demonstrate equivalent competencies.

Prerequisites: Music 111 and Music 121 or equivalents, and placement test.

220. Theory IV Laboratory: Ear-Training (2) Department Faculty

Advanced sight-singing, dictation and keyboard harmony.

Prerequisites: Music 121 or equivalent, and placement test.

250AB. Introduction to Masterworks (3) (3) Department Faculty

An introductory course with lectures and demonstrations dealing with the music of the Western Classical tradition. Either one is acceptable as three units of the General Education Humanities requirement.

261. Introduction to Electronic Music (2-3) Johnson

Survey of approaches to electronic music from 1945 to the present. Examination of characteristic examples of *musique concrète*, *electronische 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.

Prerequisite: 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 option.

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, intended to develop further the skills gained in Music 220.

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 IV, with an emphasis on twentieth century music. Students must enroll concurrently in Music 306 and Music 320, or demonstrate equivalent competencies. Prerequisites: Music 210 and 220 or equivalents, and placement test.

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) Oster

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.

Prerequisites: Music 111 or consent of instructor.

317. Vocal/Small Band Arranging (2) Department Faculty

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.

Prerequisites: Music 111 or consent of instructor.

318. History of Popular and Commercial Music (3) Johnson

An overview of popular music and of the music business from medieval times to the present. Consideration of the economic, social and cultural conditions which gave rise to popular music, especially in the United States. The effects of recording and broadcast technology on popular music and on the music business.

319. History of Jazz (3) Department Faculty

The history and development of jazz from its origin as a blending of West African and European musical traditions through minstrelsy, blues, spirituals, ragtime, swing, bebop and the modern era.

320. Theory V Laboratory: Ear-Training (2) Department Faculty

Continuation of Theory IV Laboratory, with an emphasis on twentieth century music. Prerequisites: Music 220 or 305.

321. Piano Repertoire (1) Snyder, Donovan-Jeffry, Feldman, Thompson

The study and interpretation of keyboard music from the Renaissance to the present. Attention is given to ornamentation, style, and techniques; emphasis is placed on performance in class by individual students. May be repeated for credit. Prerequisite: Completion of Music 104 or equivalent standing.

323. Chamber Singers (1-2) Frieman

Study and performance of chamber choral literature. May be repeated for credit.

Prerequisite: Audition.

324. University Singers (1-2) Frieman

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) Frieman

Study and performance of music for large chorus, especially choral/orchestral works. Admission to the class is by audition. May be repeated for credit.

326. Piano Ensemble (1) Snyder, Donovan-Jeffry, Feldman, Thompson

The study and performance of literature for piano ensembles. May be repeated for credit.

Prerequisite: Consent of instructor.

327. Symphonic Band (1) Dougherty

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) Sloss

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 other 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.

332. Experimental Music Workshop (1) Johnson

Exploration through performance and research of new approaches to composition, performance, instrument design and construction, and notation since 1950. Study and practice of different types of improvisational frameworks and controls; investigation and new relationships between notation and performance; possible uses of electronic technology as a shaping force in composition and improvisation.

340. Acting and Directing for the Lyric Theater (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.

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 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, Tewari

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 and Analysis of Early Western Music (3) Hills

A course integrating the history and analysis of music from plainchant through the late Renaissance (900–1600).

Prerequisite: Music 200A or equivalent, and consent of instructor.

352. History and Analysis: Common Practice Period (3) Hills, Amsterdam, Rust, Johnson

A course integrating the history and analysis of music from the early Baroque through the late Romantic periods (1600–1900).

Prerequisite: Music 200B or equivalent; also Music 210 and 220 or consent of instructor.

353. History and Analysis of Twentieth Century Music (3) Feldman, Johnson

A course integrating the history and analysis of music from Debussy to the present.

Prerequisite: Music 200B or equivalent; also Music 310 and 320 or consent of instructor.

354. History and Analysis of Music in the United States (3) Hills

A course integrating the history and analysis of the various musical genres that have flourished in this country from Colonial times to the present.

Prerequisite: Consent of instructor.

360. Recording Studio: Performance and Production (1–2) Department Faculty

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.

361. Electronic Music: Sound Synthesis and Control (2–3) Johnson

Study of the design and operation of analog and digital synthesizers, with application to a variety of musical contexts. Emphasis is placed on developing skill in the use of Buchla and Syntauri equipment in the SSU Electronic Music studio; students are also encouraged to bring their own equipment for discussion and analysis.

Prerequisite: Music 261 or equivalent.

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.

380. Studies in American Music (1-3) Department Faculty

Detailed consideration of a particular aspect of the music of a country in the Western Hemisphere.

Prerequisite: Consent of instructor.

385. Workshop in Commercial Music (1-2) Department Faculty

Performing ensemble experience in a context which emphasizes arranging and performance in a number of commercial styles.

389AB Jazz Improvisation (1, 1) Graves

Explores a variety of improvisation techniques that are directed toward improving communication, melodic phrasing, rhythmic skills, listening skills and other knowledge needed to improvise on a variety of music.

Prerequisite: Consent of instructor.

391. Concert Jazz Ensemble (1) Oster

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) Oster

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.

394. Choral Jazz Ensemble (1) Department Faculty

Rehearsal and performance of literature arranged for choral jazz performance; development of basic skills in jazz singing, including scat singing.

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 option.

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.

401. Instrumental Literature, Organization and Materials (2) Department Faculty

A survey of the organization of instrumental music programs: scheduling, budgeting; development of instructional programs; teaching techniques; performance materials for wind, jazz, chamber ensembles and orchestra; program planning; equipment and library management; organization of student activities in instrumental music. Open to upper division music majors and graduate students only.

402. Choral Literature and Methodology (2) 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.

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

May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

423. Class Instruction in Woodwinds (1) Department Faculty

May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

424. Class Instruction in Brass (1) Department Faculty

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.

427. Studies in Musical Analysis (1-3) Department Faculty

Detailed examination of music from a particular style or period. May be repeated for credit with consent of instructor.

Prerequisite: Music 305 or equivalent, and consent of instructor.

428. Intermediate Voice Class (1) Rust, Lewis

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

May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

430. Choral Conducting (2-3) Frieman, Rust

Basic conducting techniques, and techniques of choral rehearsal and performance.

Prerequisites: Music 305, 306, and either 352 or 353, or consent of instructor.

431. Instrumental Conducting (2-3) Sloss

Advanced conducting techniques through the study of selected instrumental works. The course will include score reading at the piano.

Prerequisite: Music 430 or consent of instructor.

432. Voice Workshop (1) Lewis, Rust

This class provides an opportunity for students who study voice privately to sing for each other. Voice faculty coach students in vocal technique, interpretation, stage techniques and repertoire. May be repeated for credit.

433. Private Instruction—Strings (1-2) Sloss, Stauffer, Graves, Gottlieb

434. Private Instruction—Woodwinds (1-2) Blair, Schuman-Post, Williams

437. Private Instruction—Brass (1-2) Moore, Swarts

438. Private Instruction—Percussion (1-2) Storch

439. Private Instruction—Keyboard (1-2) Donovan-Jeffry, Hills, Snyder, Thompson

441. Private Instruction—Voice (1–2) Lewis, Rust

443. Private Instruction—Guitar (1–2) Rosheger, Vincent

444. Private Instruction—Non-Western Instruments (1–2) Tewari

445. Private Instruction—Composition (1–2) Feldman, Johnson

Private instruction in composition for advanced students. May be repeated for credit. Corequisite: Music 425.

446. Private Instruction—Conducting (1–2) Sloss, Frieman

Private instruction in conducting for advanced students. May be repeated for credit. Prerequisite: Audition.

448. Piano Workshop (1) Snyder, Thompson

This class provides an opportunity for students who study piano privately to play for each other. Piano faculty coach students in piano technique, interpretation, stage techniques and repertory. May be repeated for credit.

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.

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.

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.

461. Electronic Music Composition (2–3) Johnson

Student-designed projects in composition. Analysis and discussion of specific compositions and/or consideration of specific sound synthesis or control methods will be related to compositional interests of students in the class. May be repeated for credit. Prerequisite: Music 262A and 361 or consent of instructor.

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.

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.

Prerequisite: Music 210, 305, at least one History and Analysis course (Music 351, 352, or 353), and consent of instructor.

491. Private Instruction—Senior Recital (2) Department Faculty

Preparation for and presentation of a Senior Recital as a culmination of the music major for performers. Limited to students enrolled in the Performance Option. To be taken within the last two semesters of completion of the Option.

Prerequisites: Music 305, all other studio instruction units required for the Option, and consent of instructor.

495. Special Studies (1–4) Department Faculty

Contact with instructor specifying work to be completed and a regular schedule of contact hours necessary.

Prerequisite: 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.

NATIVE AMERICAN STUDIES

Coordinator: William V. Smith

Contributing and Part-time Faculty: Mary Taylor, David W. Peri, Herminia Menez, Shirley Silver, Albert Wahrhaftig

Department Office: Nichols Hall 214, phone (707) 664-2458

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. American Indian students, especially, might be interested in the classes offered in tribal government and management. 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.

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

Total Units Required	20 Units
NAMS 200—Introduction to Native Americans.....	4 Units
NAMS 205—Introduction to Native American Arts	4 Units
NAMS 301—Native California History & Culture	4 Units
NAMS 340—The Contemporary Native American	4 Units
Supporting Courses (selected from the following NAMS course offerings)	4 Units

SUPPORTING COURSES

Human Service

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 348—The Role of Women in Native American Culture—4 units
 NAMS 351—Native American Community Development—4 units

Cultural Studies

NAMS 331—Cultures of Eastern North America—4 units
 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
 NAMS 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 229 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 Californian History & Culture (4)

A survey of the cultures and histories of Native California Indians.

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.

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, Tsimshian, 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 America (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, 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.

348. The Role of Women in Native American Cultures (4)

A study and analysis of the changing role, status, and function of women in traditional and contemporary Native American cultures.

350. Introduction to Museology (4)

Examines the general principles of management of public museums, the theory and technique of recording and caring for artifacts and the principles of museum design and display. Particular emphasis will be upon the preserving, handling and displaying of American Indian artifacts.

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.

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.

370. American Indian Languages (4)

A survey and analysis of the relationship between the languages and cultures of the Native American people. Cross-listed with Anthropology 386.

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.

NURSING

Department Chair: Janice Hitchcock

Faculty: Susan Berg, Dorothy Blake, Sandra DeBella-Baldigo, Laurel Freed, Carol Landis, Vivian Malmstrom, Leonide Martin, Virginia Meyer, Rose Murray, Kathleen Puntillo, Mary Searight, Sue Thomas.

Department Office: Nichols Hall 262, phone (707) 664-2465

The nursing major at Sonoma State University is planned specifically for registered nurses, offering the nurse with an associate degree, or the equivalent, an opportunity to proceed with nursing and general education and obtain a Bachelor of Science Degree in Nursing. Fully accredited by the National League for Nursing, Sonoma's "Second Step" program is a two year upper division major designed to articulate with two year community college nursing programs.

A registered nurse graduate of an associate degree nursing program in most cases will have completed all prerequisites for the Sonoma program.

A registered nurse graduate of a diploma nursing program should contact a community college that has established procedures for granting equivalent college credit for diploma nursing school course work. In most cases, diploma school graduates will need to take general education breadth requirements to meet the 30-unit prerequisite for state college admission. After completing a specified number of units, the student should request the community college to evaluate the nursing school course work and grant appropriate credit.

The purpose 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. Processes of communication, decision-making, teaching-learning, self awareness and change are emphasized. A cross-cultural approach to understanding health problems is utilized. The curriculum provides both a liberal arts background and a strong career base which incorporates a generalist orientation and an area of concentration.

The first year of the nursing program focuses upon community health nursing, through a two-semester, integrated process-oriented curriculum. The senior year offers an opportunity to select episodic or distributive nursing as an area of concentration.

The Department of Nursing accepts students to the nursing major in the Fall semester only. The number of full-time students admitted to the nursing major is established each year and is dependent on available university resources and clinical facilities. A limited number of part-time students is also admitted, following the same admission procedures and meeting the same admission criteria as those established for full-time study.

The Department defines full-time and part-time students as follows: (1) a student enrolled in full-time study in the nursing major is enrolled in a regular sequence of courses which allows completion of the program in four semesters; and (2) a student enrolled in part-time study in the nursing major is enrolled in a sequence of courses in the major which allows for completion of the program in six to eight semesters.

The Department of Nursing is seeking approval of the California State University system to initiate a Master of Science in Nursing preparing Family Nurse Practitioners, beginning Spring 1984. At the time of printing of this catalog, approval has not yet been received. Further information regarding this proposed program may be obtained from the Department of Nursing.

Requirements

Students are eligible for admission to the nursing major when they have met the standard published admission requirements for junior transfers to the University and the following prerequisites:

1. Current California licensure as a registered nurse (R.N.);
2. Completion of 60 units of transferable credit, which includes 30 units of California State University general education requirements and 30 units of college credit granted for lower division nursing;
3. College transferable credit in Chemistry with a grade of "C" or better;
4. College transferable credit in Human Anatomy and Physiology with a grade of "C" or better;
There is no Anatomy & Physiology (A&P) recency prerequisite for admission to the nursing major; there is a five year A&P recency prerequisite for enrollment in Nursing 315, a required junior year course. See course description for N315 for alternatives to five year A&P recency.
5. Proficiency in English composition demonstrated by:
 - (a) a transferable college course in English composition with a grade of "C" or better, *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 the CSU English Equivalency Examination.
6. Malpractice insurance.

Work experience as a registered nurse is recommended. Eligible applicants who are currently enrolled in the University, or plan to enroll prior to entering the nursing major, must apply to the Department of Nursing for admission to the nursing major, beginning in November, to be considered for the following Fall.

Students in the nursing major are strongly urged to belong to their professional organization.

Philosophy

We believe that people are ecological systems, open, active, ever changing, interacting in totality with the environment. People seek integrity, are social beings, and interact with other people in a heterogenous, dynamic society. We believe society is characterized by a variety of cultures and sub-cultures, each with its own value system. Individual values generally reflect those of the culture, but universal among them are the desire for recognition of personal dignity and the right to self-determination.

Professional nursing is a process directed toward providing care, cure, and coordination of health care through interdependent, dependent, and independent relationships with other health professionals, providers, and consumers. We define health as a positive level of wellness which varies according to conditions, circumstances, and environmental factors. We believe professional nursing is primarily concerned with the goal of assisting people in their striving for health in the context of humane, individualistic concern for people and their problems. Professional nursing attends to health needs within this framework of goals, motivations and value systems, working to strengthen those behaviors and resources which assist in striving toward optimum functioning in times of wellness, illness, and in the process of dying. The professional nurse provides, coordinates, and assists in continuous, uninterrupted care to individuals and families. The nurse acts as a collaborator and facilitator in the promotion of a responsive and relevant system of health care delivery. The faculty believes that education for nursing belongs within the total framework of

general education. We further believe that associate degree or equivalent preparation can be an integral part of and does form the foundation upon which professional nursing can be built. Professional preparation extends the knowledge base and scope of practice through development of a practitioner who utilizes critical thinking in the solution of problems reflecting increasing complexity.

The goal of professional education is to prepare the student to: (1) organize and utilize the concepts, principles, and theories of nursing and disciplines related to the practice of nursing; (2) assess each client situation in relation to levels of wellness; (3) define the multiple variables which operate to produce any given client situation; (4) utilize the problem solving process to conceive and initiate interventive measures and apply criteria to explain, justify, predict outcomes, and evaluate these measures; (5) recognize and participate in changes within a dynamic society and in health care systems; (6) pursue the quest for personal and professional growth and development.

The faculty acknowledges the learner's right to as much education as each is capable of pursuing. We further believe that there are as many different approaches and paths leading to the same goal as there are individuals seeking that goal. We assert that adult learners, having traveled different routes, distances, and directions, have unique combinations of experience, maturation, interest, and ability which must be taken into account when planning and selecting appropriate learning experiences and areas of concentrated study.

PROGRESSION, 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/NCr grade is specifically indicated. 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 Department of Nursing, 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 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 lost in any nursing course, for any reason, will be determined by the faculty teaching the course.

Nursing Courses Not Constituting the Major Requirements: In nursing courses not constituting the major requirements, students must meet the standards for minimal performance and progression established by the university. (Please consult catalog section on Rules and Regulations.)

Clinical Nursing Courses: If during enrollment in a clinical nursing course, the student's conduct 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.

Progression in the Nursing Major: Full time students are expected to enroll in a regular sequence in nursing major courses which will allow completion of the program in four semesters. Entering full-time students are expected to register for 310A in the Fall semester and 310B and 311 in the Spring, and must complete nursing course requirements for the junior year before registering for senior year courses.

Progression patterns for part-time students, providing for completion of program requirements in from six to eight semesters, will be worked out with the student's academic advisor.

Policy Statement on Change of Course Progression and Leave of Absence from the Major: Students who wish to alter regular course progression may petition the

Department of Nursing to obtain faculty approval. The University has established criteria and deadlines for change of official enrollment and continuing student status, described in the University Catalog and the Schedule of Classes. Within those guidelines, students who find that circumstances dictate a change of plans may petition for the following options:

- Change of progression between full time and part time, on a space available basis;
- Leave of absence from the major, available after successful completion of a full semester.

In classes where enrollment is limited, priority is given to students who are in regular progression. Students on leave must notify the department of their intent to return by the first Monday in May for the next Fall semester, or by the first Monday in December for the next Spring semester.

BACHELOR OF SCIENCE IN NURSING

MAJOR COURSE REQUIREMENTS

	<i>Units</i>
Nursing 302—Microteaching for Nurses	1
Nursing 310AB—Concepts of Nursing in the Community	5
Nursing 311—Nursing Practicum in the Community	4
Nursing 315—Science Principles Applied to Human Phenomena	4
Nursing 316—Health Assessment.....	2
Nursing 367—Interaction and Change	2
{ Nursing 423AB—Preceptorship in Episodic Nursing	7
or	
{ Nursing 424AB—Preceptorship in Distributive Nursing	3
Nursing 433—Current Professional Issues	
Nursing 467—Group Leadership and Change	3
Nursing 470—Introduction to the Research Process	2
	33

Supporting Course Requirements

* Upper Division Course Relating Health and Culture	3
Upper Division Non-Nursing Course Supportive of the Preceptorship	3
	6

CURRICULUM

Junior Year	<i>Units</i>
Nursing 302—Microteaching for Nurses	1
Nursing 310AB—Concepts of Nursing in the Community	5
Nursing 311—Nursing Practicum in the Community	4
Nursing 315—Science Principles Applied to Human Phenomena	4
Nursing 316—Health Assessment.....	2
Nursing 367—Interaction and Change	2
Nursing 470—Introduction to the Research Process **	2
Upper Division Course Relating to Health and Culture	3
(+ General Education and elective units as needed to meet graduation requirements)	

* This requirement may be met by courses approved by the Curriculum Committee of the Department of Nursing.

** N470 may be taken either junior or senior year.

Senior Year*Units*

{ Nursing 423AB—Preceptorship in Episodic Nursing ** or	}	7
Nursing 424AB—Preceptorship in Distributive Nursing **		
Nursing 433—Current Professional Issues		3
Nursing 467—Group Leadership and Change		3
Upper Division Non-Nursing Course Supportive of the Preceptorship		3
(+ General Education and elective units as needed to meet graduation requirements)		

REQUIREMENTS FOR THE B.S. DEGREE IN NURSING*Units*

Major Courses.....	63
Supporting Courses	6
General Education	48
Electives.....	7

124

This includes a minimum of 30 units of lower division nursing and 30 units of general education required for acceptance to the nursing major.

NURSING COURSES**MAJOR COURSES****302. Microteaching for Nurses (1) Malmstrom and Department Faculty**

Lecture, 1 hour; laboratory, 3 hours. (meets for ½ semester)

Lecture focuses on theoretical basis for identification and application of microelements of teaching. Guided practice in the application of selected microelements is provided in a simulated classroom setting.

Prerequisites: Admission to the nursing major and/or consent of instructor.

310A. Concepts of Nursing in the Community (3) Berg, DeBella-Baldigo, Hitchcock, Meyer, Thomas

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; consent of instructor, malpractice insurance.

310B. Concepts of Nursing in the Community (2) Berg, DeBella-Baldigo, Hitchcock, Meyer, Thomas

Seminar, 2 hours.

Continuation of concepts of health with a focus on the community. Health care delivery, community planning and selected community health problems are presented within a holistic framework.

Prerequisites: Nursing 310A, concurrent enrollment in 311; consent of instructor.

311. Nursing Practicum in the Community (4) Berg, DeBella-Baldigo, Hitchcock, Meyer, Thomas

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,

** Students may enroll in Nursing 423-4A for either 4 or 5 units, and 423-4B for a minimum of 3 units per semester and a maximum of 5 units per semester. Units in excess of the 7 units required to meet nursing major requirements may be counted as elective units.

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 better prior to enrolling in Nursing 315; OR*
- b. Petition to waive the five year recency prerequisite based on*
 - (1) an acceptable NLN Natural Sciences test score, OR*
 - (2) recent acute or critical care work experience, OR*
 - (3) recent CE course in pathophysiology.*

316. Health Assessment (2) Baldigo, Berg, 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.

Prerequisites: 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

Seminar, 2 hours.

Small group, peer counseling, and journal used to develop awareness of self as a physical, psychological, cultural being. Course serves as a laboratory experience in interpersonal communication. Focus on developing communication skills with emphasis on caring and empathy to promote constructive personal and professional relationships. Includes application to nurse/client interaction.

Prerequisites: Admission to the nursing major and/or consent of instructor.

423A. Preceptorship in Episodic Nursing (4-5) Department Faculty

Lecture, 2 hours; Preceptorship, 6-9 hours, determined by student's contractual study agreement.

Course introduces students to preceptorship study as a self-directed learning experience in acute care settings. While studying nursing theories, with faculty assistance and collaboration with a preceptor the student develops a learning contract focusing on the curative and restorative aspects of nursing care. Includes analysis of organizational and client biopsychosocial characteristics. Prerequisites: Completion of junior year nursing major requirements, malpractice insurance, and consent of senior coordinator.

423B. Preceptorship in Episodic Nursing (3-5) Department Faculty

Clinical hours determined by student's contractual study agreement.

Student designed contractual study focusing on the curative and restorative aspects of nursing care of patients with diagnosed disease. With faculty assistance, the student initiates a contract which includes goals, learning experiences and evaluation.

Clinical work in participating facilities and agencies is under the supervision of a preceptor and faculty advisor.

Prerequisites: Completion of 423A or 424A, completion of or concurrent enrollment in 467, 433, 470, and upper division non-nursing course supportive of the preceptorship; malpractice insurance; and consent of senior coordinator.

424A. Preceptorship in Distributive Nursing (4-5) Department Faculty

Lecture, 2 hours; Preceptorship 6-9 hours, determined by student's contractual study agreement.

Course introduces student to preceptorship study in a self-directed learning experience in distributive settings. While studying nursing theories, with faculty assistance and collaboration with a preceptor the student develops a learning contract focusing on the prevention of disease and maintenance of health with emphasis on continuity of nursing care. Includes analysis of organizational and client biopsychosocial characteristics. Prerequisites: Completion of junior year nursing major requirements, malpractice insurance, and consent of senior coordinator.

424B. Preceptorship in Distributive Nursing (3-5) Department Faculty

Clinical hours determined by student's contractual study agreement.

Student designed study focusing on the prevention of disease and maintenance of health aspects of nursing care with emphasis on continuous care. With faculty assistance, the student initiates a contract which includes goals, learning experiences, and evaluation. Clinical work in participating facilities and agencies is under the supervision of a preceptor and faculty advisor.

Prerequisites: Completion of 424A or 423A, completion of or concurrent enrollment in 467, 433, 470, and upper division non-nursing course supportive of the preceptorship; malpractice insurance; and consent of senior coordinator.

433. Current Professional Issues (3) Landis and Department Faculty

Seminar, 3 hours. Content covers professionalism, organization, sex role socialization, assertion, conflict resolution, power, and other political contemporary issues which are central to the nursing profession.

Prerequisites: Completion of junior year nursing major requirements and consent of instructor.

467. Group Leadership and Change (3) Hitchcock, Murray

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.

470. Introduction to the Research Process (2) Department Faculty

Seminar, 2 hours.

Introduces the baccalaureate student to basic research concepts, language and processes. Attention is given to the logic, methods, and procedures of various kinds of research with particular emphasis on qualitative studies in nursing and related sciences. Students will be introduced to the critical appraisal and interpretation of studies to improve their research consumership.

Prerequisites: Completion of Critical Thinking General Education requirement and proficiency in English composition as demonstrated by successful completion of Written English Proficiency Test (WEPT) or English 375; admission to the nursing major and/or consent of instructor.

ELECTIVES

Nursing electives, unless otherwise indicated, are open to non-nursing majors.

280. Alternative Approaches to Healing (2) Murray

Lecture/discussion, 2 hours.

Discussion 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.

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) Meyer

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 a unit on drug education teaching strategies and factors contributing to improper drug use. 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.

480. Human Sexuality (2) Hitchcock

Lecture/discussion, 2 hours.

