

Catalog 1980-81

Sonoma State University



A Guide to Your Future

Sonoma State University Catalog 1980-81



Rohnert Park, California 94928

COVER PHOTO:

THE ORION NEBULA, a cloud of inter-stellar gas out of which new stars are forming. Photographed at Sonoma State University Observatory by Paul Kellar, a senior physics major from Vallejo



A GUIDE TO SONOMA STATE UNIVERSITY

Located on a 270 acre site among the rolling hills of the wine country, Sonoma State University offers students a unique blend of academic, cultural, historical and recreational resources. Sonoma and the surrounding counties have an abundance of lakes, rivers, parks, mountains and ocean beaches. Fifty miles north of San Francisco, it is truly one of the most picturesque regions of California, described by Luther Burbank, noted horticulturist and author, in the following way: "I firmly believe from what I have seen that this (the Redwood Empire) is the chosen spot of all the Earth as far as nature is concerned."





With approximately five thousand students, Sonoma State is a relatively small Liberal Arts and Sciences University with close student-faculty interaction, yet it has a full range of modern, well-equipped facilities.

The University's unique emphasis on the liberal arts and sciences has significantly influenced the design of an excellent undergraduate curriculum as well as seventeen master's degree programs. Professional training at Sonoma in Nursing, Management, Counseling, Education, and Criminal Justice Administration exemplify the University's commitment to liberal arts education for professionals.

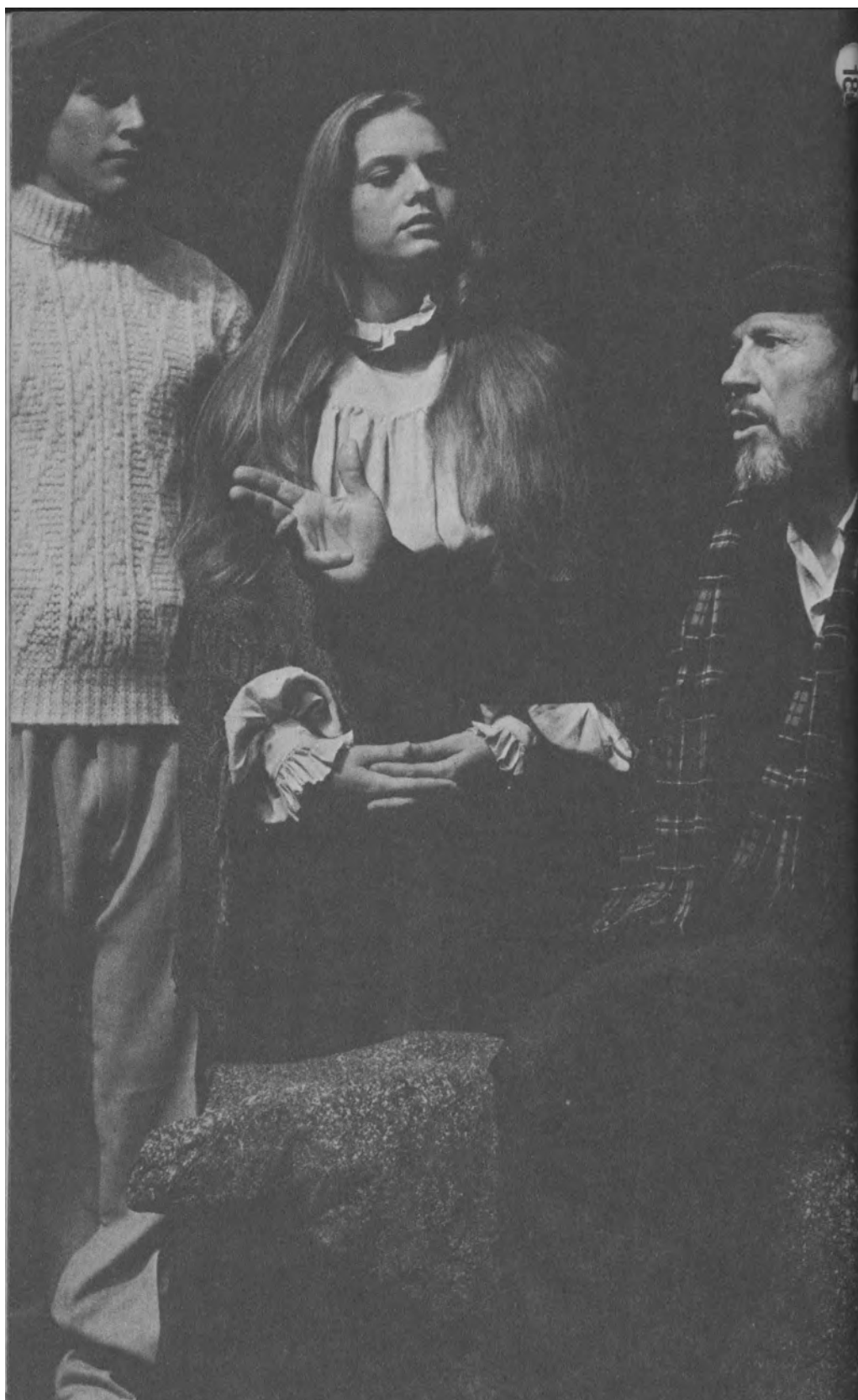
Curriculum, facilities and faculty all work together to refine our programs to meet the future needs of students and the needs of our future students.