Directed to the student who has some knowledge of basic human sexuality, the course will focus on the range of human experience in sexuality, disability, and special issues such as VD, prostitution, rape, family planning, and counseling issues. Self-awareness regarding sexuality will be stressed as it relates to the development of beginning counseling skills.

Prerequisite: Consent of 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 in the nursing department.

PHILOSOPHY

Department Chair: Richard W. Paul

Faculty: Harold G. Alderman, Peter Diamandopoulos, Stanley V. McDaniel, Edward F. Mooney, George L. Proctor, Philip O. Temko.

Department Office: Nichols Hall 362, phone (707) 664-2163

Recently, philosophy majors at a mid-Western university obtained internships in the following areas:

Academic Administration	Juvenile Justice
Alternative Teaching	Law
Business	Medical Research
Counseling	Mental Retardation
Environmental Safety Standards	Public Policy Conflict Resolution
Family Planning	Public Relations
Grant Proposal Analysis	Third World Development
Hospital Administration	Wildlife Conservation

At the same time, a study of students taking the Graduate Record Exam revealed that philosophy majors scored in the upper 10% nationally.

This, together with the fact that most college graduates are working in a field outside their major within five years of graduation, suggests that the generalizable intellectual skills and discipline obtained through the study of philosophy—skills in the analysis, description, evaluation, and synthesis of ideas and information—are an excellent means to vocational success, both inside and outside of the academic world.

Philosophy and Your Career

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. The department encourages majors to supplement their study of philosophy with a minor in another field, and the faculty is committed to working closely with majors to give them information about careers and to guide them in selecting a philosophy program that best prepares them for their chosen career.

Philosophy and Your Life

The study of philosophy is the foundation of a truly liberal education, an education that liberates us from confusion and ignorance, and frees us to be both reflective and effective in our world. In this crucial period of human history, philosophy has an especially important role to play: values, lifestyles and world views are changing with frightening rapidity, challenging our capacity to make thoughtful evaluations and testing our sense of coherence, meaning and integrity. Philosophy seeks to provide insight into the nature of the ideas that shape our total experience, thus yielding, when carefully pursued, a depth of understanding sorely needed in our time.

In addition to its value as a contemplative art and as a search for global understanding, then, philosophy also has very practical applications in a variety of fields. In recognition of its value for dealing with difficult contemporary problems, philosophy has been introduced into the curriculum of law schools, medical schools, high schools and elementary schools, and is carried to the general public by television. Philosophers of today are called upon to apply their special methods to issues in business and medical ethics, concerns of the aged and dying, the links between morality and the law, and environmental ethics, to give only a few examples.

The philosophy program at Sonoma has been formulated after many years of careful

experiment. At its heart is our faculty: highly individual philosophers who represent all of the major approaches to philosophy, and who are actively engaged in ongoing exploration of the meaning of philosophy for modern times. The new 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. We therefore encourage our faculty to bring their individual styles of thought into the classroom, where the student may enter into a close relationship with one or more of those styles after the manner of an apprentice learning a craft at first-hand.

For detailed information on courses and faculty, see the course offerings below and consult the Philosophy Department, Nichols Hall 362 (664-2163).

BACHELOR OF ARTS IN PHILOSOPHY

Major	<i>Units</i>
General Education	48
<i>Major</i>	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 a regular faculty advisor may be chosen by the student. Every student must consult his or her advisor before continuing as a major beyond the probationary semester.

Transfer Students

The department welcomes transfer students from other institutions, and is eager to work out equivalences 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, the broad historical framework within which philosophical problems and methods developed is covered in a two-semester course, Great Thinkers. This combination of history and method establishes a secure base for the demands of excellence in this field.

Required Courses:		<i>Units</i>
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

A third important feature of the major is the experience of *living philosophy*: the requirements for the upper division program bring the student into contact with each unique faculty approach. The course selections contain options to suit individual career goals, and fulfill the departmental aim of comprehensive and effective training applicable to both traditional and contemporary philosophical work.

Required Courses:

(a) Select one course out of six of the following seven categories:		
1.	Ethics or Medical Ethics or other Phil 380	
2.	Social and Political Philosophy or Marxism or Philosophy of Law or other Phil 384	
3.	Philosophy of Language or Epistemology or Philosophy of Science or other Phil 390	
4.	Philosophy of Mind or Theory of Critical Thinking or Philosophical Psychology	
5.	Pragmatism or Kant or Philosophy of Jung or Metaphysics	
6.	19th Century or 20th Century Philosophy or other Phil 382	
7.	Phenomenology or Aesthetics or Philosophy in Literature or other Phil 394	(total)
		18
(b) <i>One</i> 400-level philosophy course		3
Philosophy electives		12
Total Upper Division units		33

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.

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

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 Department 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 practiced.

101T. Critical Thinking Tutorial (1) Paul

This course is designed to provide additional practice in critical analyses. Students who register will be assigned to a designated teaching assistant, will be expected to attend at least one discussion group a week, and to turn in at least 5 assigned analyses per semester. The analyses must reach a minimal level of competence before accepted for credit.

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, Diamandopoulos

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, Diamandopoulos

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 person'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.

330. Marxism (3) Paul, Diamondopoulos

A selected study of one or more nineteenth- or twentieth-century Marxists. Special emphasis will be placed on the variety of perspectives within the Marxist tradition and the evolutionary nature of that tradition.

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 functions 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: Hegel, 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.)

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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 an M.A. at the present time. 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

Department Chair: James Gale

Faculty: Steve Blateric, C. Douglas Earl, Kenneth Flynn, Vivian Fritz, James Gale, Marcia Hart, Tony Kehl, Kathryn Klein, Robert Lynde, Dave Orr, Peter Reynaud, G. Edward Rudloff, Laura Sim, Greg Smith, Robert Sorani, Ella Trussell, Dick Walker, Martha Yates.

Department Office: P.E. 14, phone (707) 664-2357

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 Department offers instructional programs for all students in sport skills, including individual and team sports, folk and square dance, fitness, and outdoor activities. The highly skilled student may select from a variety of sports in intercollegiate athletics. Students who major in Physical Education undertake a core curriculum in the scientific and philosophical foundations of human performance. Beyond this core, each student selects one or more options/advisory plans; teaching/coaching; adapted physical education; wilderness leadership; pre-physical therapy; or interdisciplinary physical education. Field experience or clinical affiliation is an important part of all programs.

BACHELOR OF ARTS IN PHYSICAL EDUCATION ¹

Major

	<i>Units</i>
General Education	48
Major Requirements.....	40
Supporting Courses	12
Electives.....	24
TOTAL	124

SUPPORTING COURSES REQUIRED

Biology 220 Human Anatomy	4
Biology 224 Human Physiology.....	3
Biology 224L Human Physiology Lab.....	2
PE 330 Measurement and Evaluation	1 or 2
	10

COURSE REQUIREMENTS

A. Core Course (All Majors)

	<i>Units</i>
PE. 301 Philosophy of Physical Education	3
PE. 305 Motor Learning ²	4
PE. 315 Sociology of Sport	3
Hlth. 310 Kinesiology ²	4
Hlth. 315 Physiology of Exercise ²	4
	18

¹ Majors working toward a teaching credential must participate in the equivalent of one intercollegiate sport a year.

² Note: Prerequisite(s) for this class.

B. Concentrations

Several options are available to a student in his advancement toward a specific goal in his degree program. A student may select a pattern of courses in any one, or in a combination of the following concentrations or advisory plans.

Adapted Physical Education. After completing the Baccalaureate degree, students may pursue career opportunities in private or public agencies. In combination with the Teacher Preparation Option (single subject credential) a student may meet the requirements for the special emphasis credential in adapted physical education.

Physical Education Core 18 units

Adapted Physical Education Option

Required:

Educ 430 Special Education for Teachers	4
Psych 434 Psychology of Disability.....	2-4
PE 410 Human Motor Development.....	3
PE 325 Adapted PE-I Basic Concepts and Special Populations	3
PE 326 Adapted PE-II Program Development	3
PE 430C Field Experience in Adapted PE (concurrent enrollment with PE 325 or PE 326 required).....	1-3
PE 495C Special Studies in Adapted PE (minimum of 2 units)	1-4

22 units

Teacher Preparation Option. This program is designed for a student planning to enter the credential program with his/her goal the teaching of physical education and coaching in the public schools.

Physical Education Core 18 units

Teacher Preparation Option

Required:

PE 300 Analysis of Motor Performance.....	8
PE 310 Analysis of Motor Skills.....	2
PE 320 Practicum/Methods	2
PE 330 Measurement and Evaluation	2
PE 400 Theory of Elementary Physical Education.....	3
PE 431 Pre-professional Experience	1
HLTH 305 Care and Prevention of Injuries	3

Electives (2 units)

PE 325 Adapted Physical Education (3)

PE 410 Human Motor Development (3)

THAR 470 Dance for Children (2) or others as approved by advisor

23 units

Other requirements:

It is a graduation requirement that each student demonstrate competency in a variety of physical skills. Each student must participate in one intercollegiate sport, or a PE 430 coaching assignment, or a dance production each year of enrollment.

Prior to graduation, each student must complete as a volunteer, (for units or for salary) ONE of the following:

Coaching assignment in a school

Teacher's aide or program assistant in PE in school

Officiating for one sport season

Work in a public recreation program.

Credential candidates must complete a one-unit course on drug abuse and health education.

Interdisciplinary Option. 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, adult fitness, pre-certification in cardiac rehabilitation, and others.

Physical Education Core 18 units

The student in consultation with his 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 (PE 430) and/or Special Studies (PE 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

C. Advisory Plans

Wilderness Leadership. Graduates from this program have found employment in Wilderness Guide Services, U.S. Forest Service and National Park Programs, public school outdoor education, retail sporting goods and professional outdoor schools. They serve in capacities such as rescue ranger, guide, program administrator and leader.

Physical Education Core 18 units

Wilderness Leadership Concentration

Required:

PE 306 Wilderness Travel.....	2-3
PE 307 Analysis of Wilderness Skills	4
PE 308 Wilderness Leadership	2
PE 312 Mountain Medicine.....	2
PE 309 Administration of Wilderness Programs.....	3

Electives: (8 units)

In consultation with advisor 8

22 units

Pre-Physical Therapy. This concentration of courses will provide the physical education major with the necessary prerequisites for admission to certificate and/or Master's degree programs in physical therapy. This advising plan is based on common requirements of physical therapy programs.

Support Courses:

Chem 115A & B General Chemistry	10	10 units
Phys 210A & B General Physics	6	
Bio 481 Medical Microbiology	5	

(prerequisites for Bio 481 include:

- Bio 117 Animal Life (4)
- Bio 215 Intro to Molecular Biology (2)
- Bio 340 General Bacteriology (5))

PE 330 Measurement and Evaluation—Part I
(or preferably Math 165—4 units)

Physical Education Core 18 units

Pre-Physical Therapy Concentration

Required:

HS 305 Care and Prevention of Injuries 3

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PE 314 Techniques of Conditioning	2
PE 325 Adapted Physical Education	3
PE 410 Human Motor Development.....	3
HS 430 Field Experience (in physical therapy)	3
Psych 430 Abnormal Psychology	4
Electives:	
In consultation with advisor	4

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 support coursework in Biological Sciences and 20–22 units in Physical Education. 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.

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:

PE 500 Introduction to Research	3
PE 501 Graduate Seminar	3
PE 525 Thesis/Project	3
PE 505 Adv. Motor Learning	3
PE 510 Adv. Kinesiology.....	3
PE 515 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)

PE 410 Human Motor Development (3)

PE 450 Leading Adult Fitness Programs (3)

PE 516 Cardiovascular Programs (3)

PE 595 Special Studies (3)

Other emphases may be established in consultation with the Department Graduate Coordinator.

The Department of Health Sciences Education 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 course work and who do not intend to pursue an MA 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 Bachelor's 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 MA degree.

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 Master of Arts 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.

HEALTH SCIENCES AND PHYSICAL EDUCATION COURSES

Health Science

302. Advanced First Aid (3) (Spring) Orr

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.

305. 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.

310. Kinesiology (4) (Fall and Spring) Trussell, Sorani

Lecture, laboratory.

The analysis of human movement. Consideration of functional anatomy, basic mechanics of leverage, vectors, and projectiles as they relate to performance in sports and dance activities.

Prerequisite: Biology 220; completed or concurrent enrollment in PE 330 (or a course in statistics).

315. 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; completed or concurrent enrollment in PE 330 (or a course in statistics).

430A. 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: Either HS 310 or HS 315 (as appropriate).

430B. 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: HS 305.

495A. Special Studies in Health Science (1-4) Department Faculty

Includes completion of a project designed to meet a specialized advanced study need in physiology of exercise or kinesiology. The student should have prerequisite skills which usually include completion or concurrent enrollment in the appropriate courses. The project should be planned and described in written form in consultation with and with the consent of the faculty advisor.

495B. Special Studies in Athletic Training (1–4) Department Faculty

Includes completion of a project designed to meet a specialized advanced study need in athletic training. The student should have prerequisite skills which usually include completion or concurrent enrollment in the appropriate courses. The project should be planned and described in written form in consultation with and with the consent of the faculty advisor.

497. Selected Topics in Health (1–4) Department Faculty

A single topic or set of related topics not ordinarily covered by the health curriculum. The course may be repeated for credit with a different topic.
Prerequisite: Consent of instructor.

Physical Education

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, Gymnastics, 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, Sailing (Fee), and Winter Week (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.

110. Adaptive Activities (2) (Fall and Spring) Sorani

Individually prescribed exercise and group activities designed to meet the needs of students with disabilities who may not be able to participate in or derive the greatest benefit from the regular activity offerings. A medical clearance is required to enroll in this class.

300. Analysis of Motor Performance (1) (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.

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. Philosophy of Physical Education (3) (Fall and Spring) Lynde

Exploration of contemporary values and critical issues in physical education.
Prerequisite: Junior or Senior standing.

302. Sports Officiating (1) (Fall and Spring) Fritz, Earl

Rules and officiating techniques of selected sports activities for men and women. Students will attempt to become qualified officials. May be repeated for credit with different sports. Concurrent enrollment in PE 303 required.

303. Sports Officiating Lab (1) (Fall and Spring) Fritz, Earl

Organized and supervised officiating experiences in actual competitive situations.
Prerequisite: Concurrent enrollment in, or completion of PE 302. May be repeated for credit. Concurrent enrollment in PE 302 required.

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305. Motor Learning (4) (Fall and Spring) Klein

Lecture, laboratory

Perception, learning, motivations and emotion in relation to motor performance. The psychology of competition, personal adjustment and social behavior as observed in play.

Prerequisite: Completed or concurrent enrollment in PE 330 (Part I).

306. Wilderness Travel (3) (Spring) 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.

307. Analysis of Wilderness Skills (1-4) (Fall and Spring) Department Faculty

(One experience from each of: Winter activities, water craft, backpacking, rockclimbing)

The student undertakes field study in each of these areas in order to certify proficiency of skill. To receive certification, a student must demonstrate intermediate skill in each area. Students who have previously achieved these proficiencies may complete the course by examination or verification of equivalent experience.

308. Wilderness Leadership (2) Earl

Indepth study of good leadership characteristics, qualities and responsibilities. Students will be challenged to take an active role in programs which culminate in their actual *leading* of a wilderness trip.

309. Administration of Wilderness Programs (3) Earl

A course designed to acquaint the student with the administrative problems of running wilderness programs, including such areas as: cash flow, personnel management, liability, equipment inventory, and program organization.

310. Analysis of Motor Skills (2) (Fall and Spring) 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. Mountain Medicine (2) (Fall and Spring)

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 of 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) Sorani, Sim

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) Sorani

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 relaxation.

Prerequisites: PE 325 or consent of instructor, and concurrent enrollment in PE 430C.

330. Measurement and Evaluation (1-2) (Fall and Spring) Yates

A two part course. Part one is a survey of descriptive statistics. Part two includes the application of measurement techniques in the construction and selection of tests in the psychomotor and cognitive domains of physical education.

Part one is a prerequisite to physical education laboratory courses. Part two is required for students in the teacher preparation tract.

336. Community Recreation (3) (Fall and Spring) 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.

379. Extramural Sports (2) (Fall and Spring) Department Faculty

Organized competitive sports, providing instruction, training, and competition. Activities may include: volleyball, baseball, cross-country, soccer, basketball, sailing, fencing, gymnastics, golf, tennis, track and field. Sports may be added or omitted according to student interest and available resources.

May be repeated for credit.

380. Varsity Intercollegiate Sports for Men (2) (Fall and Spring) Department Faculty

Activities may include: I. Cross-country, soccer, basketball, gymnastics. II. Golf, baseball, tennis, track and field. Sports may be added or omitted according to student interest and available resources.

May be repeated for credit.

389. Varsity Intercollegiate Sports for Women (2) (Fall and Spring) Department Faculty

Activities include: volleyball, tennis, track and field, cross-country, basketball, gymnastics, and softball. Sports may be added or omitted according to student interest and available resources.

May be repeated for credit.

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.

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400. Elementary School Physical Education (3) (Spring) Flynn

Theory and practice in elementary school physical education.

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 P.E. (1) 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.

450. Leading Adult Fitness Programs (2) (Fall or Spring) Gale

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. A previous course in exercise physiology is suggested.

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: PE 495A, Special Studies in Physical Education; PE 495B, Special Studies in Wilderness Leadership; and PE 495C, Special Studies in Adapted PE.

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.

497. 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.

500. Introduction to Research (3) (Fall) 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: Physical Education 330 or consent of instructor.

501. Graduate Seminar (3) (Spring) 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: P.E. 500.

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 Seminar (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.

510. Advanced Kinesiology (3) 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.

515. Advanced Exercise Physiology (3) 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.

516. Cardiovascular Programs (3) Gale

This course is designed for students who wish to understand clinical applications of exercise physiology as it pertains to cardiovascular system.

Three topics will be discussed in detail: Exercise stress testing theory, test protocols, and test administration and interpretation; cardiovascular responses of person with coronary artery disease to acute and chronic exercise; and, a review of exercise programs which are applicable to cardiac rehabilitation.

Prerequisite: HS 315, Exercise Physiology; PE 515, Advanced Exercise Physiology highly recommended.

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.

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.

PHYSICS

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

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 in 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 Bachelor of Science degree and a flexible Bachelor of Arts. Both programs stress fundamental concepts and techniques and both offer an unusually rich laboratory experience and heavy use of computers. 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. Students interested in applied physics should select (in consultation with the department advisor) appropriate courses from the following list to fulfill the upper division degree requirements.

Electronics and Instrumentation

Physics 311—Elements of Electronics	4	units
Physics 312—Elements of Digital Electronics.....	4	
Physics 333—Precision Machining for Experimental Physics	1	
Physics 412—Microprocessor Applications	3	
Physics 431—Advanced Electronic Methods Lab	2	
Physics 470—Solid State Physics	3	
Physics 475—Physics of Semiconductors.....	3	

Applied Quantum Physics

Physics 340—Theory of Light	3	
Physics 447—Lasers and Holography	3	
Physics 470—Solid State Physics	3	
Physics 475—Physics of Semiconductors.....	3	

Environmental and Medical Physics

Physics 354—Problems in Environmental Physics	3	units
Physics 481—Applied Nuclear Chemistry and Physics.....	3	
Physics 482—Applied Nuclear Chemistry and Physics Laboratory	2	

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.

	<i>Units</i>
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

114, 214, 314—Introduction to Physics.....	12
116, 216, 316—Introductory Laboratory	3
311—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, any 400 level Physics course; certain Selected Topics, Astronomy or Physics 396, may be approved by the Advisor)	6
	50

SUPPORTING COURSES

	<i>Units</i>
A. Mathematics 161, 211, 261, 231	15
B. Chemistry 115AB or 125AB.....	10
	25

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

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to combine the study of physics with music, art history, environmental design, management, economics, philosophy, psychology, or physical education.

Lower Division requirements:	<i>Units</i>
Astronomy 100—Descriptive Astronomy	3
Physics 100—Descriptive Physics	3
One of the following laboratory courses:	
Astronomy 231—Intro. Observational Astronomy	2
Physics 211—Electronics for Non-Scientists	3
Physics 102—Descriptive Physics Laboratory	2
	8 or 9

Upper Division Requirements:	<i>Units</i>
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 or Phys 350	3–4
one course in optics: Phys 340 or 342	3
one course in computer programming:	
Physics 381 or Math 150, 158B or 158F	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:	<i>Units</i>
Physics 209AB—General Physics Lab	2
Physics 210AB—General Physics	6
Math 107—Algebra and Trigonometry	4
	12

Upper Division Requirements:	<i>Units</i>
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 or Phys 350	3–4
one course in optics: Phys 340 or 342	3
one course in computer programming:	
Physics 381 or Math 150, 158B or 158F.	2–3
Area of concentration (one other subject)	12

Advisory Plan C uses 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 sciences. This advisory plan is required of those who wish to earn single-subject teaching credentials.

Lower Division requirements:	<i>Units</i>
Physics 114, 214—Intro. Physics I, II	8
Physics 116, 216—Intro. Labs	2
Math 161, 211, 261—Calculus	12
	22

Upper Division Requirements:

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	3
One course in computer programming:	
Physics 381 or Math 150, 158B or 158F.	2–3
Area of concentration (one other subject).....	12

THE B.A. IN PHYSICS WITH AN EMPHASIS IN ASTRONOMY

Students may choose to earn a B.A. in physics with an emphasis in astronomy. Those interested in planetarium work should choose Advisory Plan C. Anyone contemplating graduate study in astronomy should choose the B.S.

The following courses must be included among those presented for the B.A.:

Astronomy 231—Intro. Observational Astronomy	2
Astronomy 305—Frontiers in Astronomy	3
Astronomy 331—Astrophotography <i>or</i>	
Astronomy 482—Advanced Observational Astronomy	2
Additional Upper Division courses (for students taking Advisory Plan C, Astr 380 or 390 is recommended)	3
	10

TEACHING CREDENTIAL (SINGLE SUBJECT)

Students who wish to earn the single subject credential in Physical Science under the Ryan Act with a bachelor's degree in physics should take the following courses and should consult with the department advisor about the program sequence.

Basic Core Courses

Astronomy 200	3
Biology 115	3
Chemistry 115AB	10
Geography 310	4
Geology 303, 304	5
Mathematics 161, 211	8
Physics 114, 116, 214, 216.....	10
Total core including 12 in G.E.	43
Remainder of General Education	36

Major:

B.A. in Physics with advisory plan C. Upper Division courses to be chosen in consultation with advisor	24
Supporting course: Math 261	4
Area of concentration—12 units in one other field (e.g., above core plus 2 additional units in Chemistry or 7 Geology, etc.)	2–12
Total for major, including supporting courses	30–40
Education Courses	28
	137–147

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.

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 I (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: Physics 114; concurrent enrollment in Physics 114 strongly recommended.

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.

Prerequisite: High school algebra, trigonometry and a high school physical science.

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.

211. Electronics for Non-Scientists (3)

Lecture, 2 hours; laboratory, 3 hours.

A survey of the electronic principles and practices involved in the appliances of contemporary society. Application of basic theoretical concepts and construction techniques to electronic devices such as audio receivers and reproduction systems,

toasters, music synthesizers, resistive heating systems, and auto control circuits. Laboratory construction and repair of devices useful to the student is encouraged. Prerequisite: Completion of G.E. requirement in 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) (Fall)

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 (4) (Spring)

Lecture, 3 hours; laboratory, 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.

Prerequisites: Math 105D or Math 107 or equivalent; Phys 210B or 214; or consent of instructor. Cross-listed with Chem 311.

312. Elements of Digital Electronics (4) (Fall)

Lecture, 3 hours; laboratory 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.

Prerequisite: Physics 311 or consent of instructor.

314. Introduction to Physics III (4)

The continuation of Physics 214. Special relativity; elementary quantum mechanics; The Bohr atom and deBroglie waves; the Schrodinger 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) (Spring)

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.

350. Descriptive Relativity and Quantum Physics (3)

Lecture, 3 hours.

Relativity and Quantum Physics. Topics such as time dilation; the twin paradox; contraction of lengths; faster-than-light particles. General relativity; Mach's principles; experimental tests of general relativity; black holes; wave-particle duality; Heisenberg uncertainty principle; elementary particles; superconductivity and superfluidity. The presentation is non-mathematical.

Prerequisite: A previous college-level course in physics or astronomy.

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.

381. Programming 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 curriculum. 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 (3) (Fall and Spring) Lecture, 2 hours; Laboratory, 3 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.

Prerequisite: Physics 312, or equivalent, or consent of instructor.

425. Introduction to Mathematical Physics (3)

Introduction to the theory of transformations in linear spaces, with special emphasis on invariance and extremum principles in physical theory. Topics in tensor analysis, functional analysis, transcendental functions, and calculus of variations.

Prerequisite: Physics 314; Mathematics 231, or consent of instructor.

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.

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475. Physics of Semiconductors (3)

Lecture, 2 hours; Laboratory, 3 hours.

Energy-band structure, intrinsic and extrinsic semiconductors, statistics of electrons and holes, transport properties, scattering mechanisms, excitation and recombination, optical properties, steady-state and transient photoconductivity, shallow and deep impurities, Schottky barrier, p-n junctions, photovoltaic effects, and amorphous semiconductors.

Prerequisite: Physics 216 and 314. Physics 470 is recommended.

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 210B or 214 and Chemistry 115B; *or* consent of instructor. Mathematics 211 is recommended.

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.)

Prerequisite: Physics 209B or 216, Physics 481 (concurrent enrollment suggested).

494. Physics Seminar (1)

Group discussions of selected recent papers on experimental and theoretical physics. May be repeated for credit.

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

Coordinator: David Ziblatt

Faculty: Donald Dixon, John Kramer, Cheryl Petersen, Robert Smith, William Young

Department Office: Stevenson 2070, phone (707) 664-2179

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.

The curriculum provides excellent preparation for careers in business, law, teaching, journalism and government. The Department's internship program provides opportunities for experience in local government agencies and private service organizations. The Department conducts studies for state and local governmental agencies which require data analysis and data processing skills, and for which students are used, whenever possible, as paid assistants. Many students have later used these skills in their careers or in their graduate studies.

Political Science is a particularly appropriate major for those students interested in law school. Courses stress effective oral and written expression, the critical understanding of human institutions and values, and the development of creative critical thinking.

Students are expected to complete the outline of courses listed below. The basic courses, Political Science 201, 202, and 302 should be completed as soon as possible. Other courses can be selected from appropriate offerings each semester. Students should plan on enrolling in Political Science 498 Senior Seminar during their senior year. All students are encouraged to discuss their specific interests and goals with their advisors.

BACHELOR OF ARTS IN POLITICAL SCIENCE

Major

	<i>Units</i>
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
 A 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

	<i>Units</i>
Political Science 200 or 202	3-4
Political Science 201	4
Upper Division courses	12-13
Total	20

TEACHING CREDENTIAL

Students seeking a teaching credential may elect Political Science as their single subject academic major under the Ryan Act plan and subsequent legislation. All majors contemplating a career in secondary social science education should see Page 359 for Ryan Single Subject Social Science Program requirements.

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 ARTS IN POLITICAL SCIENCE

The Department of Political Science offers two graduate plans leading to the M.A. Degree: American Government and Public Administration. The course of study in American Government is available for those wishing to do advanced work in preparation for secondary or community college teaching.

Graduate study in the Public Administration Plan is designed to provide public sector administrators with practical and conceptual tools for managing public and voluntary agencies during periods of rapid social and political change. Those involved with the public management process are required to develop and implement new standards for effectiveness and accountability, to respond to legal challenge and judicial intervention, and to provide better and more effective liaison between government at all levels and the public and private sectors of our society.

In an incredibly complex and fluid setting the public manager continually confronts questions regarding how leadership and direction of an agency are best accomplished; and how relations with other agencies, other levels and branches of government, the public, and agency subordinates and superiors are best handled. At the same time, the manager must maintain professional competence and avoid being overwhelmed by change itself, and must effectively meet the personal and ethical challenges as a professional manager. This program seeks to provide individuals the resources, training and sensitivities to both understand and deal effectively with this changing administrative environment.

As evidence of scholarly achievement, all students are expected to submit for faculty review either an approved master's thesis or two comprehensive written examinations. Theses must be approved by a Graduate Faculty Committee, and must meet all other requirements set forth by the University and the Graduate Dean.

Up to nine units of graduate course work taken at other institutions may be transferred into this program.

If at any time it is determined that the candidate has an English deficiency, additional courses in English will be required in addition to the approved course of study.

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. Satisfactory completion of the following courses or approved substitutes within five years of applying to the program:
 - 1. An Introduction to American Government course;
 - 2. An upper division course in American Government;
 - 3. An introductory or advanced economics course; and
 - 4. An entry-level course in public administration.

A beginning accounting course is also 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 (3) letters of recommendation.
- D. Recommendation of the Departmental graduate coordinator or graduate committee.

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. Public Administration Concentration

Required Courses:

	<i>Units</i>
One advanced course in Economics	4
* POLS 530 Advanced Public Administration	4
POLS 533 Budgeting <i>OR</i> POLS 590 Ethics & Public Policy.....	4
POLS 536 Organizational Theory <i>OR</i> POLS 585 Public Policy	4
POLS 587 Research Methods for Public Managers	4
One course in personnel/human relations field (May be taken in the Management Department.)	
Substitutions may be made for the above courses if the M.A. candidate can demonstrate completion of appropriate substitute courses or expertise.	

1. Master's Thesis Option	<i>Units</i>
Required courses	24
Courses at the "400" or "500" level	8
M.A. Thesis (POLS 591)	4
	36
2. Master's Exam Option	
Required courses	24
Courses at the "400" or "500" level	12
	36

At least 26 units must be taken in the Political Science Department.

D. American Government Program

1. Master's Thesis Option:	
Courses at the "500" level	16
Courses at the "400" or "500" level	10
M.A. Thesis (POLS 591)	4
	30

* Students must have prerequisite POLS 430 (Introduction to Public Administration) or suitable equivalent completed, or take concurrently.

2. Master's Exam Option:	<i>Units</i>
Courses at the "500" level	16
Courses at the "400" or "500" level	14
	30

At least 26 units must be taken in the Political Science Department.

NORTH COAST DATA ARCHIVE

The Department of Political Science 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 A. Credit by Examination (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.

150 B. Credit by Examination (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.

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) Marcus

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) Marcus

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) Marcus

An introduction to the field of public administration with emphasis upon bureaucratic life, leadership, and decision-making.

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438. Regional Planning Resource Management (4)

Utilizing advanced man-computer simulation models in conjunction with traditional teaching modes, the course investigates the planning process in an urban/regional setting. It focuses on the interactions among the political, economic and social sub-systems, with particular attention to the policy areas of air and water pollution and human and land resource management.

438L. Simulation of Regional Planning and Resource Management (2)

Offered concurrently with Politics 438, this course is a support course for students interested in the dynamics of the regional policy arena. The course differs from 438 in that it encompasses only the simulation of the policy arena and does not include a substantive discussion of the dynamics of resource management.

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.

474. The Public Policy Advisor (3-4) Ziblatt

The role of the professional analyst and policy advisor in the American policymaking process will be considered. By exploring the political and bureaucratic environment of policy advising, professionals such as planners, environmental specialists, scientists and policy analysts will be in a better position to assess the likely effectiveness of their advice.

PUBLIC POLICY ISSUES

Courses intended to cover a single substantive area in depth:

490 Issues in Public Policy

490A Politics of Health and Aging

490B Politics of Education

490C Politics of Regulation and Land Use

490D Politics of Science and Technology

490E Domestic Communication and Information Policy

490F International Communication and Information Policy

490G Campaign Management & Electoral Behavior

490H Arms Control & Disarmament Policy

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.

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 moderization will be studied. The general analysis will be supplemented by an intensive scrutiny of selected countries and regions.

453. Latin-American Politics (4)

An analysis of the major causes of and cures for underdevelopment in Latin America. Specific attention is given to studying the Mexican and Cuban models, Allendes' Chilean experiment and the Peruvian military's program for political, social and economic development. Students also will be encouraged to study the selected countries of their choice.

457. Seminar in the Revolutionary Process (3-4) Smith

An analysis of various approaches used in determining the causes of violent revolution with emphasis upon the critical evaluation of relevant social science concepts. Case studies of actual revolutions as selected by the students will be used to help evaluate the theoretical approaches.

Research and Special Studies

302. Approaches to Political Analysis (4) Dixon, 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.

363A. Computer Aided Statistical Analysis (2)

An introductory course for social science majors in the use of the Statistical Package for the Social Sciences (SPSS). No prior knowledge of computers, data processing or statistics is assumed.

363B. Computer Aided Statistical Analysis—Advanced (2)

A support course for advanced students providing guidance for the student's statistical investigation of social science problems. The course is intended for senior and graduate students and requires the consent of the instructor for enrollment.

Prerequisite: Approved senior or Master's Thesis topic.

363C. Cyber Special Topics (2)

An introduction to the CYBER computer, including the operating systems, up-dated control language, record manager, loader, text editor, etc.

402. Research Applications in Governmental Policy (4) Dixon, Kramer

Professionally oriented social science research experience. Students will be involved in one or more research project—typically those associated with a local governmental agency or community group. The project will confront the student with actual problems of research analysis and report writing. This course takes the student considerably beyond Politics 302.

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.

530. Advanced Public Administration (4)

Course examines wide variety of public administration literature including aspects of organizational structure, group behavior, policy studies and social-psychology. Attention will be focused upon specific "topics" within the field—areas such as organizational behavior and structure, power, leadership, personnel, control and administrative responsibility.

531. Comparative Public Administration (4) Dixon

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.

532. 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.

533. Seminar in Budgeting and Public 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.

534. Organizational Computer Use (4)

An investigation of contemporary developments in the area of information systems, the 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.

536. 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.

539. Graduate Internship (3-5) Staff

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.

540. Seminar in Public Organization Development and Change (4) Staff

An exploration of values, methodologies, strategies and theories of organization development in relation to public organizations. Since organization change requires that people develop their self-concepts, work values and interrelationships, organization change will be considered as a facilitative process.

550. Comparative Development Administration (4)

An analysis of the impact of various administrative styles on the social, economic, and political development of modernizing nations. Of particular interest are comparisons among Western, Communist and Third World administrative techniques in terms of the consequences and efficacy of their policy implementations.

585. 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.

587. Research Methods (4) Kramer, Dixon

An exposure to survey research, data analysis and statistics.

590. Issues in Public Policy (2-6) Department Faculty

Major problem areas for American life will be the subjects for research and analysis, with more than one theme offered in the same semester when appropriate. Different professors may present their areas of competence in the same semester, and students may be able to choose what portions of the offerings they would study in a given semester.

591. Master's Thesis (2-4) Department Faculty

592. 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.

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) Departmental 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.

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. Specific Pre-Law Programs are offered within the following departments:

American Multi-Cultural Studies	Foreign Languages
Anthropology	History
Criminal Justice Administration	Hutchins School
Economics	Philosophy
English	Politics
Environmental Studies	

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

	<i>Units</i>
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:

	<i>Units</i>
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 G.P.A. 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.

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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

Department Chair: Arthur Warmoth

Faculty: Eleanor Criswell, Victor Daniels, Stashu Geurtsen, Barry Godolphin, Robert Greenway, Laurence Horowitz, George Jackson, Bernd Jager, Norma Lyman, George McCabe, Edith Menrath, Charles Merrill, Gerald Redwine, Robert Rueping, Frank Siroky, Robert Slagle, Gordon Tappan, David Van Nuys, Donald Wilkinson.

Department Office: Stevenson 3092, phone (707) 664-2411

The Department of Psychology at Sonoma State University provides a variety of approaches to the learning process and to the discipline of psychology itself. Some faculty members are quite traditional in their approach to psychology and/or the art of teaching. Others represent newer methods and perspectives.

When the College began, the Department was small and could be characterized as holding a single humanistic perspective. In the years that followed, as faculty were gradually added to the Department, 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, 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.*

BACHELOR OF ARTS IN PSYCHOLOGY

The Psychology Major

By specific intent, the major is very 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 rather than the completion of a fixed series of specific courses.

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 that each student pass a comprehensive examination, designed and administered by the Department, which covers the various substantive areas in the field. This examination may be taken twice and must be passed within the first year of admittance to the major. The examination is given

*The Psychology Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in Psychology, refer to the Appendix pages 466-467.

several times each semester. It is always given just prior to the beginning of classes and again during the add and drop period each semester. A written description of the exam may be obtained in the Psychology Department Office. Students who believe that they do not have the necessary background to pass this test, or who fail it, are advised to take Psy 250—"Introduction to Psychology," to prepare for this examination.

2. Psychology is an extremely diverse field. To be able to look upon this diversity with a sense of perspective, and to appreciate the relationship of his/her own background and training to the field as a whole, the student should have a broad exposure to the many theoretical orientations, applications and professional issues that make psychology such a lively and controversial field. To facilitate this exposure, the department has provided a course, Psy 300—"Current Trends in Psychology," which features speakers from the psychology faculty, faculty from other departments, and professionals from the community at large. In choosing speakers for this course a diversity of topics and viewpoints is deliberately sought. This course also includes a history of the Department and an orientation to the major. This is the only required course in the psychology major. It must be taken during the first semester of admittance to the major.
3. A psychology major must have a substantial background in the field. To insure this, the Department requires the completion of a minimum of 24 units of upper-division psychology courses, including Psy 300, with a minimum grade of C or Credit in every course. These 24 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"). Each student must meet with an advisor and declare an advisory plan during the first semester as an upper-division student at Sonoma State University. However, the program of courses or the designated plan may be changed, in consultation with the faculty advisor. (See ACADEMIC ADVISING below for more information on the Advisory Plans.) 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 15 units of supporting work with a minimum grade of C or Credit. Normally, these units will be taken in departments other than Psychology. However, in the context of the Humanistic and the Human Services/Human Sciences Advisory Plans, it is possible, with the support of the student's faculty advisor, to include psychology courses in the 15 supporting units. Courses used to satisfy the General Education Requirements of the University may *not* be used as supporting courses, but courses used as part of another major or minor may be used. Students should obtain written approval from their advisor 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.

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. Demonstration of a broad and comprehensive knowledge of the field of psychology by passing the Department's comprehensive examination.
2. Completion of at least 20 units of upper-division psychology courses with a minimum grade of C or Credit in each course.

Academic Advising

The Department has established two types of academic advising services: (1) general academic advising, such as which classes to take to fulfill the general education requirements, checking the student's progress towards graduation, help in interpreting college and department policy, etc.; and, (2) personal academic advising, such as help in formulating career plans, recommendations for books and other sources of information within the student's field of interest, help in choosing supporting courses outside the field of psychology, help in formulating an independent study project, etc.

The two types of academic advising require quite different preparation. General academic advising requires an extensive knowledge of college regulations, policy, programs, degree requirements, and graduate school requirements as well as staying up-to-date with the frequent revisions of each of these. The Psychology Department provides a minimum of 10 office hours of general academic advising per week. Students may obtain an appointment for this service through the secretary in the Psychology Department Office. Students should see a general academic advisor at least twice during their stay at Sonoma; once when they first arrive and again during the semester prior to the semester in which they plan to graduate.

Personal academic advising requires an extensive knowledge of a particular area of psychology and an ongoing relationship with the student. The required Current Trends Class (Psy 300) is designed in part to facilitate the choosing of a personal academic advisor. Each professor in the Department makes a presentation on the current trends within his/her area of specialization. Part of each presentation is a short personal background statement. The student is encouraged to select a potential advisor on the basis of the professor's area of expertise and his/her personal characteristics, then to visit the professor during office hours and to establish the relationship. Occasionally a professor will already have too many advisees. In this case, the student is invited to repeat the process with another professor. This process is slightly inefficient, but it allows the vital element of freedom of choice. At any point during his/her stay at Sonoma, the student may change advisors by the simple process of asking a new professor to become his/her advisor. Students are encouraged to meet with their personal academic advisor at least once each semester, when planning their next semester's classes.

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 our students. Each student is asked to select a personal Academic Advisor during his or her first semester as an upper-division student at Sonoma. At this time, the 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 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.

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 Project (CIP): The Department actively participates in the University's Community Involvement Project wherein academic credit can be obtained for volunteer work in the community.

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 IN PSYCHOLOGY

See the separate description of the Master of Arts in Psychology—External Program, on page 356.

The Master of Arts program in psychology provides students with the opportunity to pursue advanced, in-depth studies of human beings as they live and experience their world. Several areas of emphasis are available: archetypal psychology, psychology of the Chicano, community psychology, psychological ecology, Gestalt psychology, psychology of wilderness experience, and phenomenology. Each candidate, with the assistance and supervision of a faculty advisor, develops a plan of study which reflects his/her questions and special interests in psychology.

The degree can serve as a terminal degree or as preparation for the Ph.D. This program is not designed to train counselors or as preparation for the Marriage, Family, and Child counseling license, which is available through the Master of Arts in Counseling within the Counseling Department (Nichols 220).

The Master of Arts Program is a 30 unit program. Students who meet the University's basic qualifications for admission to graduate standing (A & B below) are invited to enroll as unclassified post-baccalaureate students. These students may take graduate level courses while developing a proposal for a thesis or creative project and meeting any other requirements for classified standing (C, D, and E below).

ADMISSION REQUIREMENTS

- A. A Bachelor's Degree from an accredited College or University with a major in psychology or at least 24 upper-division units in psychology or the 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 undergraduate background or by passing examinations 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. Admission to classified standing requires a detailed proposal for a thesis/creative project and a program proposal both of which have been approved by a Psychology Department advisor and a faculty committee.

Applications are accepted for unclassified post-baccalaureate status on a continuing basis. Applications for classified status must be completed during the semester prior to registration as a classified graduate student.

To apply for admission as an unclassified post-baccalaureate student, write directly to the University Admissions Office.

Inquiries concerning the graduate program in psychology should be addressed to:

Graduate Coordinator
Department of Psychology
Sonoma State University
Rohnert Park, California 94928

*** 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 thirty units of approved graduate study.
- 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 application 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

Psychology 590 Master's Thesis and Directed Reading	<i>Units</i> 6
Support courses	24
	30

PSYCHOLOGY COURSES

The designation of "block" after a course title indicates that the course will only be open to students who also enroll in other specified courses within the block. These classes are part of a package and cannot be taken individually. See the description of block courses at the end of the undergraduate class listings. 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. May be used for General Education elective credit.

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 elective credit.

300. Current Trends in Psychology (4)

Each professor in the Department makes a one or two day presentation on the current trends within his/her area of specialization. Part of each presentation is a short personal background statement. This course, required of all Psychology Majors, is normally taken during the student's first semester of attendance at Sonoma.

* Also see general university requirements.

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 elective credit.

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.

304. Awareness Processes (4)

A study of growth tools for personal development. Includes co-counseling, journal-keeping, and the development of greater immediate awareness of affective, cognitive, and sensory modes of experience.

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 Wheelwright will be among those studied.

312. Seminar in Creativity (4)

This class is designed to investigate creative behavior and the relationship of this form of behavior to psychology and to the social environment in general. The student is introduced to appropriate concepts and techniques to assist understanding and assimilation of the course content.

Prerequisite: Psy 250 or equivalent.

315. Seminar in Psychological Writing (4)

The use of the written word as a means of conveying knowledge of observable events and inner realities. This course is designed for those who wish to write about topics within the field of psychology.

Prerequisite: Instructor's permission.

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.

329. Asian Psychology (1-4)

Methods and ideas of various Asian thinkers and schools of practice. Cultural roots of these disciplines and their relation to Western psychology.

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, Selvers, 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.

399. Student Instructed Course (1-4)

A course designed by an advanced student, approved by the Department, and taught by the student under the supervision of his/her faculty sponsor. Consult the class schedule for topic to be studied. May be taken twice for credit.

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)

409. Developmental Psychology (4) Fall Semester

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.

411. Behavior Problems of Children (4)

Study and observation of children with problems, and examination of the environments in which problem events occur.

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 disfunction, 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.

419. Introduction to Family Therapy (4)

Theory and process of working with couples and families.

Prerequisite: Psych 418.

421. Psychology of Aging (4)

Examination of age-related roles, images of and attitudes toward aging, transition points in the aging process, and myths surrounding aging.

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.

423. Community Psychology (2-4)

A study of community structure and processes in relation to human needs. Involves study of a community in the field. May involve comparison of community in various cultures and subcultures.

424. Seminar: Work and Organization (4)

It has been said that the present revolution in work is as fundamental as the industrial revolution was in its day. This course will include an examination of that revolution from the standpoint of the companies, the theorists, and the working people who are participating in it.

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. Visits to nearby institutions and opportunities for field work may be offered.

426. Theories of Psychotherapy (4)

This course provides a basis for study and exploration of various theoretical approaches to the therapeutic process.

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 (2-4)

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 (1-4)

An experiential-didactic approach to the Gestalt process as developed by Fritz Perls and his associates. Limited to 15.

Prerequisite: Group Process or equivalent and consent of instructor.

430. Advanced Seminar in the Gestalt Process (1-4)

Advanced study in Gestalt theory and process.

Prerequisite: Psych 429 and consent of instructor. Limited to 15.

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.

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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

437. Seminar in Psychological Testing (4)

An introduction to current, widely used objective group and individual tests, particularly those related to counseling.

438. Psychology of Disability (4)

An examination of psychological aspects of "body-insult", trauma, and "defect." Stressful conditions to be explored include amputation, brain damage, heart disease, obesity, leprosy, surgery, etc. Field trips to hospitals and rehabilitation centers.

EXPERIMENTAL AND RESEARCH PSYCHOLOGY

Each semester, 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.

441. Introduction to Psychological Research (4)

A comprehensive introduction to the concepts and principles of research methods in psychology. As part of their work for this class, students will design, carry out, and report in APA format an original research project.

Prerequisite or corequisite: Psych 440.

442. 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: Elementary Statistics, 8 units of experimental psychology, such as Psychology of Learning, Physiological Psychology, Perception and Cognition, Introduction to Psychological Research, or Social Psychology.

444. Psychology of Learning (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.

Prerequisite: Psych. 343 or consent of instructor.

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.

Prerequisite: Consent of instructor.

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.

Prerequisite: Psych. 343 or consent of instructor.

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: Psy 371.

453. Seminar in Neuropsychology (4)

An advanced survey of neuroanatomy and neurophysiology as related to behavioral, perceptual, and other psychological processes. Some background in biology and/or chemistry is suggested.

Prerequisite: Entrance by examination the first day of classes or consent of instructor.

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.

456. Human Psychology and Ethology (4)

Evolutionary perspectives on human rituals, aggression, bonding, and bodily and behavioral displays of age and sex status and emotion with comparative data on other primates.

459. Program Evaluation Research (4)

Program evaluation as a discipline and as a profession. The use of research techniques to evaluate governmental business and agency programs with a particular emphasis on programs of human service, including review of typical evaluation designs and reports. Emphasis of the course is primarily conceptual rather than statistical. The class designs and conducts an evaluation of a selected human services program.

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. While Humanistic Psychology begins with the notion of a "normal" psychology (embracing without being restricted to "abnormal" and pathological), it examines all aspects of personality formation and self-discovery as they lead toward a healthy and fully functioning person. Maslow, Rogers, Bugenthal, Jourard and May are among those studied.

464. History and Theoretical Foundations of Psychology (4) CORE

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. 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.

467. Jung and His Followers (4)

A study of imagination in the work of Carl Jung and other psychologists within the Jungian tradition. Prerequisite: Psych. 311.

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.

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.

474. Indigenous Psychology (1-4)

An examination of the psychoepistemology which the indigenous populations of the American continent had, have, and are developing. Comparison and contrast to European theoretical systems of psychology and Asian psychology will be explored. The significance of Indigenous psychology to contemporary indigenous populations, e.g., the Chicanos, Native Americans, etc. and its practice and application will be studied.

475. Psychology of the Chicano (4)

The experience of being a Chicano in North American Culture, and its impact on personality and behavior.

477. Seminar in Phenomenology (1-4)

The phenomenological approach to understanding human experience. Draws on both philosophical and psychological sources of information.

479. Phenomenology of Boundary (4)

Looks into the connective and differentiating processes disclosed in the between-nesses, 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. 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. May be repeated for credit.

Prerequisite or corequisite: Psych. 485 or consent of instructor.

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.

Other

199. Student-instructed course (1-4)

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.

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.

495. Special Study (1-4)

The Psychology Department encourages independent study as preparation and prac-

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tice 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.

595. Special Study (1-4)

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.

493. Field Experience (1-12)

Seminar, 1 hour; 3 hours per unit field.

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.

Block Classes

The following instructor prefers to work intensively with a small group of students. He feels that the subject matter he teaches is best approached in an integrated fashion.

Dr. Robert Rueping—An Integrated General Approach to Psychology

Spring Semester:

368. Interpersonal Behavior (4) BLOCK ONLY

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 Language (4) BLOCK ONLY

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.

Fall Semester:

468. Seminar in Existential Psychology (4) BLOCK ONLY

The existential tradition in philosophy and psychology. Meanings of such ideas as freedom, responsibility, action, and commitment in relation to an individual life.

469. Psychology of Time (4) BLOCK ONLY

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.

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.

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. 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.

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. Limited to M. A. candidates.

540. Seminar in Psychological Issues (2-4)

Each semester a particular topic in individual, social, or community psychology is selected for study in depth. May be repeated for credit. Limited to M. A. candidates.

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. May be repeated for credit. Limited to M.A. candidates.

550. Seminar: Current Trends in Humanistic Psychology (2-4)

Contemporary directions in the development and evolution of methods and theories relevant to the individual, interpersonal, community, and transpersonal modes of growth. May be repeated for credit. Limited to M.A. candidates.

560. Professional Workshop (1-4)

In each workshop or seminar (instructor option) a particular problem or methodology will be selected for study in depth, with the aim of developing professional capability in the area studied. May be repeated for credit. Limited to M.A. candidates.

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. Consent of instructor.

580. Seminar in Teaching College Psychology (1-4)

Discussions in theory methods and materials of teaching psychology in junior colleges and four-year colleges. Limited to M.A. candidates.

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 his graduate study committee. A student may not register for the first three units of Psychology 590 until a formal proposal has been accepted by the student's committee. An acceptable rough draft is required in order to register for the second three units.

595. Special Studies for Graduate Students (1-4)

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.