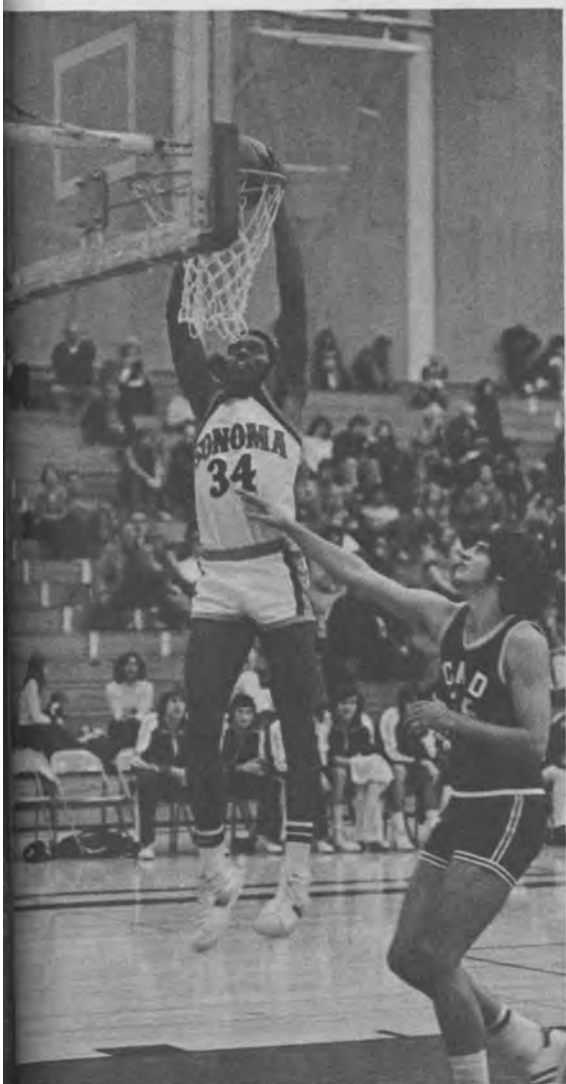




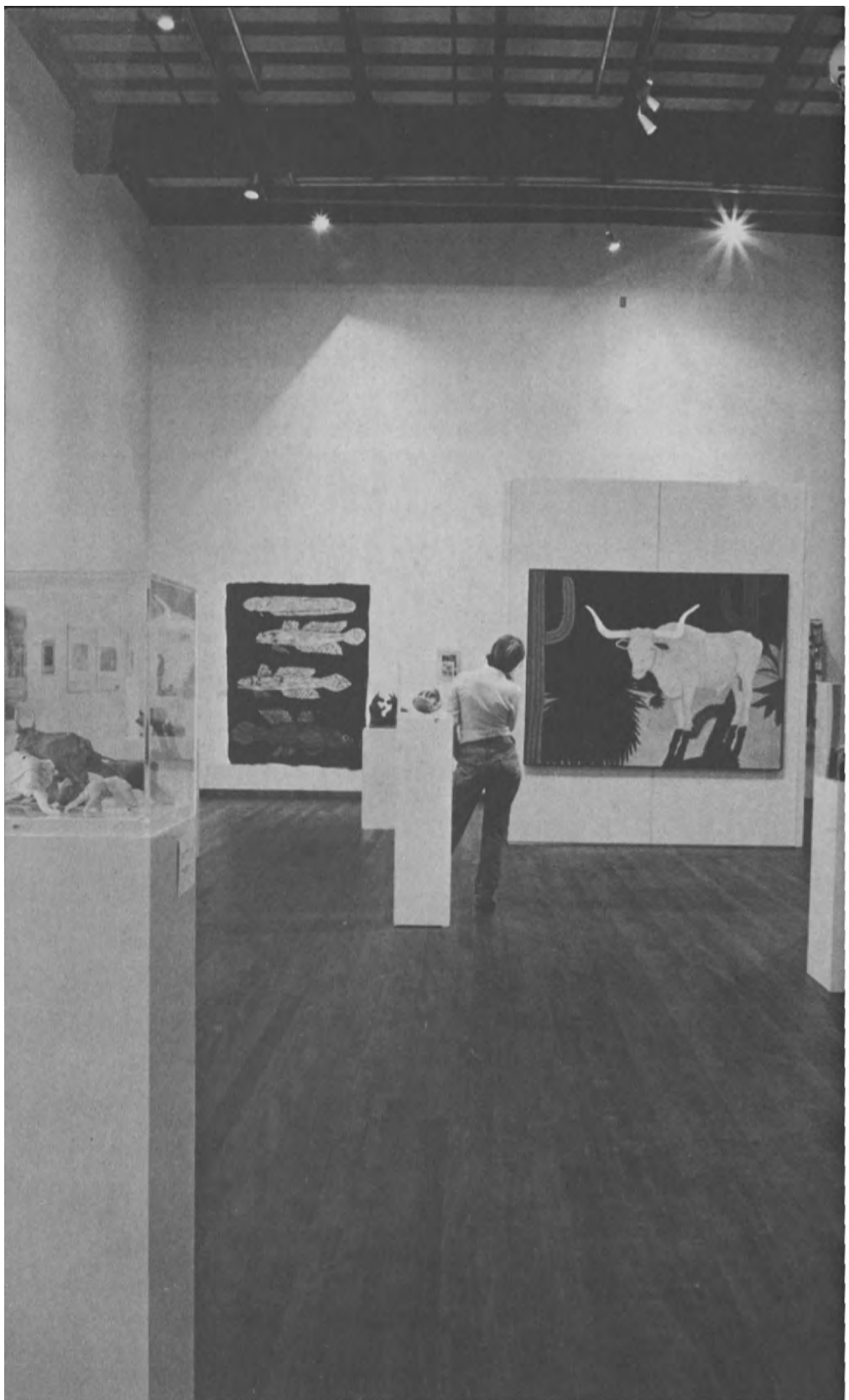
Many students take advantage of field experience and internship programs which provide practical experience in business, government, education, social service organizations. Using the resources of the community, programs at Sonoma study geothermal power, provide solar energy demonstrations, develop archaeological sites and study historical preservation of the area. Through the University's Career Placement Center, Community Involvement Program and various other outreach programs, many students are placed and work in the community. Such experiences help students integrate their learning with their career objectives in order to prepare more realistically for their future.







While the pursuit of knowledge is the central purpose of learning, Sonoma State University continues in the tradition of the liberal arts by providing extra-curricular events and activities that contribute to the education of the total human. Theatre Arts productions engage the talents of many students and the annual Jazz Festival and opera productions attract audiences from the surrounding communities. Poetry readings, film festivals, and lecture series contribute to the cultural and intellectual life of the student beyond the classroom, and the University houses the largest art gallery in Northern California. Football, soccer, basketball, baseball, tennis and track engage athletes as well as delight spectators. Other annual events such as open house and commencement bring a vitality and variety to the campus.