Areas of interest pursued by students include the human potential movement, humanistic teaching and learning, psychology and art, creative and community organizational development, existential and phenomenological research and transpersonal psychology, and many others.

Teachers in this program are people interested in role-free process, in sharing and searching with students, in understanding differences in styles of learning, in creating new professions, in allowing new dimensions of experience to emerge and in celebrating with each student his/her becoming. They are as diverse as the students applying to the program.

This master's degree, equal in all respects to one earned in the conventional university program of studies, with comparable academic standards, is available for those who are unable to pursue a regular on-campus degree. *It is necessary to attend periodic meetings with the advisor on campus.*

GENERAL DESCRIPTION

The student will, with the consultation and approval of the faculty advisor, initiate and execute the program of studies—courses, fieldwork and related research and independent study. The awarding of the degree will be dependent upon the successful completion of an examination, and thesis or creative project. This examination will be based on the program of studies as accepted by the advisor and the program Steering Committee.

THE QUALIFIED STUDENT

This master's program requires a high level of self-direction, individual initiative, and knowledge of resources in the field. Therefore, students who have background and work experience in psychology and knowledge of their own personal, educational and

vocational needs are preferred. This program encourages applications from members of minority groups and from persons already working in communities.

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 at Sonoma State University or the equivalent.
4. *Both* of the following:
 - One year of graduate-level experience [academic or practical] in humanistic psychology;
 - One semester of attendance at Sonoma State University [minimum 9 units—resident or extension].
5. Familiarity with the history and theoretical foundations of psychology. This may be met by appropriate upper-division course(s) in the applicant's background or by passing an examination administered by the Psychology Department.
6. The University requires the aptitude section of the Graduate Record Examination or the Miller Analogies Test for all graduate applicants.
The Psychology Department will use this for information but not as a primary criterion for selection.

All of the above prerequisites must be met by the student *before* she/he can officially begin the M. A. program. However, it is possible to apply while working to fulfill these prerequisites.

FEES

Fees for the program are set by the Office of Extended Education.

EXAMINATION

As part of the final admission process each student will select an M. A. committee, in consultation with the advisor. The committee will include: the advisor; a representative from the Psychology Faculty at SSU; a qualified individual from the community [ordinarily a field supervisor]; another student. This committee is responsible for evaluating the student's M. A. work. There are two phases of this evaluation. The first occurs at midyear and involves advancement to candidacy; the second is at the end of the student's program and includes the presentation of a portfolio and a final oral examination. Credit for work completed during the M.A. year is awarded at this final examination. See Department faculty for list of approved courses.

APPLICATION PROCEDURES:

- Step 1 Obtain a preliminary application package, after October 1 from Secretary to External Degree Program, M. A. in Psychology, Office of Extended Education, Sonoma State University, Rohnert Park, CA 94928.
- Step 2 Submit the completed preliminary application packet to: Secretary, External Degree Program, Office of Extended Education, Sonoma State University, Rohnert Park, CA 94928. Applications received by December 31 will be given priority. Late and mid-year applications may be accepted by petition.
- Step 3 You will be sent a Supplementary Information Packet requesting additional information in order to complete your application, i.e. letters of recommendation, transcripts, autobiographical statement, etc. Applications must then be screened; applicants will be notified that they are, or are not, eligible for the program.
- Step 4 Students will be chosen by advisors from the pool of those persons considered eligible. For students selected by advisors, final application

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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.

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.

SOCIAL SCIENCES

Dean: Jeffrey T. Douth

300 Conceptions of Society (3)

Examination of a specially selected thematic topic approached from multiple viewpoints within the Social Sciences. Topics are changed periodically. Course fulfills part of upper-division requirements in General Education.

SOCIAL SCIENCE SINGLE SUBJECT CREDENTIAL PROGRAM

Coordinator: Robert A. Karlsrud, Associate Dean, School of Social Sciences
 RYAN SINGLE SUBJECT SOCIAL SCIENCE PROGRAM

In addition to an academic major in one of the social sciences, all candidates for the Single Subject Credential—Social Sciences—must complete a breadth requirement to meet State requirements for the waiver program. These courses must total at least half the unit value of courses taken in the department of the major.

In order to qualify for the Social Science Secondary Education Program, a student shall take an academic major in Anthropology, Economics, Geography, History, Politics, or Sociology and, simultaneously, either as part of his/her General Education program, as part of the major requirements, as a means of fulfilling the Support Subjects requirement included in some social science majors, or through electives, each student shall fulfill the following requirements:

	<i>Units</i>
Anthropology 203—Cultural Systems	4
Economics 201A or 201B—Introduction to Macroeconomic Theory or Introduction to Microeconomic Theory	4
Geography 203—Cultural Geography	4
History 201—Foundations of World Civilizations	4
History 202—Development of the Modern World	4
History 251—History of the United States to 1865	4
History 252—History of the United States Since 1865	4
Politics Choose one of the following:	
423—American Constitutional System	4
425—The American Party System	4
426—The Legislative Process	4
427—The American Presidency.....	4
Sociology Choose one of the following, listed in preferential order:	
375—Survey of Sociological Theory	4
300—Sociological Analysis	4
201—Introduction to Sociology	4
OR other courses by advisement (see coordinator)	

Students who are completing the General Education requirements at Sonoma State University are to complete the Ethnic Studies requirement by taking AMCS 210, MAMS 445 or AMCS 335. Upon consultation with an advisor, a transfer student without an Ethnic Studies component will add an elective from the Ethnic Studies area. Students are also encouraged to complete Psychology 250—*Introduction to Psychology* (4 units).

In addition to the Ryan Single Subject Social Science Program requirements, all social science credential candidates are required to take the following course prior to

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completing the last phase of the Professional Education Program:

Social Science 400—Concepts and Methodologies of the Social Sciences 4 units
(substitution only with consent of coordinator)

400—Concepts and Methodologies of the Social Sciences

An analysis of the methodological, structural and conceptual bases of the social sciences through the study of social science curricula. Required by the Departments of Anthropology, Economics, Geography, History, Political Science and Sociology as part of the academic preparation of those students contemplating a career in secondary social science education.

SOCIOLOGY

Department Chair: David Arnold

Faculty: Kathleen Charmaz, Susan Garfin, Daniel Haytin, Richard Rizzo, Clarice Stasz, John Steiner, Robert Tellander.

Department Office: Stevenson 2084, phone (707) 664-2561

Sociology is the study of society with an emphasis on human relationships within groups and social institutions. It explores human behavior in an effort to describe it, explain it, and predict it. The study of sociology is fundamental to a liberal arts education. It prepares students for the informed exercise of social responsibilities in a complex society because it provides tools of inquiry that extend beyond personal experience.

For non-majors, the department offers courses on such current social issues as urban problems, the needs of the aged, the effects of bureaucratization, drug addiction, and others. Further selections provide insights into personal concerns, especially socialization, the social development of the self, family, work, religion, leisure, art, and dying. Many courses include an examination of societies outside the United States to provide a cross-cultural understanding of the topic.

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 assist students in the selection of other courses, the department has available plans of study for four career areas.

1. The *Human Services* focus is for those interested in supervision, program planning and development, proposal writing, community organization, and counseling in a wide range of agencies, such as halfway houses, alcoholism rehabilitation homes, battered women's shelters, recreation departments, special schools, and so on. This plan of study develops administrative, organizational, and research skills for these occupations, as well as appropriate sociological information about social needs in American society.
2. The *Occupations and Organizations* emphasis structures a study plan for those with interest in organizational consulting, industrial relations research, union organization, human relations advising, communication consulting, and other applications of sociology in work-related settings. This plan of study develops skills in organizational diagnosis, research, and planning, as well as an understanding of the facts of work and bureaucracy in this society.
3. The *Research* focus prepares those who wish to work in the growing area of information retrieval and analysis, whether for government, business, private agencies, social research firms, or personal consulting. The study plan incorporates all necessary research techniques, including social survey, interviewing, field work, statistical analysis, and data interpretation.
4. The *Graduate and Professional School Preparation* focus guides those who intend to go beyond a bachelor's degree for advanced degrees in such areas as sociology, social work, public health, gerontology, counseling, and related fields. This study plan recommends those courses that will facilitate acceptance in professional school and success once there.

Students should contact the department for a copy of any or all of these Study Plans.

The department has a strong commitment to the value of practical experience for the application of course work, and thus encourages participation in either the Community Involvement Program or the Internship Program. These allow students to serve an

agency of their choice, for example, hospices, convalescent homes, art organizations, community hot lines, religious centers, schools, women's centers, and the like.

All majors considering a career in secondary social science education should see page 359 for Ryan Single Subject Social Science Program requirements.

BACHELOR OF ARTS IN SOCIOLOGY

Major	<i>Units</i>
General Education	48
Sociology Courses	40
Electives.....	36
Total	124

COURSE REQUIREMENTS

	<i>Units</i>
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

Sociology 201—Introduction to Sociology	4
Sociology 300—Sociological Analysis	4
Upper Division Courses in Sociology	12
	20

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.

202. Social Problems (4)

An introduction to the study of major social problems in American society, such as poverty, racism, drug addiction, crime, sexism, mental illness, treatment of the aged, labor problems, etc. Recommended for non-majors.

295. Community Involvement Program (1–4)

Students can earn from 1–4 units of credit for work as a volunteer in community agencies which serve as future employment possibilities for Sociology majors. Placements will be made by the Center for Field Experience which has over two hundred available placements.

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.

302. Statistics for Social Scientists (4)

An introduction to statistics as they are used in the social sciences. The course will survey relevant statistical techniques and their application in social scientific analysis. Prerequisite: Math 117

304. American (USA) Society (4)

The study of American society, its values, institutions, and social organizations. The familial, technological, and social bases of American society. The social sources of change and stability in American 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.

307. Documentary Photography (2)

An introduction to basic photographic skills and the use of these skills to record and understand the social world.

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 (U.S.A.) Culture (4) (cross listed as Gerontology 332)

An analysis of how cultural values are related to attitudes and beliefs about death. Relationships will be drawn between widely held conceptions of death and the care

of the dying. The management of the dying process will be studied in conjunction with the exploration of new ways of dealing with this phenomenon. Special emphasis will be placed on examining the meaning of death to the dying person as well as to family and friends.

333. Social Change and Futurology (4)

Comparative analysis of past social changes, such as technological invention, social innovation, political revolution, and modernization. Survey and critiques of major theories and predictive schemes concerning the future development of society.

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.

395. Community Involvement Program (1-4)

Students can earn from 1-4 units of credit for work as a volunteer in community agencies which may serve as future employment possibilities for Sociology majors. Placements will be made by the Center for Field Experience which has over two hundred available placements.

400. Survey Research (4)

Topics such as questionnaire construction, sampling, interviewing, coding, etc., will be covered in lectures, discussions, readings, and short exercises.

401. Field Research (4)

Focuses on field work and participant observation. Each student will observe and analyze, in depth, lectures covering an ongoing social setting. Strategies of observation and qualitative analysis will relate to each participant's project in progress.

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.

432. Seminar: Sociology of the Arts (4)

The role of the performing arts, visual arts, and literature in society. Investigation of social factors affecting artistic production. The relationship between a work of art and its audience, the role of criticism and public taste, the influence of historical tradition, the role of the artist.

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

436. Sociology of Sport (4)

An examination of sport in the United States. Topics include the place of sport in our society, the social structure and values of organized sport, racism and sexism in sport, the relation of sport to other institutions and subcultures.

446. Criminal Justice and the Community (4)

Sociological analysis of the definition of crime, how criminal definitions are created, implication of the labeling process, and an analysis of law as an expression of interests. Similar systematic analyses will be invoked in viewing law enforcement systems, negotiations in the criminal justice process and the court as a bureaucratic system.

447. Criminology (4)

A survey of the theories of delinquency and crime which examines the origins of criminal law, patterns of criminal behavior systems and the extent and nature of criminal activity, and its causes. Emphasis will be placed on the importance and impact of social learning, social structure, and cultural expectations upon groups and individuals. Cross listed with CJA 425.

448. Punishments and Corrections (4)

Systematic analysis of the relationship among crime, its financial, social and personal costs, and the type of punishment demanded by the society. An in-depth analysis of the major theories of punishment, institutions of confinement, and relationship to the social structure, as well as alternatives to confinement.

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. Applied Sociology (4)

Prepares for sociological practice in non-academic settings (government, business, 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 as an institution and its relation to the process of industrialization is examined. The benevolent as well as the regulatory effects of our present welfare institutions are studied in relation to various impoverished and troubled segments of the society.

462. Seminar: Comparative Sociology (4)

Considerations of theory and methods applied to comparative study of nations, societies, cultures, and subcultures. The use of historical archives and existing statistical data banks for comparative analysis.

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.

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.

499. Internships (1-4)

THEATRE ARTS (DANCE/DRAMA)

Associate Dean of Performing Arts: Larry Snyder

Coordinator: Nancy Lyons

Faculty: Christopher Beck, Raymond Burr, Fred Curchack, Theresa Dickinson, Carla Guggenheim, Nancy Lyons, Judy Navas, Lloyd Scott, William Sherman, Ann Woodhead

Department Office: Ives 206, phone (707) 664-2474

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.

Theatre Arts classes are designed to introduce the student to the basic elements and techniques of drama, dance, and theatre production and design. Original dance and drama, as well as experimental approaches to existing works, are encouraged through such classes as choreography, directing, and the dance and drama ensemble workshops. 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.

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.

BACHELOR OF ARTS IN THEATRE ARTS

Major

	<i>Units</i>
General Education	48
Theatre Arts	45
Electives.....	31
Total	124

COURSE REQUIREMENTS

	<i>Units</i>
THEATRE ARTS	45

The Theatre Arts student is expected to develop a broad background in the discipline, and to demonstrate proficiency in drama, dance or design. The student may choose either dance or drama emphasis. The course offerings are divided into two stages.

Stage I consists of work considered basic to the discipline and prerequisite to more advanced technique and theory classes. With the exception of THAR 300, Theatre in Action, these courses may be waived as major requirements by examination. Stage II consists of advanced technique courses, ensemble production courses, and research and history courses leading toward independent work in ensemble theatre. All Theatre Arts courses are open to non-majors who have taken the necessary prerequisites.

DRAMA EMPHASIS

Students are advised to complete Stage I before Stage II

	<i>Units</i>
STAGE I—REQUIRED	17
100 Introduction to the History of Theatre and Dance	3
120A Beginning Acting A	1
120B Beginning Acting B	1
130 Beginning Design & Practice: Scenery	2
131 Beginning Design and Practice: Costume	2
135 Stagecrafts.....	3
145 Voice for the Actor.....	2
300 Theatre In Action: Performance and Criticism	3
STAGE II—REQUIRED.....	17
302A, 302B Drama Ensemble Workshop (2 semesters)	6
320 Intermediate Acting	2
350 Directing Workshop	2
370A History of Theatre	3
390 Living and Working in Theatre (2 semesters)	1
400 Senior Projects	3
STAGE II—ELECTIVES	11
132 Beginning Design and Practice: Lighting	2
133 Beginning Design and Practice: Makeup.....	1
170 Mime.....	1
380 Research	3
420 Advanced Acting	2
460 Drama for Children.....	2
At least 11.0 units from any of the Theatre Arts Department offerings, which may include a 3.0 unit class in dramatic literature (e.g. Black Drama, Multi-Cultural Studies; or English).	
TOTAL FOR DRAMA EMPHASIS: STAGE I—REQUIRED.....	17
STAGE II—REQUIRED	17
STAGE II—ELECTIVES	11
	45

DANCE EMPHASIS

Students are advised to complete Stage I before Stage II

	<i>Units</i>
STAGE I—REQUIRED	17
100 Introduction to the History of Theatre and Dance	3
110A Beginning Modern Dance A	1
110B Beginning Modern Dance B	1
131 Beginning Design and Practice: Costume.....	2
132 Beginning Design and Practice: Lighting	2
135 Stagecrafts.....	3
140 Rhythm Analysis.....	2

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300 Theatre In Action: Performance and Criticism	3
STAGE II—REQUIRED	17
301A, 301B Dance Ensemble Workshop (2 semesters)	6
310 Intermediate Modern Dance	2
340 Choreography I	2
370B History of Dance	3
390 Living and Working in Theatre (2 semesters)	1
400 Senior Projects	3
STAGE II—ELECTIVES	11
At least 11.0 units from any of the Theatre Arts Department offering, which may include 4.0 in Kinesiology (Health 310).	
115 Dance Styles.....	1
160A, 160B Beginning Ballet A or Beginning Ballet B	1
210 Effort/shape	2
260 Intermediate Ballet.....	1
380 Research	3
410 Advanced Modern Dance.....	2
440 Choreography II	2
450 Teaching/Directing for Dancers	2
470 Dance for Children.....	2
Health 310 Kinesiology	4
At least 7.0 units from the above list plus at least 4.0 units from other Theatre Arts Department offerings.	
TOTAL FOR DANCE EMPHASIS: STAGE I—REQUIRED	17
STAGE II—REQUIRED	17
STAGE II—ELECTIVES	11
	45

MINOR IN THEATRE ARTS 24 units

A student may emphasize either dance or drama in the Theatre Arts minor. Required courses include

100 Introduction to the History of Theatre and Dance	3
300 Theatre in Action: Performance and Criticism	3
301 A,B Dance Ensemble Workshop.....	3
or	
302 A,B Drama Ensemble Workshop	
Electives	15
	24

(Six of the elective units must be upper division and Choreography 1 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, Sherman

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. Open to majors and non-majors.

120A. Beginning Acting A (1) Navas, Sherman, Curchack

An exploration and appreciation of acting. Basic skills are developed through individual and group exercises in theatre games and improvisations that open up the imagination, break down the barriers between people and liberate the emotions. Work in believability, physical actions, relaxation, sense and emotional memory, and characterization is covered. May be repeated for credit.

120B. Beginning Acting B (1) Navas, Sherman, Curchack

Basic scene work begins with an emphasis on the personal processes between actors. They will learn to listen and to personalize the experience so that their exchanges on stage are alive and deeply felt. The scene work also includes script analysis, building a character and positive evaluation of performance.

Prerequisite: THAR 120A. May be repeated for credit.

130. Beginning Design & Practice: Scenery (2) Sherman

Basic exercises in theatre graphics and technical drawings for the stage. Techniques for realization and execution of designs (e.g., construction techniques for scenery) will be considered. Work in the class may involve designing for departmental productions.

Prerequisite: THAR 135 Stagecrafts.

131. Beginning Design and Practice: Costume (2) Sherman, Scott

An introductory course in the fundamentals of costume design and construction. Work in the class will contain experiences in sewing and designing for departmental productions. Course will include beginning drawing and the fundamentals of design.

Prerequisite: THAR 135 Stagecrafts. Crew work on a production is required.

132. Beginning Design and Practice: Lighting (2) Sherman

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.

Prerequisite: THAR 135 Stagecrafts. Crew work on a production is required.

133. Beginning Design and Practice: Makeup (1) Scott

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 current productions in dance and drama. Students will be required to work makeup crew for at least one production. May be repeated for credit.

372 / Theatre Arts (Dance/Drama)

135. Stagecrafts (3) Sherman

Work in both theory and practice will cover scenery techniques and drawings for the theatre, basic methods of lighting, costume figure drawing and sewing by hand and by machine. Use of tools and materials for scenery, costumes, props and lighting will be fundamental to the course. Crew work on productions is required. Stagecrafts is a prerequisite for Beginning Scene Design, Lighting and Costume.

140. Rhythm Analysis (2) Lyons, Woodhead

Rhythm resources for dancers. Learning to write and read musical notation of dance rhythms. Experience in writing percussion compositions for dance and in accompanying dances with percussion instruments.

Prerequisite: THAR 110A or THAR 300.

145. Voice for the Actor (2) Curchack, Navas

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) Guggenheim

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) Guggenheim

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) Curchack, Navas

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 Instucted Course (1-3)

210. Effort/Shape (2) Guggenheim

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) Guggenheim

Further experience in the technique and discipline of classical ballet including barre exercises, allegro, adage, turns and combinations.

Prerequisite: THAR 160B or consent of instructor. May be repeated for credit.

295. Community Involvement 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: Four units of Stage I or consent of instructor.

301A, B. 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.

302A,B. 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.

305. Experiments in New Theatre (3) Curchack, Navas

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 movement skills and abilities through modern dance techniques.

Prerequisite: THAR 110B and THAR 300 or consent of instructor. May be repeated for credit.

320. Intermediate Acting (2) Curchack, Navas, Sherman

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 300 or consent of instructor.

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 and THAR 300 or consent of instructor. May be repeated for credit.

350. Directing Workshop (2) (Spring) Navas, Sherman

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 Spring semester of the junior year prior to work on a senior project.

Prerequisite: THAR 120A, THAR 120B, THAR 300 or consent of instructor and a beginning design class (lighting recommended). May be repeated for credit.

370A. History of Theatre (3) (Fall) Navas, Sherman

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.

370B. History of Dance (3) (Fall) Lyons, Woodhead

A selected survey of dance history from 1800 to the present, with special emphasis on a specific topic or period.

Prerequisite: Theatre Arts 100 or consent of instructor.

374 / Theatre Arts (Dance/Drama)

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. Must be taken before THAR 400.

Prerequisite: THAR 300 or consent of instructor.

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: THAR 300 or consent of instructor; THAR 350 for Drama Senior Projects.

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) Curchack, Navas, Sherman

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.

428. From Script to Screen (3)

A course designed for adapting short screenplays to screen by utilizing limited production techniques—from pre-production to post-production. The class will adopt the collaboration format by bringing screenwriters together with student actors, directors, and camera technicians in order to produce individual short scenes. Cross-listed with English 428.

Prerequisites: English 329 or consent of instructor.

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.

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 resources for working with children including theatre games, creative dramatics, puppetry and plays for children. Practical experience in working with children will be gained through visits to schools in the community with performances and teaching material developed in class.

470. Dance for Children (2) Lyons

Developing resources for working with children in creative movement. Class includes participation in rhythmic activities and movement exploration, and observation of children's dance classes through field trips to elementary schools and nursery schools.

480. Coordinated Projects (1-3) Department Faculty

Involvement in on-campus dance or drama projects with student directors, actors, designers, technicians and under faculty supervision. May be repeated for credit.

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.

WOMEN'S STUDIES

Coordinator: E. Kay Trimberger

Department Office: Cluster Schools 31, phone (707) 664-2840, 664-2561

The overall purpose of the Women's Studies Program is to provide students with a cohesive and academically sound body of knowledge about women. The focus of the curriculum upon the experiences of women in the U.S. enables students to emerge with a solid grasp of a specific cultural and historical sequence illuminating the social forces which impinge upon and shape women's lives. It includes theoretical analyses of the effects of sex bias upon women and men in terms of social roles, status, economics, as well as recognition and analysis of women's contributions to culture and society from both historical and contemporary perspectives. The diversity of women's experiences due to differences in race and ethnicity, class, age, motherhood, sexual preference, religion and region is emphasized.

The curriculum in Women's Studies offers students a diversity of options which provide official recognition of their study of women desirable for future professional and career goals. All students are welcome to enroll in Women's Studies courses. Courses may be taken as electives and there is a minor in Women's Studies available (see details below) and a Career Minor in Women's Health (Health Systems Organization). See description under Interdisciplinary Studies on p. 227. In addition, students may choose to construct their own Special Major, an individualized, interdisciplinary undergraduate or graduate course of study, which may include Women's Studies or be focused centrally upon a women's issue, such as "Women and Health," or "Women and Work." (See further information on the Special Major elsewhere in this catalogue.)

Each semester the Women's Studies Program publishes a brochure listing all program offerings and courses on women in various departments. Copies of this brochure may be obtained in the Women's Studies Office. The Women's Studies Program will attempt to assist students in the Program with child care needs. Students may contact the office or their teachers for information regarding child care.

The Women's Studies Program and Coordinator are located in Cluster Schools 31 and 32, phone (707) 664-2840. Office hours are Monday through Friday from 10:00 A.M. to 4:00 P.M. during the academic year.

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 twelve (12) units of CORE COURSES, and at least nine (9) units of SUPPORTING COURSES, for a minimum total of twenty-one (21) units. At least seventeen (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. ("F" indicates Fall Semester; "S" indicates Spring Semester.)

- (1) WOMS 300 Introduction to Women's Studies (4) (F) 4 units
- (2) WOMS 446 Women in American History (4) (HIST 446) 4 units
- (3) *One* of the following:
 - WOMS 470 Race, Sex and Class (4) (AMCS 420) 4 units
 - or
 - WOMS 475 Feminist Theory (4)

Total CORE: 12 units

SUPPORTING COURSES

Minors in Women's Studies must complete at least three courses from the following list, for a total of from nine (9) to twelve (12) units of SUPPORTING COURSES. In addition to the courses listed below (which are described in the SSU catalog), occasional "Special Topics" courses on women offered by various departments and student-taught courses offered through Women's Studies (WOMS 199 or WOMS 399 designation) are also acceptable toward SUPPORTING UNITS in the minor. A *maximum* of two (2) student-taught courses are acceptable toward the minor. Please see the current semester BROCHURE OF THE WOMEN'S STUDIES PROGRAM for current "Special Topics" and student-taught courses.

Supporting Course Requirements:

A. Minors must take one (1) course with a multi-cultural focus from Category I: WOMEN IN AMERICAN SOCIETY, for example, AMCS 405 Black Family.