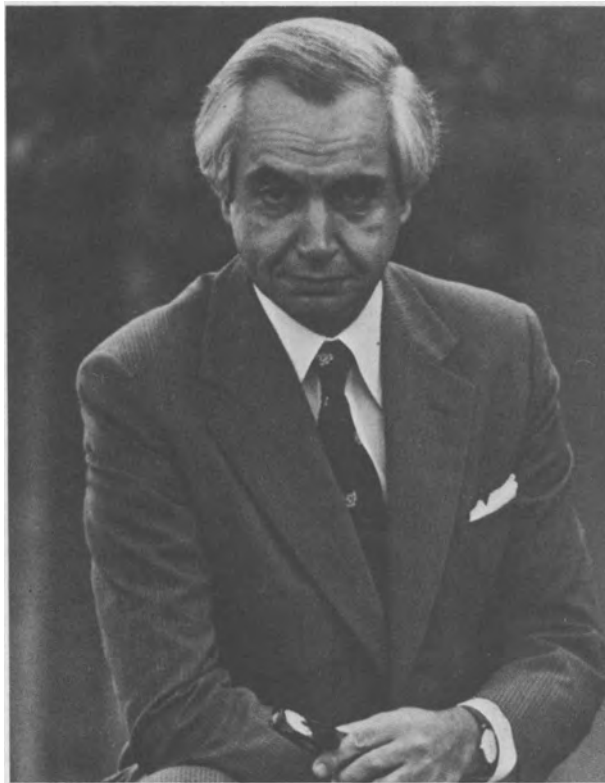






Being one of the newest Universities in the State University and Colleges system, Sonoma abounds in facilities and services for its students. The newly built residence hall provides housing for over four hundred students. The modern health center provides care and treatment for students while the child care center can provide child care for over fifty children. The Student Union houses the campus resource center, providing meeting rooms, travel service, photographic facilities and food services. Many offices provide services for students with special needs, such as financial aid, students with disabilities, counseling center, tutorial learning center and veterans affairs. All of these offices function to furnish students with the services they need to acquire today the knowledge they will need for tomorrow.





“An Education for the Future”

Sonoma State University is committed to offering quality education in the liberal arts and sciences. A long intellectual tradition has established that such education will aid students in the comprehension of the past, assist them in understanding the present, and guide them to make reasonable judgments about the future.

No curiosity or perplexity is beyond the domain of a serious education in the liberal arts and sciences; no practical challenge or professional task can be served well without the enlightenment such education provides. It is based on the study of ideas and is advanced through abstractions; it requires cogent reasoning and has the richest practical applications. In brief, it focuses on the development of intellect and aims to disclose to reflective minds the power to think and the utility of thought in an effective life.

What we esteem most highly at Sonoma State University are the minds of our students, the intellectual powers of the faculty, and the institution's freedom for all to scrutinize and question ideas. By valuing achievements and potentiality, the faculty engage the intellects of our students and teach them to be self-educating throughout their lives.

Many of the issues and problems confronting the world in the coming decades may elude even the best current professional training. We know that more than half of the career opportunities of the future have not yet been conceived. But we also know that quality education in the liberal arts and sciences can enable individuals from every walk of life to sharpen their intellectual powers and prepare both for a good life and a good living. It is, in the deepest sense, education for the future.