B. Minors *may* take two courses from Category I: WOMEN IN AMERICAN SOCIETY, but may take *no more than one* course from any of the other categories (II, III, or IV).

I WOMEN IN AMERICAN SOCIETY

- HIST 447 Women's Biography (4)
- AMCS 405 Black Family (4)
- AMCS 471 Afro-American Children's Literature (4)
- MAMS 406 La Chicana (4)
- NAMS 348 Role of Women in Native American Cultures (4)
- * HIST 463 Your Family in American History (4)
- SOC 364 Sex Roles
- SOC 345 Family (4)
- ECON 347 Women and Employment (4)
- MGT 345 Sex Roles in Management (4)
- WOMS 460 Women and Institutions (4)
- MAMS 405 Mexican-American Family (4)

II PERSPECTIVES ON WOMEN IN THE HUMANITIES

- ENG 345 Women Writers (3)
- ENG 449 Feminist Perspectives in Literature (3)
- FREN 330 Literature: Women as Authors and Subject (4)
- * FREN 440 Culture and Society: Popular Art and the Popular Mentality (4)
- * FREN 440 Culture and Society: Semiotics-Language, Culture and Sexuality (4)

* HIST 463 and FREN 440: Special Projects in these courses must focus specifically on women to count toward the minor.

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- FREN 331 Women's Regional Literature and History (3)
GERM 331 Women's Regional Literature and History (3)
SPAN 331 Women's Regional Literature and History (3)
RUSS 331 Women's Regional Literature and History (3)
SPAN 355 Women in Latin America (in English) (3)

III BIOLOGICAL AND PSYCHOLOGICAL PERSPECTIVES

- PE 502 Women and Sport (3)
NURS 480 Human Sexuality (2)
PSY 485AB Nature, Man and Woman (4) (4)
AMCS 425 Men/Women: Power in Interpersonal Relations (4)

IV SPECIAL TOPICS ON WOMEN

- WOMS 491 Feminist Pedagogies (4)

NOTE: The following variable topic courses will be assigned to one of the four categories on a semester basis:

- WOMS 199 Student-Instructed Course (1-4)
WOMS 301 Feminist Lecture Series (1-4)
WOMS 311 Special Problems of Women (4)
WOMS 395 Community Involvement Program (1-4)
WOMS 399 Student-Instructed Course (1-4)
WOMS 485 Advanced Women's Studies Seminar (2-4)
WOMS 495 Special Studies (1-4)

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) Trimberger

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).

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)

The myths and realities of women's lives from colonial times to the present. Themes include the impact of industrial capitalism on women's work, slavery, the cult of domesticity, feminist movements, and modes of resistance to sexism/oppression. Analyzes lives and ideas of significant feminists and other women.

NOTE* Cross-listed as History 446.

460. Practicum in Women's Organizations (4)

This course emphasizes student research and participant observation in local business and service organizations that were consciously formed by two or more women to be a woman's organization. Reading and research will analyze the strengths and weaknesses of alternative organizational structures in these women's institutions.

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 as well as various European immigrant groups in the U.S. 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) Trimberger

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 and the contributions of different national, racial and class perspectives. Prerequisite: WOMS 300 or permission of the instructor.

485. Advanced Women's Studies Seminar (2-4) Trimberger

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. Feminist Pedagogies (2-4) Trimberger

This course focuses upon developing and evolving feminist pedagogies—the arts, styles and crafts of teaching through feminist modes and perspectives. Examines traditional, humanist, socialist and feminist educational theories and methodologies. Emphasizes educational methods and organizational and communications skills. Required for all students teaching Women's Studies courses and open to others including student-teacher from other departments.

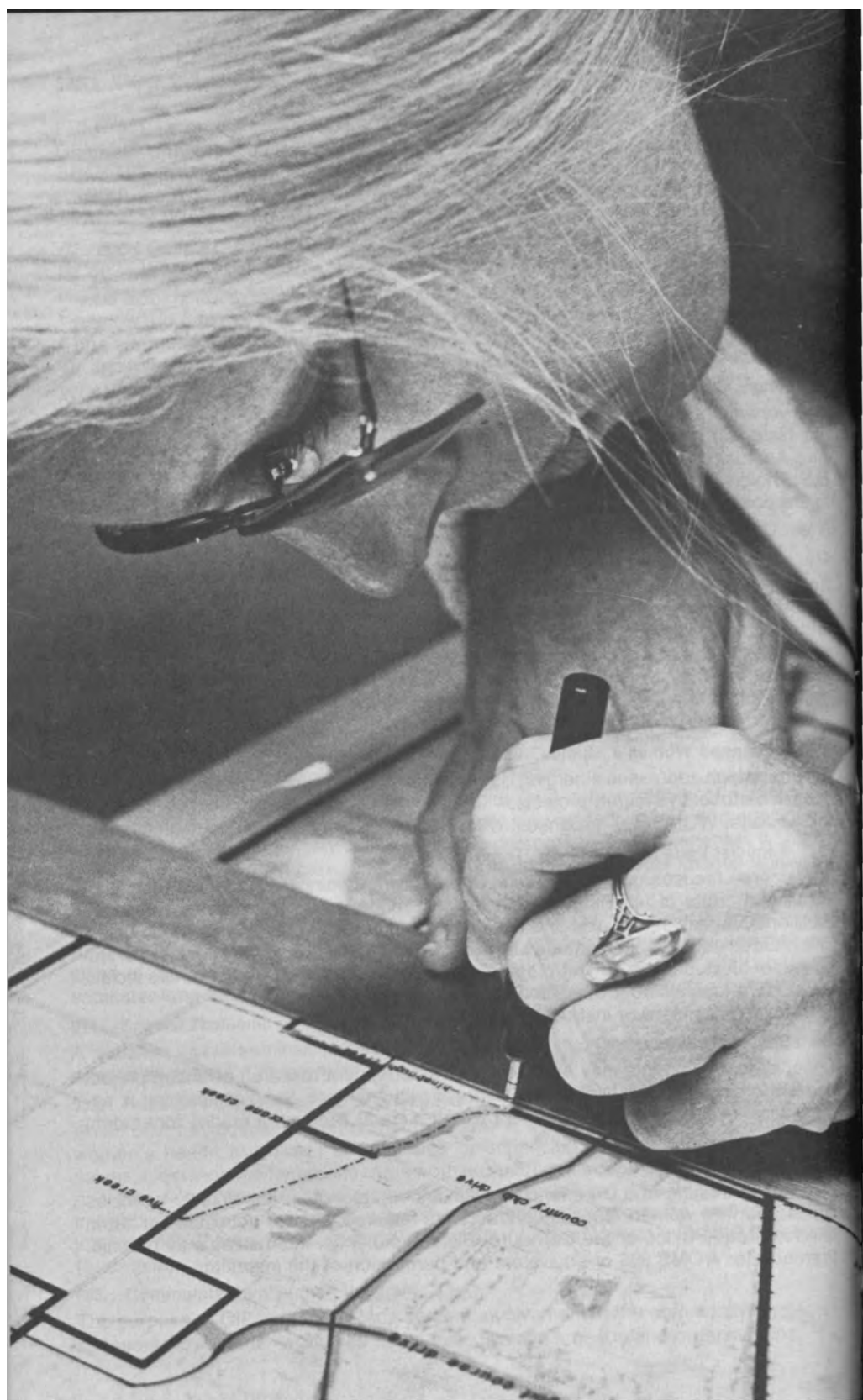
Prerequisite: Consent of instructor.

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.



Special Programs

Community Involvement Program

Internships

Engineering

Special Studies

SPECIAL PROGRAMS

2

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.

INTERNSHIPS

Internships are supervised programs of work and study that involve students working in governmental, organizational, or business settings for an average of 12 to 20 hours each week; 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. Internships are required in some academic departments while they are optional in others. Internship placements can be arranged through the Career Development Center 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 often involve regularly scheduled classroom meetings that expand upon the supervised work experiences.

Internships can be 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.

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 computing that are part of most engineering programs. Interested students should consult an advisor in the Department of Physics and Astronomy. A substantial number of graduates of that department are currently employed as engineers.

SPECIAL STUDIES COURSES

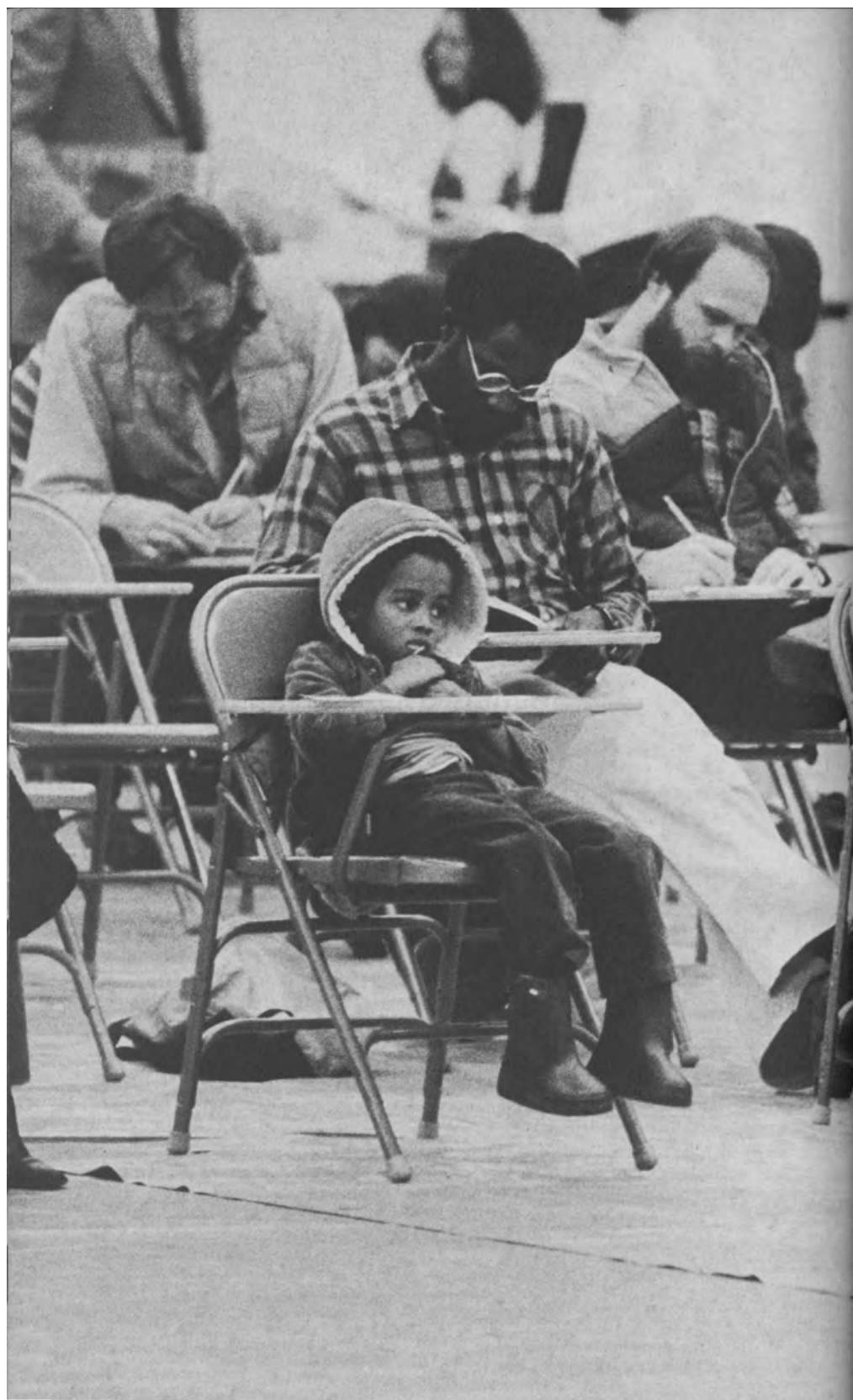
Sonoma State University makes arrangements through Special Studies 495 and 595 for superior students who want to pursue academic interests beyond the scope of the regular curriculum. Such courses are subject to the following conditions:

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. Special Studies may be designed for one student or be constituted as a seminar for several.
6. Approval for registration must be obtained from the advisor, instructor and Department Chairman.



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ADMISSIONS

Admissions Policies

Requirements for admission to Sonoma State University are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Administrative Code. Prospective applicants who are not sure of these requirements are encouraged to 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.

UNDERGRADUATE ADMISSIONS REQUIREMENTS

First-Time Freshman Applicants

First-time freshman eligibility is governed by an eligibility index. The index is computed using the high school grade point average on all course work completed in the last three years of high school, not counting physical education and military science; and the ACT composite, or the SAT total score. The table of grade point averages, with corresponding test scores and the equation by which the index is computed, is reproduced on p 474–475.

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

ACT Address

American College Testing Program, Inc.
Registration Unit, P.O. Box 168
Iowa City, Iowa 52240

SAT Address

The College Board
Box 592
Princeton, New Jersey 08541

First-Time Freshman Applicants (California High School Graduates and Residents)

Applicants who are graduates of a California high school or legal residents for tuition purposes need a minimum eligibility index of 741 (ACT) or 3072 (SAT). The following table illustrates grade point averages and scores needed to qualify for admission. If your high school GPA is above 3.2, you are exempt from the test requirement.

EXCERPTS FROM ADMISSIONS ELIGIBILITY TABLE FOR CALIFORNIA HIGH SCHOOL GRADUATES

GPA	2.00*	2.20	2.40	2.60	2.80	3.00	3.20**
ACT Score ..	35	31	27	23	19	15	11
SAT Score ..	1472	1312	1152	992	832	672	512

* Above 3.2 eligible with any score

** Below 2.0 not eligible

First-Time Freshman Applicants (Nonresident)

If you are neither a resident for tuition purposes nor a graduate of a California high school you need a minimum eligibility index of 826 (ACT) or 3402 (SAT). If your high school GPA is above 3.60 you are exempt from the test requirements.

Undergraduate Transfer Applicants (Resident and Nonresident)

Transfer admission eligibility is based on TRANSFERABLE college units attempted rather than on all college units attempted. California Community College transfers should consult their counselors for information on transferability of courses. If you are

in good standing at the last institution attended you may be admitted as an undergraduate transfer if you meet either of the following provisions:

1. Eligible for admission in freshman standing (see freshman requirements) and a GPA of "C" (2.0 on a scale where A = 4.0) or better in all transferable college units attempted.
2. Completed at least 56 transferable semester units or 84 transferable quarter units with a GPA of "C" (2.0 on a scale where A = 4.0); or better if a California resident; nonresidents must have a grade point average of 2.4 or better.

New Admission Requirements Effective Fall 1984

If you plan to apply for admission during 1983–84 or later you should be aware that additional admission requirements become effective for applicants for fall 1984 and later. A first-time freshman will still need to meet the GPA test score requirements described above and in addition must have completed eight semesters of college preparatory English and four semesters of college preparatory mathematics. Your school will know what courses will count toward these requirements and when you should take them.

A few applicants may not have had the opportunity to take all of the required courses by 1984. The CSU will make some exceptions to these requirements during 1984–85 and 1985–86 for those who cannot schedule all of them in the time remaining in high school. If you are one of those few, your school will know about possible flexibility. If you plan to enroll as a transfer from another college, you may also need to meet the new subject requirements, as well as the regular college unit and grade requirements. If you did not take the right courses in high school, you can take equivalent courses in college. Your counselor can advise whether the new policy will apply to you.

Don't assume that English and mathematics are the only important subjects in high school. In order to be well prepared you should plan to take a full college preparatory program including additional courses in mathematics, science, social science, foreign language, and the humanities/fine arts.

Other Applicants

Applicants not admissible under one of the above provisions should enroll in a community college or other appropriate institution. Only under the most unusual circumstances will such applicants be permitted to enroll in the University. Permission is granted only by special action.

Applicants who are over 18 years of age but who have not graduated from high school will be considered for admission if they have demonstrated high school equivalency through the successful completion of the General Educational Development (GED) test and qualify on the basis of GPA and SAT or ACT scores.

POSTBACCALAUREATE AND GRADUATE STUDENTS ADMISSION REQUIREMENTS

Postbaccalaureate Standing, Unclassified

For admission to unclassified postbaccalaureate standing, a student must: (a) hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by an appropriate campus authority; (b) have attained a grade point of at least 2.5 (A = 4.0) in the last 60 semester (90 quarter) units attempted; and (c) have been in good standing at the last college attended. Admission to 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 unclassified postbaccalaureate standard 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 classified graduate students 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 (\$105.00 per unit)	\$3,150.00
Fees.....	456.00
Room and Board.....	3,000.00
Books.....	270.00
Health Insurance	115.00
Incidentals.....	<u>1,309.00</u>
Total annual estimated cost	\$8,300.00

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

Applicants whose native language is not English are required to furnish scores for the Test of English as a Foreign Language (TOEFL) before they can be admitted to the University. This test is offered by the Educational Testing Service four times per year. Application and registration forms are available from the Educational Testing Service, Princeton, New Jersey 03540, or from U.S. embassies and consulates overseas.

Undergraduate applicants must achieve a score of 500 or more before they can be accepted for admission. Graduates must achieve 550 or better. Adequate performance on the TOEFL is mandatory. 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. Previously enrolled students are subject to the same application dates and fees as new applicants. If any college or university work has been undertaken since the last enrollment at Sonoma State University, the applicant must request that each college attended send two complete official transcripts to the Office of Admissions and Records and pay the \$25 application fee. A new health record form must be filed with the Student Health Center.

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 we need transcripts of your high school work, ACT or SAT scores, as well as any college work completed. For Juniors and Seniors we need duplicate copies of your college work only. 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 \$30 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. Students who attended their first choice campus during either of the two semesters immediately preceding reentry need not pay the application fee if no other academic work was attempted elsewhere in the meantime.

Postbaccalaureate Application Procedures

All applicants for any type of postbaccalaureate status (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 within the appropriate filing period. A complete application for postbaccalaureate status includes all of the materials required for undergraduate applicants (Part A) plus the supplementary graduate admissions application (Part B). Postbaccalaureate applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$30 nonrefundable application fee. Two official transcripts showing the award of BA/BS and the last 60 units must be submitted. 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. In the event that a postbaccalaureate applicant wishes to be assured of initial consideration by more than one campus, it will be necessary to submit a separate application (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

Impacted programs are undergraduate programs in which the number of applications received in the first month of the filing period exceeds the total spaces available, either locally (at individual campuses) or systemwide. You must make application for an impacted program during the first month of the filing period and may file more than one application and fee for additional programs. Nonresidents, foreign or domestic, are not considered for admission to impacted programs. High school and community college counselors are advised before the opening of the fall filing period which programs will be impacted.

Supplementary Admission Criteria

Each campus with impacted programs uses supplementary admission criteria in screening applicants. Campuses are authorized to use a freshman applicant's ranking on the eligibility index, the transfer applicant's overall GPA, or a combination of campus-developed supplementary criteria in selecting those to be admitted. If you are a freshman applicant and plan to apply to an impacted program you should take the ACT or SAT test at the earliest date. Your test scores and your grades earned in the final three years of high school may be used in determining admission to the program. The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the CSU Counselors' Digest 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 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 INFORMATION CONCERNING APPLICATIONS AND ADMISSION

Application Filing Periods

<i>Terms in 1983-84</i>	<i>Applications First Accepted</i>	<i>Filing Period Duration</i>	<i>Application Acknowledgment Begins</i>
Fall Sem. 1983	Nov. 1, 1982	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.	Dec. 1982
Spring Sem. 1984	Aug. 1, 1983		Sep. 1983

Space Reservation Notices

Most applicants will receive some form of space reservation notice from their 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" and, if necessary, other evidence furnished by students are used in making these determinations. Students may not register and enroll in classes until the Residence Questionnaire has been received by the Office of Admissions and Records. Further details regarding residency are contained in the Appendix page 472 of this catalog.

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.

Recommended High School Preparation

Overall excellence of performance in high school subjects and evidence of academic potential provide the best basis for predicting success at Sonoma State University. While no specific courses are required for admission, all prospective freshmen are strongly encouraged to include the following subjects in their preparation for work at SSU: college preparatory English; foreign language; mathematics; laboratory science; history and/or social science; study in speech, music, art and other subjects contributing to a general academic background.

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.

Early Admission Program

Sonoma State University will recognize outstanding academic achievement (3.75 GPA or higher) of high school students by issuing an early admissions commitment to such applicants conditional upon the earning of the high school diploma or its equivalent.

Details about the Early Admission Program may be obtained from Office of Relations with Schools.

ENGLISH PLACEMENT TEST

All entering freshman and lower division students who enroll with fewer than 56 transferable semester units must complete the CSU English Placement Test (EPT) with the exception of students who present one of the following:

1. Satisfactory scores on the CSU English Equivalency Examination.
2. Score of 3, 4, or 5 on the English Composition Examination of the College Board Advanced Placement Program.
3. A score of 600 or above on the College Board Achievement Test in English Composition with Essay.
4. A score of 510 or above on the verbal section of the College Board Scholastic Aptitude Test (SAT-Verbal).
5. A score of 23 or above on the ACT English Usage Test.

6. Completion of an acceptable college course in English composition of four-quarter or three semester units with a grade of C or better.

Failure to take the English Placement Test at the earliest opportunity after admission may lead to administrative probation which, according to Section 41300.0 of Title 5, *California Administrative Code*, and CSU Executive Order 186, may lead to disqualification from further attendance. The results of the EPT will not affect admissions eligibility but will be used to identify students who need special help in reading and writing in order to do college-level work.

Information bulletins and registration materials for the EPT will be mailed to all students subject to the requirement. The materials may also be obtained from the Office of Admissions and Records.

Graduation Requirement in Writing Proficiency

All students subject to degree requirements listed in the 1977–78 and subsequent general catalogs must demonstrate competency in writing skills as a requirement for graduation. Information on currently available ways to meet this graduation requirement may be found on page 23, “Completion of the Written English Proficiency Requirement.”

ENTRY-LEVEL MATHEMATICS REQUIREMENT

All students entering CSU as of fall 1983–84 must demonstrate basic competency in mathematics. New freshmen must demonstrate competence by successful completion of the CSU Entry-Level Mathematics (ELM) Examination. Transfer students must demonstrate competence either by successful completion (a grade of C or better) of a mathematics course certified for General Education (Intermediate Algebra or above) or by taking the CSU ELM Examination.

Students required to take this examination should do so as soon as possible after admission. (The results of this examination do not affect admission.) Failure to take the examination before the end of the first term may lead to probation and disqualification according to Section 41300.1 of Title 5, *California Administrative Code* and CSU Executive Order 338.

Students who cannot demonstrate basic competence on the examination are required to take steps to overcome deficiencies early in their enrollment. Any coursework undertaken primarily to acquire the required competence shall not be applicable to the baccalaureate degree.

Information bulletins and registration materials for the ELM Examination will be mailed to all students who may be subject to the requirement or they may be obtained from the Office of Admissions and Records. Further information regarding the examination and possible exemptions may be obtained from the Office of Testing.

ENGLISH/MATH 99 LEVEL COURSES (non-baccalaureate credit)

The University offers 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' units load for a given semester, but which do not apply towards graduation. Courses are graded CR/NC, 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 admitted only under administrative academic probation. Enrollment in English 99 and/or Math 99, as appropriate, is then mandated during the first semester of enrollment. Students will be allowed to repeat either or both courses, once only, in the next semester.

Failure to pass after the second attempt results in disqualification. Students who are disqualified may petition the Standards Committee to take either course for a third semester.

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 in Accredited Colleges

Credit toward fulfillment of graduation requirements will be allowed only insofar as courses satisfactorily completed meet the standards and requirements of the university.

Credit for Extension and Correspondence Course

A maximum of 24 units of credit earned in correspondence and extension courses may be allowed toward the bachelor's degree. Extension 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 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 challenge courses by taking examinations developed at the campus. Credit shall be awarded to those who pass them successfully.

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.

College Level Examination Program

The University allows students to earn credit toward the baccalaureate 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 major department. CLEP tests are administered on a regularly scheduled basis. Interested students are advised to consult with the Office of Testing Services. See the Appendix pages 466–467 for course equivalencies.

Challenge Examination

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.

Health Examination

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.

Regulations and Procedures of the University

**Enrollment Regulations
Categories of Enrollment
Changes of Enrollment
Grading
Scholastic Status
Additional Regulations**

ENROLLMENT REGULATIONS

Registration

All students expecting to enroll at the University who are eligible to do so, may register during the regular registration period. All eligible continuing students and all admitted applicants will be mailed registration information approximately two weeks before registration. This material will inform about mandatory advising, registration appointment time, and procedures for registering.

The best source of registration information is the Schedule of Classes. This booklet is published each semester, and it can be purchased for a small fee in the Campus Bookstore approximately one month before registration. The Schedule of Classes gives a detailed description of registration procedures, course offerings of each department, current fees, and other basic information.

Program of Study

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. Students who need to be registered full-time should note that 12 units is the minimum enrollment to qualify, except that some allowance is made for graduate students officially accepted in Master's Degree programs taking classes that are part of their approved degree program.

Academic Load

The normal 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.

The normal academic load for graduate students is 12 units, but a student may register for 15 units without approval. Unit load above 15 units requires the advisor's signature and the approval of the Graduate Dean.