Peter Diamandopoulos
President

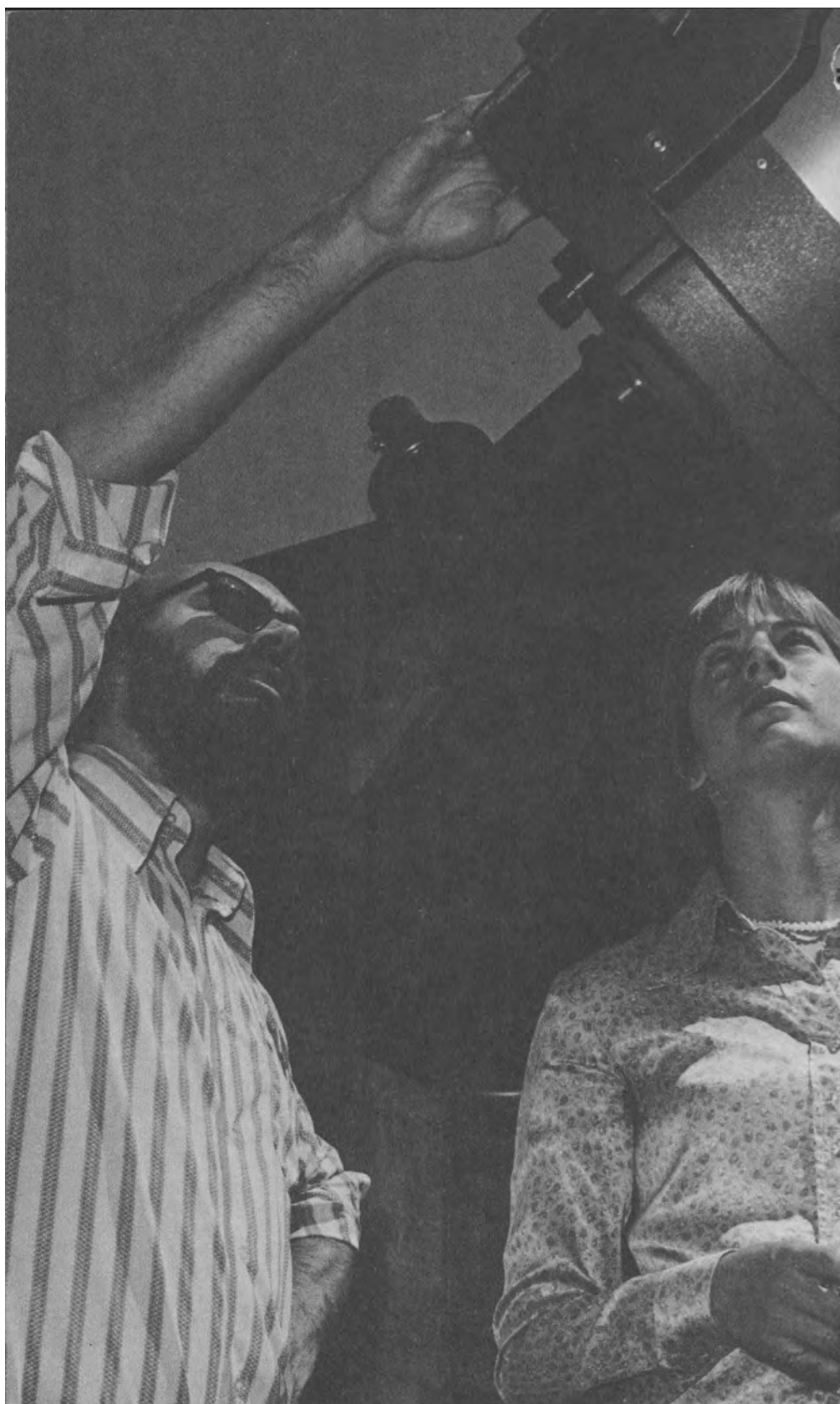


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Sonoma State University

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 \$3.00 plus sales tax. For mail orders, send check or money order made payable to the Sonoma State University Bookstore in the sum of \$4.00 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 and Colleges, by the Chancellor or designee of The California State University and Colleges, 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 and Colleges. 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 and Colleges, the Chancellor of The California State University and Colleges, 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 and Colleges. 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 1980–81

FALL, 1980

November 1, 1979	Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1980 begins.
November 30, 1979	Priority period to apply for admission ends. Applications received after this date will be processed on a space available basis.
January 2–March 31, 1980	Period to apply for financial aid (BEOG, SEOG, NDSL, FISL, EOP, Nursing and Work-Study employment) to insure consideration in the initial round of awards.
June 1, 1980	Last day for foreign students to apply for admission to the Fall Semester, 1980.
July 17, 1980	Schedule of Classes on sale in Bookstore.
August 25, 1980	Academic year begins. General faculty conference.
August 26, 1980	New Student Orientation and Advising.
August 27–28, 1980	Registration.
September 2, 1980.....	Instruction, change of program and late registration begins.
September 6–7, 1980.....	New Student Orientation Retreat.
September 26, 1980.....	Census date. Last day to file Change of Program or register late.
October 3, 1980	Last day to apply for degrees to be awarded in January, 1981.
October 6, 1980	Begin filing period for June 1981 graduation.
October 10, 1980	Last day to declare Basis of Grading. Last day to apply for partial refund of non-resident tuition. (See University Catalog, page 368.)
December 12, 1980	Last day of instruction.
December 15–19, 1980	Final examinations.
December 22–31, 1980	Holiday recess. Classes not in session.
January 2, 5 and 6, 1981	Student-Faculty conferences and evaluation.
January 7, 1981	Division and Department meetings for evaluation. Semester ends.

HOLIDAYS

September 1, 1980.....	Labor Day. Campus closed.
September 9, 1980.....	Admission Day. Campus open.

October 13, 1980	Columbus Day. Campus open.
November 12, 1980	Veteran's Day observance. Campus open.
November 27-28, 1980	Thanksgiving Holiday. Campus closed.
December 25-26, 1980	Christmas. Campus closed.
January 1-2, 1981	New Year's Day. Campus closed.
January 8-23, 1981	Mid-semester recess. Classes not in session.

SPRING, 1981

August 1, 1980	Period to apply for Spring Semester, 1981 begins.
August 30, 1980	Priority application period for Spring Semester, 1981 ends. Applications received after this date will be processed on a space available basis.
November 1, 1980	Last day for foreign students to apply for admission to the Spring Semester, 1981.
November 1-30, 1980	Period to apply for admission to the University and to the Credential Programs for Fall Semester, 1981.
January 5, 1981	Schedule of Classes on sale in Bookstore.
January 26, 1981	Spring semester begins. General faculty conference.
January 27, 1981	New Student Advising and Orientation. Faculty meetings 9:00 a.m. to 12:00 noon.
January 28-29, 1981	Registration.
February 2, 1981	Instruction, change of program and late registration begins.
February 27, 1981	Census date. Last day to file Change of Program or late register.
March 6, 1981	Last day to apply for degrees to be awarded in June, 1981.
March 9, 1981	Begin filing period for August 1981 graduation.
March 13, 1981	Last day to declare Basis of Grading. Last day to apply for partial refund on non-resident tuition. (See University Catalog, page 368.)
April 13-17, 1981	Spring recess. Classes not in session.
May 20, 1981	Last day of instruction.
May 21-28, 1981	Final Examinations.
May 29, 1981	Commencement, 10:00 a.m.
June 1-2, 1981	Student-Faculty conferences and evaluation.
June 3, 1981	Division and Department meetings for evaluation. Semester ends.

HOLIDAYS

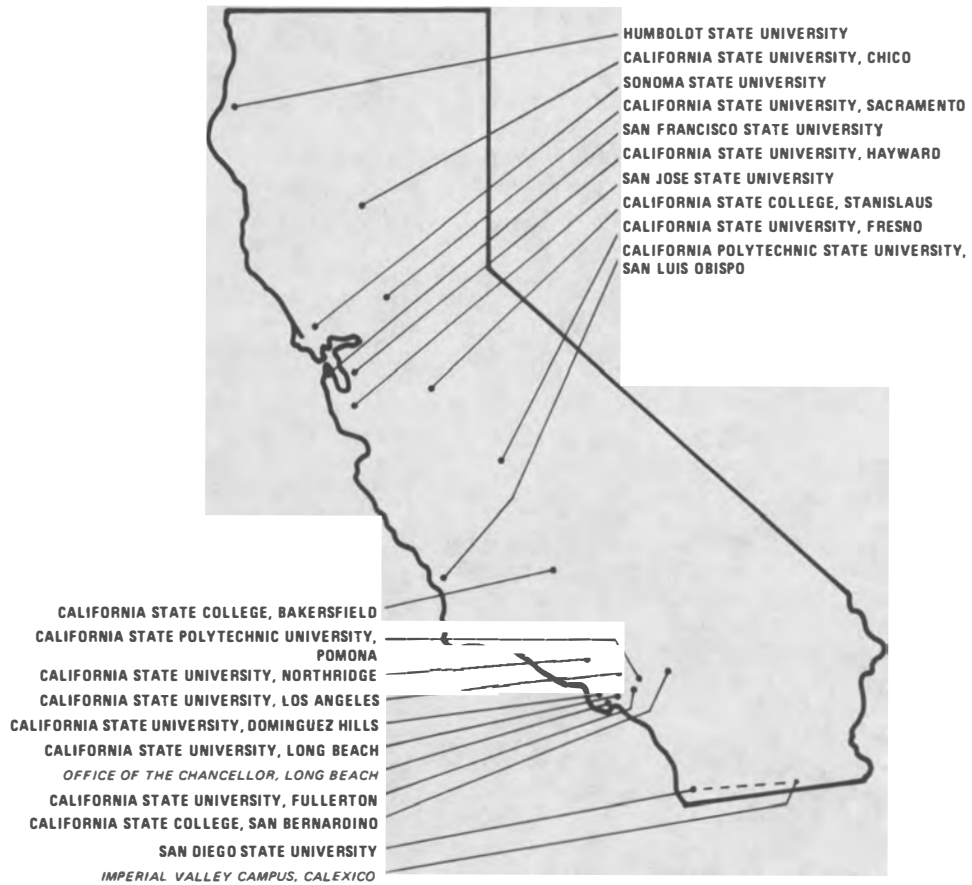
February 12, 1981	Lincoln's Birthday. Campus open.
February 16, 1981	Washington's Birthday. Campus closed.
April 13–17, 1981	Spring recess. Classes not in session.
May 25, 1981.....	Memorial Day. Campus closed.



**The California
State University
and Colleges**

**The Moon
photo by R. J. Leckey, SSU**

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES



THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

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. Today, 16 of the 19 campuses have the title "university."

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

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

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

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

The CSUC offers more than 1,400 bachelor's and master's degree programs in some 200 subject areas. Approximately 350 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 CSUC 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 1979 totaled over 300,000 students, who were taught by a faculty of 18,000. Last year the system awarded over 52 percent of the bachelor's degrees and 32 percent of the master's degrees granted in California. Almost 725,000 persons have been graduated from the 19 campuses since 1960.

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

EX OFFICIO TRUSTEES

The Honorable Edmund G. Brown Jr. State Capitol, Sacramento 95814
Governor of California

The Honorable Michael Curb State Capitol, Sacramento 95814
Lieutenant Governor of California

The Honorable Leo McCarthy State Capitol, Sacramento 95814
Speaker of the Assembly

The Honorable Wilson C. Riles 721 Capitol Mall, Sacramento 95814
State Superintendent of Public Instruction

Dr. Glenn S. Dumke 400 Golden Shore, Long Beach 90802
Chancellor of The California State University and Colleges

APPOINTED TRUSTEES

Appointments are for a term of eight years, except for a student Trustee and alumni Trustee, whose terms are for two years. Names are listed in order of appointment to the Board.

Mr. Charles Luckman (1982) 9200 Sunset Blvd., Los Angeles 90069	Mr. John F. O'Connell (1980) P. O. Box 3965, San Francisco 94119
Mr. Roy T. Brophy (1980) 2160 Royale Rd., Suite 20, Sacramento 95815	Ms. Blanche C. Bersch (1984) 291 S. La Cienega Blvd., Suite 410, Beverly Hills 90211
Mrs. C. Stewart Ritchie (1980) 1064 Creek Dr., Menlo Park 94025	Mr. Michael R. Peevey (1985) 215 Market Street, Suite 930, San Francisco 94105
Mr. Frank P. Adams (1981) 235 Montgomery St., Suite 1045, San Francisco 94104	Mr. John F. Crowley (1985) 3068 16th St., San Francisco 94103
Mr. Dean S. Leshner (1981) P. O. Box 5166, Walnut Creek 94598	Ms. Wallace Albertson (1986) 1618 Sunset Plaza Dr., Los Angeles 90069
Dr. Claudia H. Hampton (1982) 450 N. Grand, Room G353, Los Angeles 90012	Mr. Eli Broad (1986) 10801 National Blvd., Los Angeles 90064
Dr. Mary Jean Pew (1983) 2021 N. Western Avenue, Los Angeles 90027	Mr. Donald G. Livingston (1987) 550 S. Flower St., Los Angeles 90071
Mr. Willie J. Stennis (1983) 3947 Landmark, Culver City 90230	Ms. Celia I. Ballesteros (1987)* 1146 Union, Suite 3, San Diego 92101
Dr. Juan Gómez-Quirónes (1984) Professor, History Department University of California, Los Angeles 405 Hilgard Ave., Los Angeles 90024	Mr. Jason E. Peltier (1981) 9123 W. Lilac Rd., Bonsall 92003

OFFICERS OF THE TRUSTEES

Governor Edmund G. Brown, Jr. President	Eli Broad Vice Chair
Dr. Claudia H. Hampton Chair	Chancellor Glenn S. Dumke Secretary-Treasurer

* Appointment subject to confirmation by the State Senate.

OFFICE OF THE CHANCELLOR

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

Dr. Glenn S. Dumke Chancellor
Mr. Harry Harmon Executive Vice Chancellor
Mr. D. Dale Hanner Vice Chancellor, Business Affairs
Dr. Alex C. Sherriffs Vice Chancellor, Academic Affairs
Dr. Marjorie Downing Wagner Vice Chancellor, Faculty and Staff Affairs
Mr. Mayer Chapman General Counsel

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

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. Stanford Cazier, President
(916) 895-5011

California State University, Dominguez
Hills
Carson, California 90747
Dr. Donald R. Gerth, President
(213) 515-3300

California State University, Fresno
Shaw and Cedar Avenues
Fresno, California 93740
Dr. Norman A. Baxter, President
(209) 487-9011

California State University, Fullerton
Fullerton, California 92634
Dr. L. Donald Shields, President
(714) 773-2011

California State University, Hayward
25800 Carlos Bee Boulevard
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, Jr.,
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. John M. Pfau, 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
125 South Seventh Street
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
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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) 633-2122

Sonoma State
University

SONOMA STATE UNIVERSITY DIRECTORY

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Mr. Eric Koenigshofer (ex officio alumnus)	