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.

Late Registration

Students who fail to register during the scheduled regular registration may late register during the first four weeks of instruction. Students who are eligible and who wish to register late will be required to obtain the appropriate approvals in order to be added to class enrollment lists. Information concerning late registration approvals is available from the Office of Admissions and Records. Students who late register during the first four weeks of instruction are subject to a \$25 late registration fee.

CATEGORIES OF ENROLLMENT

Undergraduate Class Levels

Undergraduate students are classified according to the number of units completed, calculated as follows:

<i>Status</i>	<i>Units Completed</i>
Freshman	0–29
Sophomore	30–59
Junior	60–89
Senior	90 +

Non-Traditional Grading

Students at Sonoma State University may count no more than 40 units toward their total baccalaureate degree programs which have been graded by non-traditional grades. Non-traditional grades are CR/NC or ABC/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 $\frac{1}{3}$ 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 or ABC/NC modes. Generally, such courses will fall within the categories of field experience, practicum, group process and creative projects. A rationale for courses so designated will be given to the University Standards Committee. The Units for all such courses will count as part of the 40 units of non-traditionally graded work that may be applied toward the student's major and the total degree program.

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 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.

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 succeeding semester. Reapplication to attend SSU is required if a student has graduated or attended another educational 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.

Concurrent Enrollment

At another California State University (Intrasystem Concurrent Enrollment): SSU students may register concurrently at SSU and other campuses of the California State

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University. Applications are available from the Office of Admissions and Records, Stevenson Hall 1088, with no further application fee. Such concurrent enrollment is valid for one term only.

At other institutions: Concurrent enrollment at this University and another 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 in this Catalog.

Extension students admitted in regular 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 OFFICIAL 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 grading to Audit or conversely 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, 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 item on Dropping in this section 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 Cashiering 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: A, B, C, D, F.

Letters A, B, C and D indicate passing grades; F indicates failure. Additional + (plus), – (minus) supplements adding or subtracting .3 grade points per unit applies to the A, B, C and D grades except that there is no A+.

Non-Traditional: CR/NC and ABC/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.

Further information concerning the non-traditional grading option is given under non-traditional grading in the Categories of Enrollment section.

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Explanation of Grades

The following chart shows grade symbols and their numerical equivalents for evaluating course work. Progress points do not apply to post-baccalaureate or graduate students.

GRADES		
<i>Grade Symbol</i>	<i>Explanation</i>	<i>Grade Points</i>
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

Definitions of Administrative Grading Symbols

The following definitions apply to the grades assigned for various categories of enrollment. (See preceding Grades chart.)

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 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 but 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 thesis 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. See pg 403 for additional details.

No Credit (NC). NC grades are not included in the calculation of grade point average. See pg 403 for additional details.

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 two dollar fee for each transcript requested.

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 g.p.a. 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.

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 petition to be submitted.

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.

Scholastic Probation

If a student's cumulative grade point average in all university work attempted, or cumulative grade point average at Sonoma State University, 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 successive 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.

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.

In addition to the above disqualification standards applicable to students on probation, the President may designate a campus official to act for him in disqualifying individuals 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 reinstatement 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

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 & 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."

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 g.p.a.
 - b. 30 semester units with at least a 2.50 g.p.a.
 - c. 45 semester units with at least a 2.00 g.p.a.

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 baccalaureate 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. Continuous attendance is defined as enrollment in at least one semester or two quarters per year in a qualifying educational institution.

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.

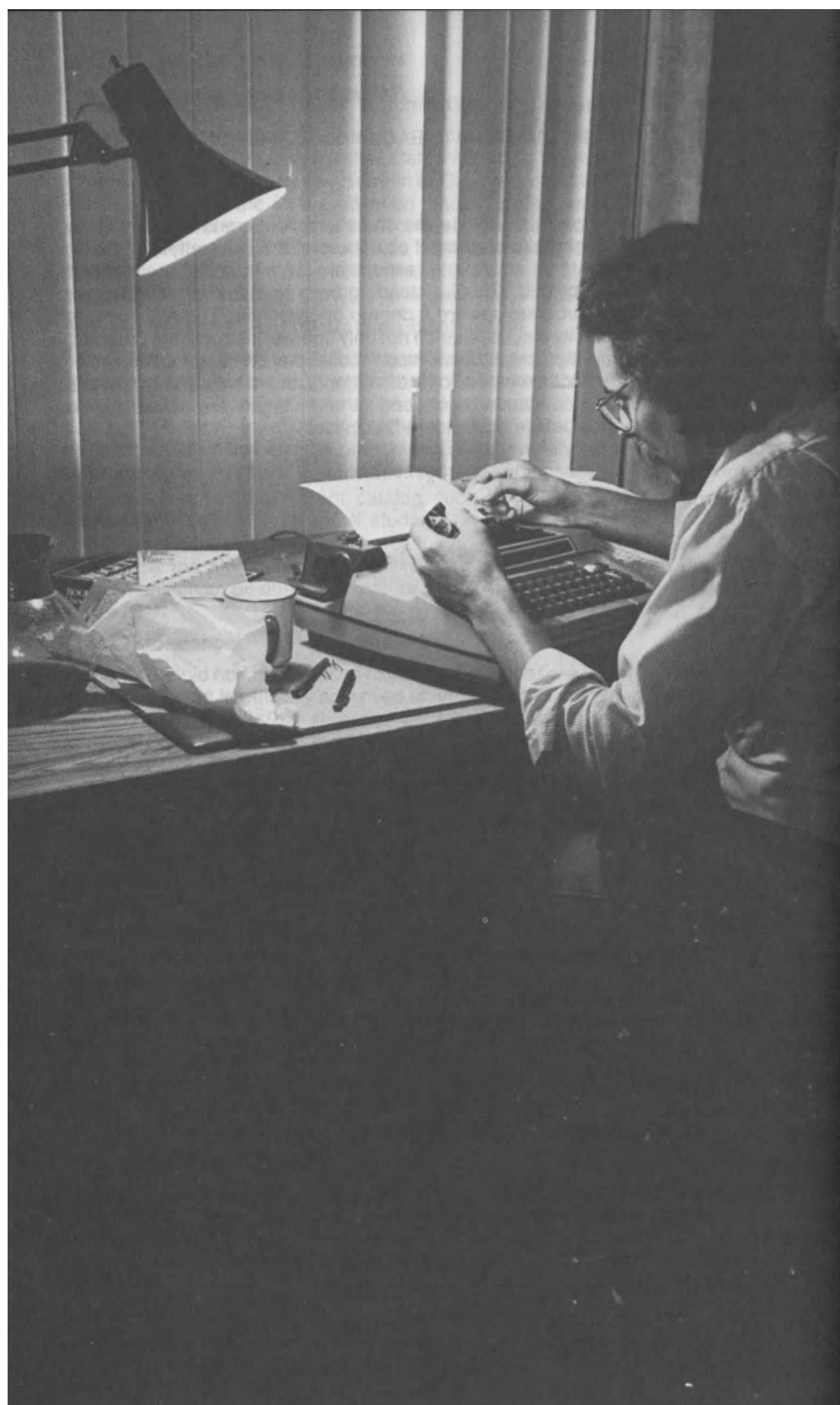
Privacy Rights of Students

The full text of the Family Educational Rights and Privacy Act of 1974 (the Buckley Amendment), as amended, is available in Appendix Page 468. 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 460 for details on Student Discipline.



Fees, Expenses and Financial Assistance

Financial Assistance Information

Fees

Financial Aid

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 $\frac{2}{3}$ 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 $\frac{2}{3}$ approval of students voting on a referendum called for by a petition signed by 10% 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

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.

ALL STUDENTS	0-5.9 units	6 units & up
State University Fee *	\$45.00	\$139.00
Student Services Fee *	108.00	108.00
Student Union Fee	27.00	27.00
Facilities Fee	3.00	3.00
Associated Students Fee	10.00	10.00
Instructionally Related Activities Fee	5.00	5.00
Total per Semester.....	\$198.00	\$292.00

NONRESIDENTS (U.S. and Foreign)

Nonresident Tuition *	
Per unit	\$108.00
(A 15% service charge is levied for installment payment of foreign non-resident tuition)	

SUMMER SESSION

Fee per unit.....	\$56.80
Student Union Fee (per unit)	.80

EXTENSION PROGRAM

Fee per unit.....	\$51.00

OTHER FEES OR CHARGES

Application Fee (for admission or re-admission, non-refundable)	\$30.00
Late Registration	25.00
Replacement of Permit to Register (I.D.) Card.....	1.00
Transcript of Record	4.00
Failure to meet time limit (late fee)	2.00
Graduation Fee.....	10.00
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.

STUDENT SERVICES FEE

The student services fee provides financing for the following student services programs not covered by state funding:

1. Social and Cultural Development Activities: provides for the coordination of various student activities, student organizations, student government, and cultural programs.
2. Counseling: includes the cost of counselor's salaries and clerical support plus operating expenses and equipment.
3. Testing: covers the cost of test officers, psychometrists, clerical support, operating expenses, and equipment.
4. Placement: provides career information to students and faculty for academic program planning and employment information to graduates and students.

* Fees are subject to change.

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5. Financial Aids Administration: includes the cost of the counseling and business services provided in connection with the financial aid programs.
6. Health Services: provides health services to students and covers the cost of salaries of medical officers and nurses plus related clerical and technical personnel as well as operating expenses and equipment.
7. Housing: includes the cost of personnel providing student housing information and monitoring housing services.
8. Student Services Administration: covers 50% of the cost of the Dean of Students Office which has responsibility for the overall administration of student services.

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.....	\$60.00
Automobiles, non-reserved, per semester	22.50
Motorcycles, motorbikes, Mopeds, motorized bicycles, etc.	5.60
Daily Park UR Self non-reserved space—per admission.....	.50
Replacement of Decal.....	2.00

LIBRARY FEES

Photocopy expense, each	.10
2 week material per day, week or month based loans per day	.15
2 day material per day	.25
Overnight (9:00 a.m.) material per hour	.25
2 hour material per hour.....	.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.

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.

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 most scholarships, a candidate must have a GPA of at least 3.5 in the last 30 semester (45 quarter) units of academic work. The applications of candidates who meet these minimum requirements are reviewed by the University Scholarship Committee, which will make 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 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, in anticipation of the following academic year. 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.

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.

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.

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.

GRANTS:

1. *Pell Grant*. Grants may range from approximately \$150 to \$1,800 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 \$200 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.
4. *Nursing Scholarships*. These funds may range up to \$2,000 per academic year and are available only to those students admitted to the Nursing Program. Eligibility is based on demonstrated need.
5. *State University Grant Program (SUGP)*. This grant is for a maximum of \$100 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.
6. *Cal Grants (administered by the California Student Aid Commission)*. Cal Grant A awards are for registration fees only. Eligibility for this program is based on GPA in addition to demonstrated financial need. First time 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 \$500 to \$1,100 (plus 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 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.
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 \$100 to \$3,600 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 2 academic years, \$6,000 total during undergraduate years, and \$12,000 total maximum including graduate studies. Repayment and interest (5%) begin 6 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 dependent and independent undergraduates; and \$5,000 for graduate or professional students. Repayment period and interest (9%) begins 6 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. For borrowers who received this type of loan prior to January 1, 1981, the old 7% interest rate applies.
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 10 years to repay. There are no loan cancellation provisions. 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 30 days to those registered for 6 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 \$1,800 to \$2,200 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 not plentiful in Sonoma County and the surrounding University service area. But jobs are available 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 414 for a detailed description of this program.
18. *Other Scholarships*. Each year many specialized scholarships go unawarded. High School Counselors often know of special 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/FISL, 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 results 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 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 a 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

Library
Computing Services
Media Services

INSTRUCTIONALLY RELATED SERVICES

RUBEN SALAZAR LIBRARY

Ruth Hafter, Library Director; Richard Bellamy, Barbara Biebush, Patricia Chapman, Jean Day, Timothy Huston, Marie Luethe, Lenore Radtke, Sandra Walton, Patricia Wollter.

Completion of the Library Addition in December 1977 doubled the size of the original building. The Library now has study space for 1220 students, and houses a book collection of over 330,000 volumes, with 16,000 volumes added each year. The periodicals collection consists of 50,000 bound volumes, with more than 2,000 current subscriptions. Some 56,000 items are contained in the documents section. The Library maintains an extensive collection of elementary and secondary textbooks and juvenile literature.

The first floor of the Library houses the bibliography area, reference department, archives and special collections complex, and a separate reserve bookroom. The administrative offices and technical services department are also located on this floor. Services provided by the reference department include individual assistance to students and interlibrary loan arrangements with a wide variety of libraries in the State. This loan service is facilitated by a fast delivery system. Access to on-line bibliographic data bases via computer terminal is available.

The book stacks on the second floor contain the circulating collection and periodicals. Also on the second floor the expanded library media center contains over 13,000 phono-records, tapes, and cassettes, as well as video materials and equipment. Expanded facilities have also been provided on the second floor for the microform collection, which now numbers 740,000.

All circulation services are on the second floor. These services are being converted to computerized operations.

Group study rooms, a typing room, copying facilities and terminals directly linked to the campus Computer Center are provided for students on the second floor of the Library.

General Library hours during the semester are: Monday–Thursday, 9:00 a.m.–10:00 p.m.; Friday, 9:00 a.m.–5:30 p.m.; Saturday, 9:00 a.m.–5:00 p.m.; and 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 Office of Computing Services handles the instructional, research and administrative computing work for the entire University. Students at Sonoma State have access to three separate computing facilities:

1. CYBER 170–730 Timesharing system.
2. Campus PDP 11/44 Timesharing system.
3. The State University Data Center computers in Los Angeles (CYBERS 170–760 and 730).

State University Data Center

The Sonoma State computer is linked by telephone cable to the State University Data Center at Los Angeles. This makes available two CYBER computing systems. These systems are used to process some instructional student projects and large systemwide administrative programs.

Interactive Usage

Interactive usage is a mode of operating a computer in which students at different locations may write and run programs at the same time. The two most outstanding features of this usage are quick response and the ability to create programs in a step by step fashion. All three computer systems available at Sonoma State University allow interactive usage.

Languages (software)—The following languages are available at Sonoma State University:

COBOL—business language
APL—mathematical language
GPSS—simulation of systems
SPSS—statistical analysis
LISP—list processing language
FORTRAN—scientific language
SIMULA—scientific language
BASIC—basic timeshare language
ALGOL—scientific language
PASCAL—structured language
MACRO—assembly language
COMPASS—assembly language

Port Selector

A port selector is connected to all available computers, to all terminals in the Computer Center, and to most terminals on campus. This device allows a user at any terminal to use any of the computing systems.

Hours: The Computer Center is open: Monday–Thursday 7 a.m. to 2 a.m.; Friday 7 a.m. to 5 p.m.; Saturday & Sunday 8 a.m. to 6 p.m.

Student Consultants: Consultants are assigned to assist computer users in the Computer Center terminal room 1506. A schedule showing consultant's hours and expertise is posted during the first week of classes.

Graphics Lab: Room 1511 in the Computer Center has been remodelled to house 5 Tektronix terminals, a plotter and a digitizing tablet. The digitizer allows the digitizing and display of cartographic data in a variety of map styles. Plot-10 and TIGS subroutines to drive the digitizer exist on the CYBER. EASYGRAPH and LABPLOT software packages are also available.

Microcomputer: Room 1503 houses an Apple II Plus microcomputer with a color tv monitor; two disc drives can be attached. The hardware also includes a graphics tablet and a sintac light pen. Discs for running Pascal Basic and Apple programs can be checked out through the Library Reserve Room.

Additional Terminal Locations: Students may also use terminals in

A. Darwin 19A, Stevenson 2055.

Hours are posted.

B. Salazar Library, 2nd floor. Terminals are available during Library hours.

MEDIA SERVICES

Media Services provides consultation, audio-visual materials, equipment, and materials production services in support of the University's instructional program. Each teaching station on campus is equipped with a Media Module for use of classroom films and multi-media materials that are housed in the Media Services Library. Services to the faculty include instructional design, photographic and graphic preparation of instructional materials, audio and video production, and instructional

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television. Students may preview materials and utilize the Student Media Production Lab for work with sound, film, or slides.

A cabled distribution system provides service to many classrooms connected to Media Services, with an intercom system allowing the instructor to give special instructions.

Educational Support Services

**Academic Advising
Advising and Counseling Center**

Reentry

Career Development Center

Student Employment

Field Experience

Career Planning and Placement

Career Placement Information

Testing

Office for Students with Disabilities

Educational Support Programs

Student Affirmative Action

Educational Opportunity Program

Learning Center

International Student Programs

Sonoma State American Language Institute (SSALI)

CSUC International Programs

National Student Exchange

EDUCATIONAL SUPPORT SERVICES

The Educational Support Services Division coordinates the activities of a variety of student support units whose goal is to assist students in their educational endeavors from pre-registration through their college career to alumni status. The pedagogical aim of these services is to nurture, allowing the student to reach and grow in intellectual, physical, and social achievement.

Students need a variety of support services which work closely with the academic program to make their college career a successful one. The Academic Advising and Counseling Center assists students with pre-registration, on-going academic advising and counseling as well as giving support for reentry students and those students without a declared major. All support services have the common aim of helping the student succeed in his/her academic pursuits.

The Career Development Center focuses on career planning and placement in addition to assisting with student employment and field experience relating to academic programs. The Alumni Association fosters a continuing relationship between the University and her Alumni. Testing Services aid students in a variety of assessments directed at achieving educational advancement.

Educational Support Programs address the needs of underrepresented and economically disadvantaged students and coordinate the activities and services of Student Affirmative Action, Educational Opportunity Program, and the Learning Center. The programs assist students who require financial aid, advising, tutoring, or counseling to enhance their chance for success in an institution of higher education. The Learning Center conducts a wide array of learning assistance programs to develop study skills which help students become effective and efficient learners. These services which include peer and faculty assisted tutoring are available to all students of the University.

The Office for Students with Disabilities and the Office of International Student Programs direct their advising and assistance programs to the needs of the disabled and international students attending the University. These offices work to insure that students overcome barriers to their educational advancement including social, cultural, and physical ones.

The main location for Educational Support Services Division is in the Village, with the Office of Students with Disabilities in Stevenson 1041 and with the Learning Center on the first floor of the Library. Students are encouraged to use all of these services to assist in achieving their academic goals.

ACADEMIC ADVISING AND COUNSELING CENTER

Academic Advising

The Advising and Counseling Center is the focus of a number of closely related programs which are committed to the effective interpretation of the academic resources of the University to students.

The personnel of the Center focus on academic advising and counseling with the goal of enhancing the student's progress in academic decisions. The Center assists all students but has a special responsibility to reentry students and those students who have not yet declared a major. Counseling is available to help students solve problems which interfere with their academic progress. The Center is located in Village 515.

The center of liberal education is the relationship between teacher and learner. It is

easy to recognize this relationship in the context of a classroom. It is more difficult to recognize the equally important manifestation of this relationship in the design of a coherent program of study. Academic advising is often seen by students as a mechanical process of securing information about requirements. A more important aspect of advising is the process of defining 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 Center assists undeclared majors in clarifying their educational objectives and planning their academic programs. In addition, prospective students and currently enrolled students with declared majors are welcome to use the services of the Center. For information and appointments call 664-2442.

Counseling

Free Counseling is provided to students with academic, vocational, 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. Complete confidentiality is maintained in an interactive and non-judgmental atmosphere that promotes resolution of issues through self-understanding and constructive problem solving.

The Center also offers workshops and courses on a variety of themes such as: career planning through self-exploration, assertiveness training, men's and women's issues, communications skills, stress reduction, overcoming test anxiety, procrastination, and time management. In addition, consultation services are offered to student groups, faculty, and University staff.

The Center also offers a referral service to community mental health services and private practitioners for students requiring long term psychotherapy. Individual, couple or group counseling is offered to students requiring assistance with re-entry concerns, career and educational exploration, and skill building—as well as to students experiencing problems with stress or personal crises.

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 can be taken for credit.

Faculty and staff join reentry students at the weekly Brown Bag Lunch, held every Thursday of the year (except Thanksgiving), from 11:30 a.m. to 1:30 p.m. For more information call 664-2444.

CAREER DEVELOPMENT CENTER

The Career Development Center provides programs and services to assist students in developing realistic career options through three component offices: Student Employment, Field Experience, and Career Planning and Placement. In addition, the Career Development Center functions as part of the Student Development Cluster of student services with the Advising and Counseling Center and the Office of Testing Services in the Educational Support Services Division.

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-professionals in schools and recreation; office and sales work; skilled and semi-skilled labor; and domestic, hospital, and restaurant positions. Despite the competitive labor market in Sonoma County, the Student Employment Office makes over 7,000 job referrals annually and 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 establish part-time employment opportunities that relate to students' academic and career objectives.

Field Experience

The Community Involvement Program (CIP) and numerous departmental Internship programs provide students with a broad range of experiential learning opportunities. As a result of these field experience placements, students gain a better understanding of their subject matter, 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 integration of 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. In addition, the office has a wide variety of resource materials to assist students in the development of their own individualized experiential learning programs.

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. 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: Careers in Health, Careers in Law, Power and Work, and Fear of Success. There is also a Contact 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 University 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 slight fee for file service and for the Education and Human Services Newsletter.

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.

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. Students interested in further information are invited to contact the Office of Testing Services.

UNDERGRADUATE CANDIDATES FOR ADMISSION:

SAT or ACT
TOEFL (International Students)

PLACEMENT TESTS:

CSU English Placement Test (EPT)
CSU Entry Level Math Test (ELM)
SSU English as a Second Language Placement Test (ESLPT)

There will be a fee charged for the ESLPT.

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; This applies to all Multiple Subject Candidates before enrolling in student teaching and to Single Subject Candidates before admission to the program.

After January 31, 1983, all initial credential candidates shall be required to obtain a satisfactory score on the California Basic Education Skills Test (CBEST), Credential Candidates with majors *unapproved* by the Commission for Teacher Preparation and Licensing will be required to take an additional State approved examination.

Credit by Examination Candidates:

College Level Examination Program (CLEP)
CSU English Equivalency Examination (EEE)

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Graduate School Candidates

For advancement to classified standing in master's degree programs at Sonoma State University, the following tests are required:

Biology	GRE Aptitude GRE Advanced Biology Tests and SSU Biology Department Assessment Exam *
Counseling	GRE Aptitude Test
Cultural Resources Management	GRE Aptitude Test
Education	GRE Aptitude Test
English	GRE Advanced Lit. or SSU Comprehensive Exam *
History	GRE Aptitude and GRE Advanced Test in History
Management	Graduate Management Admission Test (GMAT)
Mathematics	GRE Advanced Test in Mathematics
Physical Education	GRE Aptitude Test
Politics	GRE Aptitude Test
Psychology	GRE Aptitude Test or Miller Analogies Test (MAT)
Special Major	GRE Aptitude Test. Other tests may also be required depending on the specific requirements of participating departments

INTERNATIONAL STUDENT CANDIDATES

Undergraduate and graduate candidates for admission must take the TOEFL. The ESLPT is a prerequisite for placement in ESL classes.

OFFICE FOR STUDENTS WITH DISABILITIES

A broad range of services is provided through this office to all Sonoma State University students with disabilities, including those with temporary disabilities. Services include priority registration, orientation, close-in parking, community education, an on-campus shuttle service, and campus and community referrals. These services help to make possible a successful educational experience for students who have quadraplegia, paraplegia, visual and auditory impairment, epilepsy, heart or stroke conditions, learning disabilities, or any other disability which limits any educational experience or activity.

The office works closely with campus administrators, student affairs offices, and academic departments to eliminate physical and attitudinal barriers so that students with disabilities can participate fully in educational, social and cultural activities.

Students, faculty and staff are invited to call or visit the office and to utilize any of its resources.

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), the Learning Center (LC), and the SUCCESS CONSORTIUM. In addition, ESP sponsors special projects such as the Sonoma Training and Educational Program (STEP) for high school students.

* For more information concerning the Biology Assessment Exam or the English Comprehensive Exam please contact the appropriate academic department.

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. Once enrolled, the program 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, orientation to college, tutoring, and learning assistance to help students with class work, counseling and advisement.

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.

Educational Opportunity Program

Educational Opportunity Program (EOP) provides access to the University for students demonstrating the potential and motivation for success in higher education but who for economic or academic reasons require assistance in such services as orientation, advising, registration, financial aid, tutoring or counseling 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.

Learning Center

The Learning Center, located in the Ruben Salazar Library, provides a wide variety of services to assist students in becoming effective and efficient learners. Students can participate in activities which enhance their survival and success at Sonoma State University. The Center believes that students can achieve independence and at the same time appreciate the cooperative nature of the acquisition of knowledge.

The extensive assortment of services includes activities involving individuals, groups, and learning aids. Students receive individualized attention through tutors and learning skills specialists. Study sessions and workshops provide assistance through small groups. Learning aids such as handouts and audio-visual media help students develop skills independently. These services assist students in reading, writing, and study skills.

The Learning Center also houses the federally funded Special Services Program. Qualified students who need to develop learning skills in order to survive in the University may participate in this program. Special Services provides courses, workshops, tutors, and a learning skills program to assist participating students.

International Student Programs

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.

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-three 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.