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Assistant to the President.....	Bonnie J. Moody
Affirmative Action, Acting Director.....	Homero Yearwood
Public Affairs, Director.....	David Holmstrom
Special Events, Director.....	Gloria Oster
University Communications, Director.....	James Molica
Institutional Research, Director.....	George L. Proctor
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Assistant to the Academic Vice President.....	Louis A. Dallara
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Division of Natural Sciences, Chair	Galen Clothier
Division of Social Sciences, Chair	Delmar Valleau
Division of Interdisciplinary Education and Cluster Schools, Chair	James C. Stewart
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Dean of Undergraduate Studies.....	William H. Poe
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Reentry Services, Director	Tak Richards
Educational Opportunity Program, Director	William B. Clarke
Tutorial Learning Center, Director	Herbert Castillo
Multi-Cultural Services, Director	Valdemir King
Dean of Graduate Studies and Special Programs, Acting	Ardath Lee
Dean of Extended Education	Carroll V. Mjelde
Library Director	Ruth Hafter
Computing Services, Director	Eduard Glaaser
Instructional Resource Center, Director	Harold R. Skinner

Dean of Students	Joaquin Sanchez
Associate Dean of Students and Campus Judicial Officer.....	Fred Engbarth
Counseling and Career Development, Director.....	Rand Link
Housing, Acting Director	John Wright
Intercultural Center, Director	Fernando Nugent
Student Health Center, Director.....	Thomas R. Plowright
Student Resource Center, Director	Raul Arizpe
Student Union, Director	Raul Arizpe

Students with Disabilities, Director Anthony Tusler
 Testing Services, Director Gerald J. Alves
 Veterans Affairs, Director Albert Fortin

Dean of Admissions and Records Frank Tansey

School Relations, Director P. Scott Anderson
 Registrar Frederick Jorgensen
 Financial Aid, Director Richard Goodenough

Director of Business Affairs B. Y. Quong

Sonoma State University
 Enterprises, Inc., Acting General Manager Otto Buckenthal
 Bookstore, Manager Otto Buckenthal
 Campus Food Service, Director John Fonseca
 Campus Planning, Director Fred R. Cunha
 Plant Operations, Chief William R. Mabry
 Procurement and Support Services Officer Joseph C. Vizi

Director of Management Services Alan K. Murray

Public Safety, Director R. Richard Courier
 Personnel, Director Alan K. Murray



Degrees and Credentials

The Great Galaxy of Andromeda
photo by Barrie Stebbings, SSU

BACCALAUREATE DEGREE REQUIREMENTS

The University grants two baccalaureate degrees: Bachelor of Arts and Bachelor of Sciences. Students are eligible for graduation when they are in good standing and have fulfilled the following requirements:

1. Completion of a General Education program.

(See p. 22.)

2. Completion of a major.

Major programs vary considerably in their requirements, and students should consult with faculty advisors early in their academic programs.

3. Completion of the Written English Proficiency Requirement.

All undergraduate students must demonstrate upper division written English competence as a requirement for graduation. During the junior or senior year, a test of competence 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.

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. Petition forms are available in the office of the Department of English.

4. 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 his 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. 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. 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 completion of a minor. 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.

Catalog Year of Graduation

A student who is in a period of continuous attendance at the time of filing the application for award of degree may elect to meet the catalog requirements in effect at the beginning of his or her last previous period of continuous attendance or at the time of completion of the curriculum. A student is considered in continuous attendance if he or she registers for at least one semester or summer session within any 12-month period. A student not in a period of continuous attendance at the time of filing for a degree must meet the catalog requirements in effect at that time. Special exceptions may be made for students on active military duty.

After a degree is posted to a student's permanent academic record, that record is closed and will not be changed for any reason.

All students graduating from Sonoma State University who wish to continue for

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additional study must make application for admission during the normal application period.

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-BREADTH REQUIREMENTS

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.C. 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. Certain Sonoma State University General Education requirements may also be met through the following credit by examination programs:
 College Level Examination Program (Pages 352 and 418)
 College Board Advanced Placement (Page 351)
 C.S.U.C. English Equivalency Test and Science and Math Test (Page 352 and 418)
 Departmental Challenge examinations (consult appropriate departments)

THE DISCIPLINARY GENERAL EDUCATION PROGRAM

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 all lower division students with basic skills and a common core of educational experience. Completion of the Disciplinary General Education Program provides the following units:

	<i>Units</i>	<i>Section</i>
Basic Subjects	9	I
American Institutions and Values.....	6	II
Ethnic Studies	(see Section III)	III
Humanities	9	IV
Natural Sciences	9	V
Social Sciences	7	VI
Total	40	

I. Basic Subjects (9 units)

General Education requirements in the Basic Subjects may be met by taking one course from each of the following three groups:

- 1. English..... 3**
 English 101 Expository Writing and Analytical Reading (3 units)
- 2. Philosophy..... 3**
 Philosophy 101 Critical Thinking (3 units)
 Philosophy 200 Logic (3 units)
- 3. Mathematics..... 3**
 Math 105A, B, C, D, E. Pre-calculus Mathematics (3 units)
 Math 107 Algebra and Trigonometry (4 units)
 Math 108 Analytic Geometry and Trigonometry (3 units)
 Math 111 Symmetry in the Arts and Sciences (3 units)
 Math 114 Intermediate Algebra (3 units)
 Math 115 Explorations in Mathematics (3 units)
 Math 117 Mathematics for the Social Sciences A (3 units)
 Math 118 Mathematics for the Social Sciences B (3 units)
 Math 161 Calculus I with Analytic Geometry (4 units)
 Math 165 Elementary Statistics (4 units)

II. American Institutions and Values (6 units)

General Education requirements in American Institutions and Values may be met by taking one course from each of the following two groups:

1. **United States History** 3
History 251 or 252
2. **California State and Local Government and United States Constitution** 3
Politics 200

III. Ethnic Studies

A course in Ethnic Studies must be included within the courses selected to fulfill either the Humanities or the Social Sciences requirement.

The courses listed below fulfill this requirement.

Humanities—Section 4A

AMCS 255

MAMS 451

NAMS 346

NAMS 205

Social Sciences—Ethnic Studies

NAMS 200

MAMS 219

AMCS 210

Ethnic Studies courses listed under the Humanities fulfill one Humanities requirement; Ethnic Studies courses listed under the Social Sciences fulfill a Social Sciences requirement. No more than 8 units of Ethnic Studies courses may be applied to General Education requirements.

IV. Humanities (9 units)

General Education requirements in the Humanities may be met by taking one course from three of the following four groups:

1. **World Literature** 3
English 214 Literature of the World (3 units)
2. **World Philosophy**..... 3
Philosophy 100 Introduction to Philosophy (3 units)
3. **The Fine Arts**..... 3
Art 210 Introduction to Art History (3 units)
Art 211 Introduction to Art History (3 units)
Art 212 Introduction to World Film History (3 units)
Music 250 Introduction to Music Literature (3 units)
Music 251 Music of the World (3 units)
Theatre Arts 100 Introduction to the History of Theatre and Dance (3 units)
4. **Comparative Perspectives** 3
 - A. Ethnic Studies
 - AMCS 255 Black Humanities (4 units)
 - MAMS 451 Chicano Humanities (4 units)
 - NAMS 205 Introduction to Native American Arts (4 units)
 - NAMS 346 Philosophic Systems and Sacred Movements in Native North America (4 units)
 - B. Foreign and Comparative Culture

In addition to the courses listed below the comparative perspectives requirement may be met by the study of a foreign language. Current offerings include French, German, Greek, Italian, Latin, Russian, and Spanish in the Department of Foreign Languages, and Hindi and Sanskrit in the India Studies Program.

 - India Studies 301A Indian Civilization: The Sacred Tradition (4 units)

India Studies 301B Indian Civilization: The Secular Tradition (4 units)

Sociology 431 Comparative Religions (4 units)

V. Natural Sciences (9 units)

General Education requirements in the Natural Sciences may be fulfilled by choosing two or more courses (to a total of at least 9 units) from the following lists. The courses chosen must include at least three units in the Biological Sciences and three units in the *Physical Sciences* from Group A, GENERAL PERSPECTIVES. Other courses may be taken from Group A or Group B, SPECIFIC EMPHASES. (The courses in Group A have no prerequisites. Some of the courses in Group B have prerequisites.) The nine unit total must include at least one laboratory.

A. GENERAL PERSPECTIVES (without prerequisites)

1. Biological Sciences

Biology 115 An Introduction to Biology (3 units)

2. Physical Sciences

¹ Astronomy 100 Descriptive Astronomy (3 units)

¹ Astronomy 200 Introductory Astronomy (3 units)

Astronomy 231 Introductory Observational Astronomy (2 units)

¹ Chemistry 102 Chemistry and Society (3 units)

Chemistry 103 Chemistry and Society Laboratory (1 unit)

Chemistry 115A General Chemistry (5 units)

Chemistry 125A General Chemistry (6 units)

Geology 102 General Geology (4 units)

¹ Geology 202 Rocks, Time and Evolution (3 units)

¹ Physics 100 Descriptive Physics (3 units)

Physics 102 Laboratory Physics for the People (1 unit)

¹ Physics 114 Introduction to Physics 1 (4 units)

Physics 116 Introductory Laboratory Experience (1 unit)

Physics 209A General Physics Laboratory (1 unit)

¹ Physics 210A General Physics (3 units)

B. SPECIFIC EMPHASES

1. Biological Sciences

¹ Anthropology 201 Human Evolution (4 units)

Biology 112 Introduction to Oceanology (3 units)

Biology 116 Biology of Plants (4 units)

Biology 117 Biology of Animals (4 units)

¹ Biology 201 The Human Species (2–3 units)

Biology 201L The Human Species: Laboratory Component (1 unit)

² Biology 202 Natural History of the North Bay Region (3 units)

Biology 220 Human Anatomy (4 units)

Biology 224 Human Physiology (3 units)

Biology 314 Field Biology (3 units)

¹ Biology 332 Plants and Civilization (3 units)

¹ Biology 385 Contemporary Issues in Biology (3 units)

2. Physical Sciences

Astronomy 303 Extraterrestrial Intelligence and Interstellar Travel (3 units)

¹ Astronomy 305 Frontiers in Astronomy (3 units)

NOTES:

¹Non-laboratory course.

²Meets laboratory requirement only when laboratory is listed in class schedule.

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- ¹ Astronomy 350 Cosmology (3 units)
- Chemistry 302 Chemistry and the Environment (3 units)
- Geology 120 Regional Field Geology (3 units)
- ¹ Geology 233 Geology of the Mountains (3 units)
- Geology 303 Advanced Principles of Geology (4 units)
- ¹ Physics 301 The Relation of Physics to Society (3 units)
- ¹ Physics 313 Classical Studies (1–3 units)
- ¹ Physics 342 Popular Optics (3 units)

VI. Social Sciences (7 units)

General Education requirements in the Social Sciences may be met by taking one course from each of the following two groups:

Units

- 1. Social Structure and Social Behavior 4**
Courses presenting broad perspectives on the determinants of social behavior and social structure and their evolution, emphasizing major theories of social causality which have arisen over the past 250 years.
Note: Students may not take a course in their major field to fulfill the general education requirement in Social Structure and Social Behavior.
Anthropology 203 Cultural Systems (4 units)
Economics 201 Introduction to Economics (4 units)
Ethnic Studies:
 NAMS 200 Introduction to Native Americans (4 units)
 MAMS 219 Introduction to Chicano Studies (4 units)
 AMCS 210 Ethnic Groups in America (4 units)
Geography 201 Man and Environment (4 units)
Politics 201 Ideas and Institutions (4 units)
Psychology 250 Introduction to Psychology (4 units)
Sociology 201 Introduction to Sociology (4 units)
- 2. World History 3**
History 201 Foundations of World History (3 units) OR
History 202 Development of the Modern World (3 units)

THE HUTCHINS SCHOOL OF LIBERAL STUDIES INTERDISCIPLINARY GENERAL EDUCATION PROGRAM

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

Humanities.....	12
Social Sciences	8
Natural Sciences	9
Basic Subjects	3
General Education Electives	8
Electives.....	8
Total	48

FACULTY APPROVAL

Proficiency of students in any and all parts of the curriculum is properly ascertained by the faculty of the University. A favorable vote of the faculty shall be required for granting of any degree.

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 21 for information.