Campus Services and Activities

CAMPUS SERVICES AND ACTIVITIES

The University offers a broad range of services and activities that focus on the intellectual, personal, and social needs of students. These programs make a significant contribution both to the quality of student life and to the achievement of the academic goals of the institution.

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. Advising and Orientation Day, offered at the beginning of each semester, is supplemented by: 1. *Summer Advising*, an on-campus residential weekend experience in July where prospective students (and interested parents) explore Sonoma's philosophy and environs with continuing students, staff and faculty; 2. *The Campus Community Congress*, in early Fall, where student clubs and community resources are showcased; and 3. *The Village Elder Program*, an ongoing support system that links up incoming freshmen with volunteer monitors from the staff and faculty.

HOUSING SERVICES

On Campus: The campus residential community provides comfortable, convenient, personalized living accommodations for 438 single students. The residential life program is also designed to be an important part of a 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 \$2,860. Interested students should contact the Residence Hall office for more information (707) 664-2541.

Off Campus: To assist with the off-campus housing needs of students, an off-campus housing staff maintains listings of off-campus accommodations that include houses, cottages, 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 in the office of off-Campus Housing office, in the Student Union. The office provides services to students on tenant's rights, landlord-tenant problems, and small claims court procedures. For more information, 664-2443.

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.

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.

As no on-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 Health Center makes available a moderately priced insurance policy which covers most of the cost for medical care beyond that which the Health Center can provide.

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, student volunteers, and parents in a modified parent-cooperative setting. Hours of operation are from 8:00 a.m. to 4:00 p.m. For information regarding enrollment, call (707) 664-2230.

STUDENT RESOURCE CENTER

The Student Resource Center, housed in the Student Union, is committed to broadening the educational, cultural, and social experience of students at SSU. Their efforts reflect the conviction that students should have an opportunity to pursue their own special interests and talents to more fully develop their potential. The Center is primarily concerned with the planning and implementation of student initiated and student related co-curricular activities. The Center is also charged with the responsibility of interpreting and overseeing many University policies that directly affect students. The Center's staff serves students as facilitators, resource persons and helpmates to insure the accessibility of University services and facilities.

Specific programs include Orientation, peer advising, and special events like the annual Christmas Crafts Faire. The Center oversees the chartering and activities of all student clubs and organizations. Additionally, the Center is responsible for campus rules and procedures regarding student events, use of campus facilities and services and policies relating to vendors, distribution of published literature and speakers.

The Center sponsors the popular Intramural Sports and Campus Recreation Program, which offers a wide variety of men's, women's, coed and team events.

VETERANS' AFFAIRS

Veterans receive through this office a wide spectrum of support services that include: (1) assistance with matriculation; (2) academic, personal and VA benefits counseling; (3) reconciliation of VA pay problems; (4) certification of veterans' dependents; and (5) financial aid counseling and coordination. Assistance is also provided as needed in selecting qualified tutors paid by the Veterans Administration.

The office coordinates a veterans work-study program on campus and acts as a liaison to community agencies and to the Veterans Administration in assisting veterans with achievement of their educational and career aspirations.

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, a travel service, and an art gallery. In addition the Off-Campus Housing Office and Veteran Affairs Services are now 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.

INTERCOLLEGIATE ATHLETICS

Sonoma State University sponsors 15 intercollegiate programs, eight sports each for men and 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 Northern 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, baseball, 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.

General Information

History and Accreditation

Schedule of Classes

Affirmative Action Policy

Academic Foundation

President's Associates

Alumni Association

Extended Education

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, and the National Association of Schools of Art and Design.

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. 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 program.

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, donations 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, composed of members from the business, professional, political and social leadership of the community, has as its purpose the enhancement of university/community relations and funding for the enrichment of the University's educational program.

The President's Associates is dedicated to accomplishing the following missions:

1. To further develop an institution of outstanding academic quality which will serve the desires and needs of students from the Northern California region served by Sonoma State University.
2. To relate the school's programs and achievements, as well as its problems, to the Community and to communicate the nature of the institution and its need for the understanding and support of the Community.
3. To assist the public in fully benefiting from the rich resources and facilities available to it at Sonoma State University.
4. To seek and develop sources of funds to supplement the State's financial support. Since only academic programs are funded by the State, the President's Associates will help enrich other programs such as those in the performing arts, music, and athletics.
5. To aid in identifying the University as a cultural center of the Community as an outgrowth of the art and humanities programs of the institution.

UNIVERSITY DEVELOPMENT COUNCIL

The University Development Council of Sonoma State University is a select group of business and civic leaders who are committed to the purposeful growth of their communities and to the excellence of Sonoma State University, and whose goal is to foster a vigorous alliance of mutual benefit between university and community.

The University Development Council, under the direction of its Executive Committee, develops extra-mural financial resources for support of the University revitalization and development goals in five critical areas:

- Scholarships
- Faculty Research and Development
- Cultural Events
- Joint Ventures
- Capital Outlay Projects

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

A self-supporting program, SSU Extended Education offers Summer Session and January Intersession as well as a nearly infinite array of continuing education opportunities for those whose needs go beyond those met by the standard University curriculum. Extended Education programs are not supported by State appropriations.

Summer Session and January Intersession

During the summer and January break, students may concentrate on particularly challenging courses, earn units toward graduation, and take prerequisites for more advanced courses through the summer and January programs offered by Extended Education. These courses are offered both on and off campus for either resident or extension credit. Courses with an "s" designation (eg: MGT s490) offer resident credit and apply toward degree requirements as would any other university course taken through the resident program. Courses with an "e" designation (eg: MGT e490) offer extension 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.

Extension Programs

The many Extended Education programs, totalling some 600 offered at various times each year, offer opportunities for career development, completion of professional relicensure requirements, on-site training to private and public organizations, personal development, and academic achievement through degree and certificate programs. Included are the

- Attorney Assistant Certificate Program,
- Certificate Program in Business Data Processing
- Graphic Design Certificate Program
- Nursing Relicensure Program
- Accounting Continuing Education Program
- Continuing Education Program for Educators
- M.A. Psychology Program (External Degree)
- Open University Program, which allows students not otherwise able to participate in the resident program to attend SSU. Complete details on all Extended Education programs are published each fall, spring and summer 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.

The Faculty

INSTRUCTIONAL FACULTY

- 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.
- 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) Assistant Professor of Management
B.A. (Art) 1973; B.A. (Management) 1977, Sonoma State University; CPA 1980.
- 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. 1962, University of California, Berkeley.
- David O. Arnold (1970) Professor of Sociology
B.A. 1960, University of Chicago; M.A. 1962, University of Iowa; Ph.D. 1966,
University of California, Berkeley.
- Mary R. Arnold (1967) Professor of Russian
B.A. 1941, Moscow State Pedagogical Institute of Foreign Languages, USSR; M.A.
1949, Ph.D. 1964, 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 California,
Berkeley.
- Michael E. Baldigo (1975) Associate Professor of Management
M.B.A. 1966, University of Chicago; C.D.P. 1970, M.B.A. 1971, Indiana University,
Bloomington; C.P.A. 1973; B.A. 1976, B.S. 1978, Thomas Edison College; Ph.D. 1977,
California Western University; C.M.A. 1982.
- 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.
- Susan Berg (1980) Assistant Professor of Nursing
B.S. 1968, University of San Francisco; M.S. 1971, University of California, San Francisco; P.N.P. 1977, University of California, Davis.
- Dorothy M. Blake (1973) Associate Professor of Nursing
B.S. 1956, M.Ed. 1958, University of Minnesota.
- Esteban A. Blanco (1970) Associate Professor of Mexican American Studies
B.A. 1968, M.A. 1970, San Francisco State College.
- 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.
- F. 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 français 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.
- Raymond Burr Professor of Theatre Arts and University
Artist-in-Residence
- 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.
- Eileen Carol (1982) Lecturer in Nursing
B.S.N. 1973, California State University, Los Angeles; M.N., F.N.P. 1981, University of Washington.
- 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.
- Joyce Chong (1979) Lecturer in Education
B.A. 1972, City College of New York; M.A. 1979, Sonoma State University.
- James Christmann (1982) Assistant Professor of Biology
B.S. 1968, Arizona State University; M.A. 1969, Ph.D. 1976, John Hopkins University.
- Galen E. Clothier (1962) Professor of Biology
B.A. 1955, Fresno State College; M.S. 1957, Ph.D. 1960, Oregon State University.
- Michael D. Coleman (1970) Associate 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) Assistant Professor of English
B.A. 1967, San Francisco State College; M.A. 1978, San Francisco State University.

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- Betty Collier-Arrington (1981) Assistant Professor of Management
B.A. 1967, Fisk University
- Thomas P. Cooke (1974) Associate 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.
- Victor Daniels (1968) Professor of Psychology
B.A. 1962, San Francisco State College; M.A. 1964, Ph.D. 1966, University of California, Los Angeles.
- Sandra A. DeBella-Baldigo (1975) Associate Professor of Nursing
B.S. 1968, University of San Francisco; M.S. 1973, California State University, San Jose.
- Jayne A. DeLawter (1974) Associate Professor of Education
B.S. 1964, Ball State University; M.A. 1967, Ed.D. 1970, Teachers College, Columbia University.
- Nirmal Singh Dhesi (1964) Professor of English
B.A. 1950, M.A. 1953, Punjab University, India; Ph.D. 1968, Michigan State University.
- Peter Diamandopoulos (1977) President of the University;
Professor of Philosophy
B.A. 1952, M.A. 1956, Ph.D. 1957, Harvard 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 Science
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) Assistant Professor of Counseling
B.A. 1970, University of Washington; M.A. 1979, Ph.D. 1979, University of California, Berkeley.
- Fred Dorer (1981) Provost/Vice President;
Professor of Chemistry
B.S. 1961, California State University, Long Beach; Ph.D. 1965, University of Washington.
- Jeffrey T. Douth (1973) Dean, School of Social Sciences;
Associate Professor of Management Studies
B.S. 1968, M.S. 1970, Ph.D. 1976, University of California, Berkeley.
- Melanie Dreisbach (1980) Lecturer in Education
B.A. 1970, Connecticut College; M.A.T. 1972, Trenton State College; Ph.D. 1980, University of California, Los Angeles.
- 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
B.S. 1960, M.S. 1961, Yale University; Ph.D. 1965, Harvard University.
- C. Douglas Earl (1969) Professor of Physical Education
B.A. 1961, M.A. 1963, Chapman College; Ph.D. 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. 1966, 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. 1957, University of California, Los Angeles.
- Joann E. Feldman (1966) Professor of Music
B.A. 1963, Queens College; M.A. 1966, University of California, Berkeley.
- Norman Feldman (1957) 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. 1965, Stanford University.
- Kenneth W. Flynn (1968) Professor of 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) Associate 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) Associate 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 Physical Education
B.A. 1963, Southwest Texas State University; M.A. 1964, Ball State University.

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- 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.
- 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.
- 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.
- Samuel L. Greene, Jr. (1966) Professor of Physics
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. 1963, 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) Associate 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) Assistant 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.
- 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) Associate 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. 1963, University of Connecticut.
- Colin O. Hermans (1969) Professor of Biology
B.A. 1958, Pomona College; M.S. 1964, Ph.D. 1966, University of Washington.
- 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. 1971, San Jose State College.
- G. Arthur Hills (1969) Professor of Music
B.A. 1953, Cascade College; M.A. 1955, University of Portland.
- Janice E. Hitchcock (1972)..... Associate 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. 1958, Stanford University.
- Sally Hurtado-Lopez (1972) Assistant Professor of Education
B.A. 1965, California State College, Long Beach; M.S. 1967, 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. 1968, 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) Associate Professor of Communication 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.

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- 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) Acting Dean, School of Natural Sciences;
Professor of Physics and Astronomy
B.A. 1964, M.A. 1966, Ph.D. 1970, University of California, Berkeley.
- Bjorn Karlsen (1966) Professor of Education
B.A. 1949, State Teachers College of Oslo, Norway; M.A. 1951, University of Nebraska; Ph.D. 1954, University of Minnesota.
- 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.
- Benjamin Karr (1973) Professor of Counseling
B.B.A. 1937, City College of New York; M.A. 1963, California State College at Los Angeles; Ph.D. 1967, University of Cincinnati.
- 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.
- Valerie Kendrick (1980) Lecturer in Management Studies
B.A. 1980, Sonoma 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.S. 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 Chaumière; 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.

- Ardath M. Lee (1972) Associate Dean of Academic Programs
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, The 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.
- Wingham John H. Liddell, Jr. (1971) Associate Professor of Management Studies
B.A. 1954, 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.
1964, University of Pennsylvania.
- 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.
- Norma J. Lyman (1968) Associate Professor of Psychology
B.A. 1965, Sonoma State College; M.S.W. 1967, University of California, Berkeley.
Certified Social Worker, ACSW.
- 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, University of California, Berkeley.
- 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.

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- 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, School of Expressive Arts
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.
- 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.
- Virginia Young Meyer (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.
- 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) Dean of Extended Education,
Associate Vice President for Community Affairs and 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) Associate 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) Assistant Professor in Theatre Arts
B.A. 1970, University of California, Berkeley; M.A. 1973, San Francisco State University.
- Thomas C. Nelson (1969) Associate Professor of Mathematics
B.S.E.E. 1961, M.S.E.E. 1963, Santa Clara University; Ph.D. 1969, Oregon State 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.
- 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.
- Stephen 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.
- Dorothy Overly (1961) Professor of English
B.A. 1939, M.A. 1941, University of Alabama; Ph.D. 1949, University of Chicago.
- 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) Associate Professor of Anthropology
A.B. 1966, M.A. 1969, Ph.D. 1973, University of California, Berkeley.
- Don R. Patterson (1970) Acting Dean, Educational Support Services;
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. 1963 (Mathematics), San Jose State College; M.A. 1949 (Education), Stanford University; Ph.D. 1969, Oregon State University.
- William H. Poe (1970) Professor of History

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- 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
B.S. 1957, University of Michigan; Ph.D. 1963, University of Wisconsin.
- Richard F. Popko (1980) Assistant Professor of Management Studies
B.S. 1964, University of Southern California; M.A. 1982, Sonoma State University.
- Joseph H. Powell (1968) Professor of Biology
B.S. 1959, Whitworth College; Ph.D. 1964, University of Washington.
- Glenn W. Price (1967) Professor of History
B.A. 1940, La 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) Assistant Professor of Nursing
B.S. 1976, Sonoma State University; M.S. 1978, University of California, San Francisco.
- Wright W. Putney (1961) Professor of Art, School of Expressive Arts
B.A. 1950, M.A. 1951, New Mexico Highland University; Ph.D. 1955, Pennsylvania State University.
- Charles F. Quibell (1970) Associate Professor of Biology
B.A. 1958, Pomona College; Ph.D. 1972, University of California, Berkeley.
- James Ragan (1982) Assistant Professor of English
B.A. 1966, St. Vincent College; M.A. 1967, Ph.D. 1971, Ohio University, Athens.
- Saeid Rahimi (1982) Lecturer 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 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. 1971, University of California, Santa Cruz.
- 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, Université de Lausanne, Switzerland; Ph.D. 1969, Louisiana State University, Baton Rouge.
- 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 I. Saarni (1980) Assistant 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.
- Alexander Sapiens (1982) Assistant Professor of Bilingual Education
B.A. 1967, Oregon State University; M.A. (Linguistics) 1978, M.A. (Education) 1980,
Ph.D. 1982, Stanford University.
- 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
B.A. 1962, M.A. 1970, Ph.D. 1977, University of Chicago.
- Jeannine E. Schüler-Will (1972) Assistant Professor of Humanities
Hutchins School of Liberal Studies
B.A. 1964, University of Colorado; M.A. 1970, 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) Associate 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. 1969, 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) Professor of Drama
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.

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- 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.
- Gregory K. Smith (1978) Coach
B.A. 1971, LaVerne College; M.Ed. 1978, Eastern Washington 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) Associate Dean, Performing Arts;
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. 1965, University of the Pacific.
- Gordon G. Spear (1974) Associate Professor of Physics and Astronomy
B.A. 1966, Ph.D. 1972, 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 California, Los Angeles.
- Clarice Stasz 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; A.M. 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, Humanistic Psychology 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.
- Robert W. Tellander (1971) Assistant 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 and 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, School of Expressive Arts
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.
- Ellen Kay Trimberger (1975) Associate 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 Science 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, Conservatory of Music, Kansas City, Missouri; 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) Associate 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
B.S. 1960, Hamline University; M.Ed. 1970, West Chester State University.
- Arthur L. Warmoth (1970) Associate 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) Associate Professor of History
B.A. 1961, M.A. 1965, University of Wisconsin; Ph.D. 1970, University of Washington.
- Shane Weare (1971) Associate 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.

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- G. Davidson Woodard (1962)..... Professor of Geology
B.S. 1951, M.S. 1953, University of Adelaide, Australia; Ph.D. 1963, University of California, Berkeley.
- Ann B. Woodhead (1975) Assistant Professor in 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) Assistant Professor of Biology
B.A. 1971, M.P.H. 1974, Ph.D. 1982, University of California, Berkeley.
- Martha M. Yates (1968) Professor of 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.
- Jean Ann Young (1965) Professor of Education
B.S. 1951, State Teachers College, Oswego, New York; M.A. 1957, Ed.D. 1968, 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.
- Betty Allums (1981) Visiting Lecturer in American Multi-Cultural
Studies
B.A. 1959, San Francisco State University; M.A. 1978, Lone Mountain College.
- Melanie Almond (1981) Lecturer in Management Studies
B.A. 1981, Sonoma State University.
- Skinner Anderson (1982) Lecturer in Management Studies
B.S. 1950, Oklahoma State University; M.B.A. 1964, Oklahoma University.
- Wesley A. Anderson (1979) Lecturer in Management Studies
B.A. 1970, Sonoma State University; M.B.A. 1972, Golden Gate University.
- Joe E. Armstrong (1980) Lecturer in Environmental Studies and Planning
Ph.D. 1960, University of Texas; M.A. 1974, San Jose State University.
- 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.
- Marsha E. Bailey (1979) Lecturer in Art
B.F.A. 1970, M.F.A. 1973, University of California, Irvine.
- Thomas A. Barnebey (1974) Lecturer in Physics and Astronomy
B.A. 1964, M.S. 1966, Ph.D. 1971, University of California, Los Angeles.
- Christopher B. Beck (1977) Lecturer in Theatre Arts
- Roger V. Bell, Jr. (1980) Lecturer in Philosophy
B.A. 1966, University of California, Berkeley; M.A. 1971, San Francisco State
University.
- Carlos Benito (1981) Lecturer in Economics
M.S. 1971, Ph.D. 1973, University of California, Davis
- James A. Bennyhoff (1975) Lecturer in Anthropology
B.A. 1948; Ph.D. 1961, University of California, Berkeley.
- Glenn Blair (1977) Studio Instructor: Saxophone
- Stephen L. Blateric (1979) Coaching Specialist in Physical Education
B.A. 1977, M.A. 1979, University of Denver.
- Martha Boland (1982) Lecturer in Nursing
B.S.N. 1966, Duke University School of Nursing; M.S.N. 1977, Georgia State
University.
- Leffler A. Brown (1978) Lecturer in Management Studies
B.A. 1971, M.B.A. 1976, Golden Gate University, San Francisco.
- Billy R. Browning (1976) Lecturer in American Multi-Cultural Studies
B.A. 1973, M.A. 1974, Sonoma State College.
- Mildred Burt (1982) Lecturer in Nursing
B.A. 1969, Whitworth College; M.S. 1975, University of Utah.
- John Bushnell (1977) Emeritus Professor of Biology
B.S. 1931, M.S. 1932, Ph.D. 1935, University of Wisconsin.
- Jacques Cadeaux (1982) Lecturer in Management Studies
B.A. 1976, Pomona College; M.A. 1978, Stanford University.
- Deihleen Claffey (1982) Lecturer in Computer Science
B.S. 1978, University of Santa Clara.

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- William Clarke (1981) Visiting Lecturer in American
Multi-Cultural Studies
B.A. 1973, Southern Illinois University; M.A. 1981, Webster College.
- Earl F. Couey (1981) Language Lab Director
B.A. 1968, Sonoma State University; M. A. 1974, Dominican College.
- Donna Crawford (1981) Lecturer in Computer Science
B.S. 1953, University of Minnesota; M.A. 1981, University of California, Los Angeles.
- Dolores Crowley (1981) Visiting Lecturer in Psychology
B.A. 1960, College of New Rochelle; M.A. 1971, University of San Francisco.
- Fred Curchack (1978) Lecturer in Theatre Arts
B.A. 1970, M.A. 1973, Queens College, N.Y.
- Barbara A. Curtin (1977) Lecturer in Nursing
B.S. 1975, Sonoma State University; M.H.S. 1977, University of California, Davis.
- Forrest Davis (1982) Lecturer in American Multi-Cultural Studies
B.A. 1970, M.A. 1974, University of California, Los Angeles.
- Marilyn Deasy (1982) Lecturer in Nursing
B.S. 1968, University of San Francisco; M.S. 1977, University of California, San Francisco.
- John Doane (1978) Lecturer in Art
B.F.A. 1971, M.F.A. 1972, California College of Arts and Crafts.
- Arthur H. Dougherty (1980) Lecturer in Music
B.S. 1950, New York University; M.A. 1953, New York University.
- William E. Duff, Jr. (1980) Lecturer in Management Studies
B.A. 1965, University of North Carolina; M.B.A. 1968, Georgia State University.
- Virginia Epstein (1977) Lecturer in Education
B.S. 1969, Kansas State Teachers College; M.A. 1975, University of Colorado.
- David Farrell (1981) Visiting Lecturer in Interdisciplinary Studies
B.A. 1968; M.A. 1970, California State University, Sacramento; Ed.D. 1979, University of California, Los Angeles.
- Joan Fellers (1982) Lecturer in Biology
B.A. 1970, University of California, Berkeley; M.S. 1972, University of Michigan, Ann Arbor; Ph.D. 1977, University of Maryland, College Park.
- James R. Frieman (1977) Lecturer in Music
B.A. 1969, Temple University; M.A. 1976, San Francisco State University.
- Johanna Gladieux (1982) Lecturer in Counseling
B.A. 1967, M.A. 1970, Ph.D. 1975, University of California, Berkeley.
- Karen Gottlieb (1981) Studio Instructor: Harp
B.A. 1977, University of Washington; M.Mus. 1980, Cleveland Institute of Music.
- Gregory Grantham (1982) Assistant in Biology
B.A. 1980, Sonoma State University.
- Mel Graves (1982) Lecturer in Music;
Studio Instructor: Bass
B.A. 1969, San Francisco State University; M.A. 1976, University of California, San Diego.
- Norman Gri (1982) Visiting Lecturer in Physics &
Astronomy
B.A. 1958, University of British Columbia; M.S. 1964, University of California, Los Angeles, Ph.D. 1968, University of Cincinnati.
- Carla L. Guggenheim (1976) Lecturer in Theatre Arts
B.S. 1976, New York University.

- Vivian Hansen (1982) Lecturer in Bilingual Education
B.A. 1967, University of California, Berkeley; M.A. 1981, Sonoma State University.
- Roger Hartwell (1982) Assistant in Biology
B.A. 1979, Sonoma State University.
- Lois Heelan (1981) Lecturer in Management Studies
B.S. 1967, University of Pittsburgh; M.B.A. 1970, Golden Gate University.
- Elizabeth C. Herron (1980) Lecturer in English
B.A. 1964; M.A. 1966, San Francisco State University.
- Timothy M. Huston (1982) Visiting Lecturer in English
B.A. 1967, University of Arkansas, Little Rock; M.L.S. 1969, University of Maryland, College Park; M.A. 1976, Sonoma State University.
- Robert Holten (1982) Lecturer in Computer Science
B.A. 1953, M.A. 1955, Ph.D. 1958, University of California, Berkeley.
- Theodore R. Johnson (1975) Lecturer in Management Studies
B.A. 1970, California State College, Long Beach; J.D. 1974, Hastings College of Law, Berkeley.
- R. John Jones (1980) Lecturer in Management Studies
B.A. 1977, Sonoma State University.
- Warren O. Kahn (1980) Lecturer in Music
B.A. 1972, Ithaca College.
- Carole Klein (1981) Studio Instructor: Trumpet
B.A. 1969, Washington University; M.A. 1975, Stanford University.
- Eunice Koller (1982) Lecturer in Nursing
B.S., P.H.N. 1935, University of Washington; M.P.H. 1968, University of California, Berkeley.
- Michael Landes (1981) Lecturer in Mathematics
B.A. 1970; M.A. 1977, San Francisco State University.
- June Legler (1982) Lecturer in Geology
B.S. 1979, California State University, Hayward.
- Barbara Lesch (1981) Visiting Lecturer in Management Studies;
Director, Affirmative Action
B.A. 1968, Brooklyn College; M.A. 1970, University of Maryland; Ph.D. 1979, University of Wisconsin.
- Carolyn Lewis (1976) Studio Instructor: Voice
B.S. 1963, Utah State University.
- Catherine Lewis (1982) Lecturer in Nursing
B.S.N. 1974, San Francisco State University; M.H.S., F.N.P. 1979, University of California, Davis.
- Stephen Lewis (1982) Visiting Lecturer in Economics
B.A. 1963, University of California, Davis; Ph.D. 1969, University of California, Santa Barbara.
- Linda Lipps (1982) Visiting Lecturer in Women's Studies
B.A. 1975, M.A. 1982, Sonoma State University.
- Lawrence Livingston, Jr. (1979) Lecturer in Environmental Studies
and Planning
A.B. 1940, Stanford 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.
- Linda Loy (1982) Lecturer in Management Studies
B.S. 1968, University of California, Berkeley; M.A. 1980, Sonoma State University.
- Michael Lyle (1982) Lecturer in Computer Science
B.S. 1970, M.S. 1972, New Mexico State University, Las Cruces.

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- Victoria Mann (1982) Visiting Lecturer in Communication Studies
B.A. 1979, Sonoma State University.
- James H. May (1974) Visiting Lecturer in Native American Studies;
Assistant Library Director
B.S. 1958, Stanford University; M.B.A. 1964, Harvard University; DLS 1978, Columbia University.
- David Melcon (1981) Lecturer in Mathematics
B.S. 1974, University of California, Berkeley; Ph.D. 1979, University of California, Davis.
- Theresa Dickinson Merrick (1980) Lecturer in Theatre Arts
B.A. 1963, Harvard University.
- Gordon C. Moore (1980) Studio Instructor: Trombone;
Lecturer in Music
- Raymond N. Munoz (1979) Visiting Lecturer in
Education
B.A. 1973, San Jose State University.
- Macario M. Naranjo (1979) Visiting Lecturer in Physical Education
- H. Andrea Neves (1982) Lecturer in Mexican-American Studies
B.A. 1967, Universidad de las Americas; M.A. 1972, California State University, Sacramento.
- Norman Nielsen (1982) Lecturer in Management Studies
B.S. 1957, University of California, Davis.
- Gladys Nitzberg (1981) Visiting Lecturer in Humanities
B.A. (Psychology) 1970, B.A. (English) 1981, Sonoma State University; M.A. 1978, University of San Francisco.
- Madeline L. Noonan (1980) Lecturer in Nursing
B.S. 1970, College of Saint Teresa; M.S. 1971, University of California San Francisco.
- Bob Nugent (1981) Gallery Director;
Lecturer in Art
B.F.A. 1969; M.F.A. 1971, University of California, Santa Barbara.
- Joseph P. O'Neil (1973) Lecturer in Management Studies
B.A. 1954, M.B.A. 1958, Stanford University. CPA 1960.
- Walter W. Oster (1968) Associate Professor of Music
San Francisco Conservatory of Music.
- Rene Pagan (1980) Visiting Lecturer in American Multi-Cultural Studies
B.A. 1971, University of California, Irvine; M.A. 1974, California State University, Fullerton.
- Richard W. Perry (1980) Lecturer in Management
B.A. 1962, University of California, Santa Barbara; J.D. 1965, University of California, Berkeley; M.A. 1970, Sacramento State University.
- F. James Picchi (1982) Lecturer in Management Studies
B.A. 1959, San Francisco State University; M.A. 1982, Sonoma State University.
- Cynthia Podsiadlo (1982) Assistant in Biology
B.A. 1969, State University of New York at Stony Brook.
- Michele Poteracke (1982) Lecturer in Communication Studies
B.A. 1977, San Jose State University.
- John Jay Potter (1982) Coach in Physical Education
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.
- 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.
- Margaret J. Rattle (1978) Lecturer in Art
B.A. 1967, University of Washington; M.F.A. 1976, Claremont Graduate School.
- Anthony Reveaux (1981) Lecturer in Art
B.A. 1961, University of Connecticut; M.F.A. 1972, San Francisco Art Institute.
- Peter Reynaud (1981) Coaching Specialist in Physical Education
B.A. 1974, California State University, Hayward.
- Charles Rhodes (1981) Visiting Lecturer in Interdisciplinary Studies
B.S. 1970; M.S. 1972, Virginia Polytechnic Institute.
- Tak Richards (1981) Visiting Lecturer in Psychology
B.A. 1954, Antioch College; Ph.D. 1978, Union Graduate School.
- A. Richard Rizzo (1982) Lecturer in Education and Philosophy
B.A. 1964, M.A. 1969, San Francisco State University; Ph.D. 1974, University of California, San Francisco.
- Marcia Robinson (1982) Lecturer in American Multi-Cultural Studies
B.A. 1975, Webster College; M.F.A. 1978, University of California, San Diego.
- George Rodetis (1981) Lecturer in Art
B.A. 1958; M.A. 1965, San Diego State University; Ph.D. 1974, University of Illinois.
- Heinz-Juergen Roeser (1982) Lecturer in Physics & Astronomy
B.S. 1972, M.S. 1973, University of Idaho.
- Gerald Rosen (1971) Lecturer in English; Writer in Residence
B.E.E. 1960, Rensselaer Polytechnic Institute; M.B.A. 1962, Wharton Graduate School; M.A. 1966; Ph.D. 1969, University of Pennsylvania.
- Philip Rosheger (1979) Studio Instructor: Guitar
- Robert Rubin (1982) Lecturer in Biology
B.S. 1966, M.S. 1968, San Diego State University; Ph.D. 1979, University of California, Irvine.
- Laura Saltzman (1981) Visiting Lecturer in Mexican-American Studies
B.A. 1979, Sonoma State University.
- Frank Scalercio, Jr. (1979) Visiting Lecturer in Physical Education
B.A. 1971, M.A. 1973, Sonoma State 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 (1981) Studio Instructor: Oboe
B.A. 1970, City University of New York; M.Mus. 1972, State University of New York; M.F.A. 1974, Sarah Lawrence College.
- Lloyd Elliot Scott (1981) Lecturer in Theatre Arts
B.A. 1967; M.A. 1973, Humboldt State College.
- Thomas W. Scott (1980) Lecturer in Management Studies
B.A. 1978, Sonoma State University.
- Niles Severy (1982) Lecturer in Physics & Astronomy
B.A. (Mathematics), B.A. (Physics) 1971, Sonoma State University; M.S. 1973, University of Colorado, Boulder.

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- Harvey Siegel (1981) Lecturer in Philosophy
B.A. 1974, Cornell University; Ed.M. 1975, Ed.D. 1977, Harvard University.
- Alan Siegle (1982) Lecturer in Environmental Studies
and Planning
B.A. 1976, Sonoma State University.
- Laura Sim (1981) Coaching Specialist in Physical Education
B.A. 1978, San Diego State University; M.S. 1980, Montana State University.
- Lois Simpson (1981) Lecturer in Nursing
B.S. 1949, M.S. 1957, University of Colorado, Boulder.
- Thomas Stauffer (1976) Studio Instructor: Cello
B.A. 1967, University of California, Riverside; M.M. 1969, Music Academy of Zagreb,
Yugoslavia; M.A. 1971, University of California, Davis.
- Jean Stewart (1982) Assistant in Biology
B.A. 1982, Sonoma State University
- Kenneth Stocking (1979) Emeritus Professor of Environmental
Studies and Planning
B.A. 1933, M.A. 1942, University of the Pacific; Ph.D. 1950, University of Southern
California.
- Arthur Storch (1982) Studio Instructor: Percussion
B.S. 1977, Brooklyn College, C.U.N.Y.; M.M. 1979, The Julliard School.
- Inez Storer (1976) Lecturer in Art
B.A. 1970, Dominican College; M.A. 1971, San Francisco State University.
- Marilyn Thompson (1976) Studio Instructor: Piano
B.M. 1964, San Francisco Conservatory of Music.
- Hector Timourian (1979) Visiting Lecturer in Biology
B.A. 1955, Ph.D. 1960, University of California, Los Angeles.
- Bennie W. Troxel (1980) Lecturer in Geology
B.A. 1951, M.A. 1958, 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 Tassell (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.
- Randall Vincent (1981) Studio Instructor: Jazz Guitar
- Donald C. Wilkinson (1982) Lecturer in Psychology
B.A. 1968, University of Michigan; M.A. 1972, Sonoma State University.
- Bonnie L. Williams (1977) Studio Instructor: Flute; Lecturer in Music
B.A. 1967, San Francisco State University.
- R. Steve Wilson (1978) Lecturer in Mathematics
B.A. 1969, M.A. 1970, Ph.D. 1972, University of California, Santa Barbara.
- Donna S. Yonash (1982) Lecturer in English
B.A. 1966, Ohio Wesleyan University; Ph.D. 1971, University of California, San Diego.
- David A. Young (1980) Lecturer in Management
B.A. 1968, Pomona College.

EMERITUS FACULTY

- John R. Arnold, B.A., M.A., Ph.D. Professor of Biology
Appointed 1961, 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.
- James B. Enochs, B.A., M.A., Ph.D. Professor of Education
Appointed 1963, Emeritus since 1975.
- † Sally L. Ewen, B.A., M.A. Professor of English
Appointed 1964, Emeritus since 1982.
- 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 Education and Psychology
Appointed 1963, Emeritus since 1975.
- 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.
- 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.
- 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
Appointed 1963, Emeritus since 1979. School of Environmental
 Studies and Planning

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) Associate Librarian, Part-Time
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.
- Timothy M. Huston (1975) Senior Assistant Librarian
B.A. 1967, University of Arkansas, Little Rock; M.L.S. 1969, University of Maryland,
College Park; M.A. 1976, Sonoma State University.
- Marie K. Luethe (1972) Librarian
B.S. 1964, California State College, Hayward; M.L. 1965, University of Washington;
M.P.A. 1975, California State University, Hayward.

† Deceased, 1983.

462 / Student Affairs Officers

- Lenore S. Radtke (1962) Associate 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

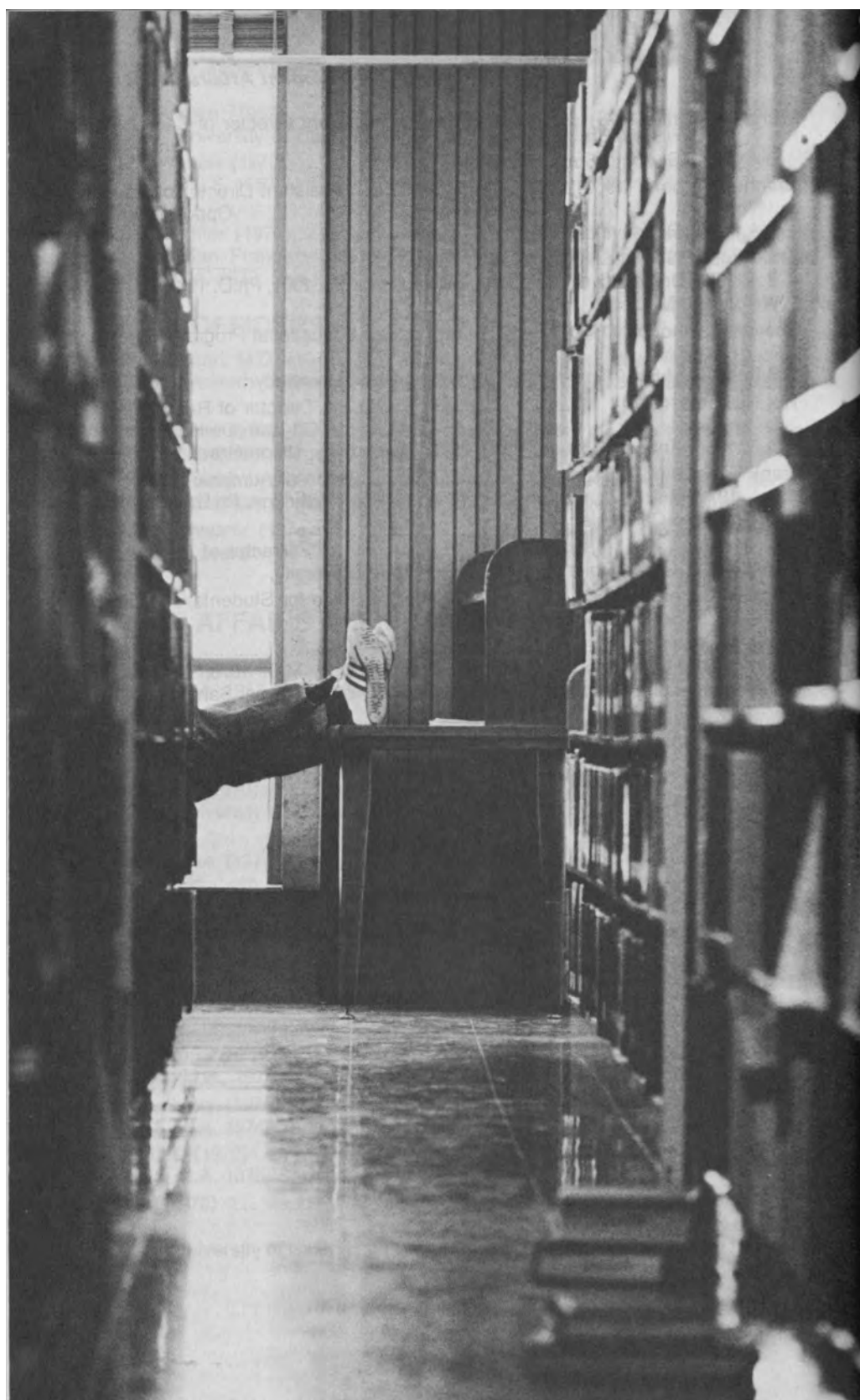
- Martin H. Bauman, M.D. (1970) Psychiatrist, Part-Time
1959, Northwestern University; 1967, Psy. Res., University of Wisconsin Medical School.
- H. G. Lockard, Jr. (1972) Staff Physician
M.D. 1948, Medical College of Virginia.
- Thomas R. Plowright (1966) Director, Health Service
B.S. 1942, University of New Hampshire; M.D. 1946, University of Vermont.
- Georgia G. Schwartz (1974) Staff Physician
B.A. 1966, University of California, Berkeley; M.D. 1970, University of California, Irvine.

STUDENT AFFAIRS OFFICERS

- Gerald Alves (1965) Director of Testing Services
B.A. 1955, M.A. 1957, California State University, Chico.
- Keith Brookshaw (1982) Counselor
B.A. 1973, University of California, Davis; M.S. 1975, California State University, Hayward
- Philip Brownell (1970) Counselor
B.A. 1961, University of California, Berkeley; M.S. 1971, California State University, Hayward.
- William B. Clarke (1979) Director, Educational Opportunity Program
B.A. 1973, Southern Illinois University; M.A. 1981, Webster College, Missouri.
- Carol Curtis (1976) Assistant Director of Financial Aid
B.A. 1970, Teaching Credential 1972, M.A. 1975, Humboldt State College.
- David Farrell (1980) Associate Dean of Students/Student Life
Director of Student Resource Center
B.A. 1968, M.A. 1970, California State University, Sacramento; Ed.D. 1979, University of California, Los Angeles.
- Albert G. Fortin (1974) Director, Veterans Affairs
B.A., 1973; M.A., 1974, University of Northern Colorado.
- Eleanor V. Henry (1974) Psychometrist-Testing Services
B.A. 1973, M.A. 1974, Sonoma State University.
- Martin D. Lee (1979) Counselor
B.A. 1975, M.A. 1976, San Jose State University.
- Rand Link (1970) Associate Dean of Students/Student Development
Director, Counseling and Career Development
B.A. 1968, University of California, Santa Barbara; M.S. 1970, Ohio State University.

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- Michael McGriff (1975) Assistant Director of Career Planning
and Placement
B.A. 1972, Sonoma State University.
- Jeanne L. Moore (1969) Assistant Director of Educational
Opportunity Program
B.A. 1947, Roosevelt University, Chicago.
- Berle Post (1974) Counselor
B.A. 1958, University of Wisconsin, Milwaukee; M.S. 1961, Ph.D. 1967, University of
Wisconsin, Madison.
- Charles E. Rhodes (1980) Educational Program Coordinator/
Residence Halls
B.S. 1970, M.S. 1972, Virginia Polytechnic State University.
- Tak Richards (1974) Director of Reentry Program/
Off-Campus Housing Services
B.A. 1954, Antioch College; Ph.D. 1978, Psychology, Union Graduate School.
- Frank Tansey (1979) Dean of Admissions and Records
B.A. 1970; M.A. 1971, California State University, Northridge; Ph.D. 1979, University
of Southern California.
- 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.
- 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.



Appendix

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 <i>Biological Sciences</i> and 3 units general education in <i>Physical Sciences</i>). 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 <i>Algebra and Trigonometry</i> .)	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 & 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 <i>Survey of American Literature</i>).	English 237, 238
Analysis & Interpretation of Literature Subject Examination & Departmental Essay	6 (fulfills 6 units of credit) toward <i>Basic Composition</i> (Freshman English).	English 101 and 214
English Literature Subject Examination	6 (fulfills 6 units of course credit in <i>Survey of English Literature</i>).	English 239, 240

CLEP EXAMINATIONS APPROVED AT SONOMA STATE UNIVERSITY—Continued

Examination	Amount of Credit Approved	Course Equivalent— CLEP
Biology Subject Examination and Essay	Up to 6 units (fulfills 6 units of course credit toward Basic Biology course sequence and <i>waives</i> up to 12 units of major requirement).	Biology 115, 116, 117
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 <i>Educational Psychology</i>).	Psychology 490
General Psychology Subject Examination	4 (fulfills 4 units of course credit in <i>General Psychology</i>).	Psychology 250
Human Growth & Development Subject Examination	3 (fulfills 3 units of course credit in <i>Human Growth and Development</i> , similar to Child Psychology or Child Development).	Psychology 410
Introductory Accounting Subject Examination	4 (fulfills 4 units of course credit in <i>Financial Accounting Fundamentals</i>).	Management 230
Introductory Business Law Subject Examination	4 (fulfills 4 units of course credit in <i>Law and Society</i>).	Management 225
Introductory Macroeconomics Subject Examination	4 (fulfills 4 units of course credit in <i>Introduction to Macroeconomics</i>).	Economics 201A
Introductory Microeconomics Subject Examination	4 (fulfills 4 units of course credit in <i>Introduction to Microeconomics</i>).	Economics 201B
Introductory Marketing Subject Examination	4 (fulfills 4 units of course credit in <i>Marketing Environment</i>).	Management 360
Introductory Sociology Subject Examination	4 (fulfills 4 units of course credit in <i>Introductory Sociology</i>).	Sociology 201
Statistics Subject Examination	3 (fulfills 3 units of course credit in Statistics for the	Management 315 Social Sciences).

AVERAGE ANNUAL COSTS AND SOURCES OF FUNDS PER FULL-TIME EQUIVALENT STUDENT

The 19 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. Including capital outlay, the CSUC 1982/83 budget totals approximately \$1.20 billion. Approximately \$1.18 billion of the \$1.20 billion total has been budgeted to provide support for a projected 239,900 full-time equivalent (FTE*) students. Thus, excluding costs which relate to capital outlay and the Energy and Resources Fund (e.g., building amortization), the average cost per FTE student is \$4,947 per year. Of this amount, the average student pays \$710. Included in this average student payment calculation is the amount paid by non-resident students. The remaining \$4,237 in costs is funded by state and federal taxes.

Averages do not fit all students alike or even any specific student. To arrive at an average figure that is meaningful, the costs outlined above exclude "user fees" for living expenses, housing, and parking as well as costs for extension and summer session work. Computations are based on full-time equivalent students, not individuals, and costs are prorated by system totals, not by campus. The average costs for a full-time equivalent student in the system are depicted in the following chart:

TOTAL 1982/83 CSU BUDGET (Projected Enrollment: 239,900 FTE)

<i>Funding Source</i>	<i>Amount</i>	<i>Average Cost Per Student (FTE)*</i>	<i>Percentage</i>
State Approp. (Support)	\$970,118,453	\$4,044	81.7%
Student Charges.....	170,233,339	710**	14.4%
Federal (Financial Aids)	46,337,429	193	3.9%
State Funding (Capital Outlay and Energy and Resources Fund)	18,803,000		
Total	<u>\$1,205,492,221</u>	\$4,947	100.0%

* For budgetary purposes, full-time equivalent (FTE) translates total head count into total academic student load. The term assumes that a full-time student in The California State University is enrolled for 15 units of academic credit. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

** The average costs paid by a student include the student services fee, health facilities fee, college union fee, student body fee, application fee, catalog fee, State University Emergency Fee, and the non-resident tuition. This amount is derived by taking the total of all student fees and dividing by the total full-time equivalent student enrollment. Individual students may pay more or less than \$710 depending on whether they are part-time, full-time, resident or nonresident students.

*** Average Cost per Student (FTE) and Percentage columns are not calculated for this funding source. The estimated replacement cost of all the system's permanent facilities and equipment on the 19 campuses is currently valued at \$4.1 billion, excluding the cost of land.

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 1) access to student records maintained by the campus, and 2) the release of such records. In brief, the law provides that the campus must provide students access to official 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 Office of Admissions and Records. 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. Expulsion, Suspension or Probation of Students; Fees and Notification. The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such 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, 90403, 89705–89707.5, 68124 and 68123, and in Title 5 of the *California Administrative Code*, Article 4 (commencing with Section 41900) of Subchapter 5 of Chapter 1, Part V. A copy of the statutes and regulations is available for inspection at the campus Admissions Office.

Legal residence may be established by an adult who is physically present in the state 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, etc.

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 minor's parents, or, in the case of permanent separation of the parents, 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 man or a woman may establish his or her residence; marriage is not a governing factor.

Nonresident 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 1982/83 academic year are:

Quarter Term Campuses		Semester Term Campuses	
Fall	September 20	Fall	September 20
Winter	January 5	Winter (Stanislaus Only)	January 5
Spring	April 1	Spring	January 25
Summer	July 1		

Questions regarding residence determination dates should be directed to the campus Admissions Office. They can give you the residence determination date for the term for which you are registering.

There are several 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. A student who is an adult alien is entitled to residence classification if the student has been lawfully admitted to the United States for permanent residence in accordance with all applicable provisions of the laws of the United States; provided, however, that the student has had residence in California for more than one year after such admission prior to the residence determination date. A student who is a minor alien shall be entitled to residence classification if both the student and the parent from whom residence is derived have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has had residence in California for more than one year after acquiring such permanent residence prior to the residence determination date of the term for which the student proposes to attend the University.
7. Certain credentialed, full-time employees of California school districts.
8. Full-time State University and Colleges employees and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.
9. Certain exchange students.
10. Children of deceased public law enforcement or fire suppression employees, who were California residents, and who were killed in the course of law enforcement or fire suppression duties.

Any student, following a final decision on campus 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.

ADMISSION TABLE

GPA	ACT Score	SAT Score	GPA	ACT Score	SAT Score	GPA	ACT Score	SAT Score
(—) ¹			2.80	19	832	2.39	27	1160
3.20	11	512	2.79	19	840	2.38	27	1168
3.19	11	520	2.78	19	848	2.37	27	1176
3.18	11	528	2.77	19	856	2.36	27	1184
3.17	11	536	2.76	19	864	2.35	28	1192
3.16	11	544	2.75	20	872	2.34	28	1200
3.15	12	552	2.74	20	880	2.33	28	1208
3.14	12	560	2.73	20	888	2.32	28	1216
3.13	12	568	2.72	20	896	2.31	28	1224
3.12	12	576	2.71	20	904	2.30	29	1232
3.11	12	584	2.70	21	912	2.29	29	1240
3.10	13	592	2.69	21	920	2.28	29	1248
3.09	13	600	2.68	21	928	2.27	29	1256
3.08	13	608	2.67	21	936	2.26	29	1264
3.07	13	616	2.66	21	944	2.25	30	1272
3.06	13	624	2.65	22	952	2.24	30	1280
3.05	14	632	2.64	22	960	2.23	30	1288
3.04	14	640	2.63	22	968	2.22	30	1296
3.03	14	648	2.62	22	976	2.21	30	1304
3.02	14	656	2.61	22	984	2.20	31	1312
3.01	14	664	2.60	23	992	2.19	31	1320
3.00	15	672	2.59	23	1000	2.18	31	1328
2.99	15	680	2.58	23	1008	2.17	31	1336
2.98	15	688	2.57	23	1016	2.16	31	1344
2.97	15	696	2.56	23	1024	2.15	32	1352
2.96	15	704	2.55	24	1032	2.14	32	1360
2.95	16	712	2.54	24	1040	2.13	32	1368
2.94	16	720	2.53	24	1048	2.12	32	1376
2.93	16	728	2.52	24	1056	2.11	32	1384
2.92	16	736	2.51	24	1064	2.10	33	1392
2.91	16	744	2.50	25	1072	2.09	33	1400
2.90	17	752	2.49	25	1080	2.08	33	1408
2.89	17	760	2.48	25	1088	2.07	33	1416
2.88	17	768	2.47	25	1096	2.06	33	1424
2.87	17	776	2.46	25	1104	2.05	34	1432
2.86	17	784	2.45	26	1112	2.04	34	1440
2.85	18	792	2.44	26	1120	2.03	34	1448
2.84	18	800	2.43	26	1126	2.02	34	1456
2.83	18	808	2.42	26	1136	2.01	34	1464
2.82	18	816	2.41	26	1144	2.00	35	1472
2.81	18	824	2.40	27	1152	(—) ²		

See *Eligibility Index* in the ADMISSION section.

¹ Above 3.2 eligible with any score.

² Below 2.0 not eligible.



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