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

ON-CAMPUS MASTER'S DEGREE PROGRAMS

Biology	English
Counseling	History
Education (five options)	Management
Curriculum	Mathematics
Early Childhood Education	Physical Education
Educational Administration	Political Science
Reading	Psychology
Special Education	Special Major (Interdisciplinary)

EXTERNAL MASTER'S DEGREE PROGRAM

Psychology

ADMISSION REQUIREMENTS

Admission requirements and procedures for graduate students are described under the general admissions section in this catalog. Admission to the University with unclassified postbaccalaureate standing does not in 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.

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 (Advancement to Graduate Standing) and Form G-2 (Graduate Study Plan) in the Graduate Studies Office. It is

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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, field internship, comprehensive oral or written 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 $\frac{1}{3}$ 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

- 1– 99 Noncredit courses.
- 100–299 Freshman and sophomore.
- * 300–499 Upper division *may be* acceptable for graduate credit.
- 500–599 Graduate.

* 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.

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 (with the exception of the Bilingual/Cross-Cultural Specialist Credential), and for the Administrative Services Credential 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 Bilingual/Cross-Cultural Specialist Credential is offered through the cooperative efforts of the Department of Mexican-American Studies, the Department of Education, and the Department of Foreign Languages. Students interested in this program should apply directly to the Department of Mexican-American Studies.

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 96).

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

CHILDREN'S CENTER PERMIT PROGRAM

This program is designed for students who are interested primarily in the education of young children—infants to five years of age. The courses are designed as electives and are open to the entire campus community. The student may enroll in the Education Department's program and include appropriate courses from other departments. The permit holder will be eligible for work in children's center programs and will be qualified to teach in any pre-school situation in California, public or private.

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For a Supervisor Permit the student may add to the basic Instructional Permit six units of coursework in supervision and administration of programs for young children. Permit program applicants should consult with the Early Childhood Education faculty to plan an appropriate pattern of courses.

MULTIPLE SUBJECT CREDENTIAL (ELEMENTARY EMPHASIS)

This credential authorizes the holder to teach grades pre-school through twelve in a self-contained classroom (effectively making the credential an elementary credential).

The program is a three-phase (29 unit) program extending over three academic semesters. 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. Academic major requirements can be met by completing an *appropriate curriculum* within one of the following programs: Bachelor of Arts in Liberal Studies (B.A.L.S.); Hutchins School of Liberal Studies; Environmental Studies and Planning; or Mexican-American Studies/Liberal Studies. Other majors may qualify by passing the Common portion of the National Teacher Examination (NTE).

ADMISSION REQUIREMENTS:

1. Junior standing (60 units), 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 faculty.
4. A spontaneous writing sample.
5. Approval of the Department of Education. The number of applicants is such that not all who are qualified can be accepted. Although grade point average is a consideration in the selection of candidates, emphasis is also given to
 - (a) extent of experiences relevant to elementary school teaching, and
 - (b) recommendations, particularly recommendations resulting from interviews, child-related experiences and college course work.
6. Two sets of official transcripts on file in the Credentials Office of the Department of Education.
7. An autobiographical statement.

PROFESSIONAL COURSE REQUIREMENTS:

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

<i>Phase I</i>	<i>Units</i>
Ed. 301 Introduction to the Public School	(1)
Ed. 302 Field Experience in the Public School	(2)
Ed. 350 Introduction to Teaching	(3)
<i>Phase II</i>	
Ed. 407A Curriculum of the Elementary School—Reading	(3)
Ed. 407B Elementary Reading Field Experience	(1)
OR State examination in Reading	
Ed. 402 Curriculum of the Elementary School—Mathematics (Math 300 is a prerequisite to this course)	(2)

Phase III

Candidate must pass the Written English Proficiency Test or an approved equivalent course prior to student teaching.

	<i>Units</i>
Ed. 405A Student Teaching and Seminar.....	(7)
Ed. 405B Student Teaching and Seminar.....	(8)

At least one of the following methods classes *must* be taken during the professional preparation program. Faculty believe that all four of these courses are important for successful teaching, and encourage students to take more than one of the four.

	<i>Units</i>
Ed. 400 Curriculum of the Elementary School—Social Science	(2)
Ed. 401 Curriculum of the Elementary School—Environmental Education	(2)
Ed. 403 Curriculum of the Elementary School—Science.....	(2)
Ed. 408 Curriculum of the Elementary School—Language Arts.....	(2)

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

MULTIPLE SUBJECT CREDENTIAL (EARLY CHILDHOOD EMPHASIS)

ADMISSION REQUIREMENTS:

Same as for the Multiple Subject Credential (Elementary Emphasis) outlined above.

PROFESSIONAL COURSE REQUIREMENTS:

Phase I First Semester	<i>Units</i>
Ed. 420 Course and Field Work: Child Development (The child from birth to adolescence—home and school interaction)	(3)
Phase II Second Semester	
Ed. 437A Integrated curriculum in the Classroom (all grades)	(3)
Ed. 407A Curriculum of the Elementary School: Reading	(3)
Ed. 407B Elementary Reading Field Experience	(1)
OR State Examination in Reading	
Phase III First Semester	
Ed. 431 Practicum and Field Experience (Pre-School/Kindergarten)	(3)
Phase IV Second Semester	

Candidate must pass the Written English Proficiency Test or an approved equivalent course prior to student teaching.

Ed. 405A & B Student Teaching Elementary Grades (Setting: fulltime seven weeks in Primary; fulltime seven weeks in Intermediate grade.)	(7–8)

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

MULTIPLE SUBJECT CREDENTIAL (BILINGUAL/ CROSS-CULTURAL EMPHASIS)

Admissions and professional course requirements for this recently approved program are the same as those for the Multiple Subject Credential (Elementary Emphasis) outlined above, with additional requirements in language and culture. For further details regarding admission and program requirements, students should contact 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	Mathematics
English	Music
Drama	Physical Education
English	Physical Science
Journalism	Chemistry
Speech	Physics
Foreign Language	Social Science
French	Mexican American Studies
German	Social Science Division
Spanish	Multi-Cultural Studies
Life Science (Biology)	

Note: See each department for program and major details.

Students must complete the approved undergraduate subject matter preparation in 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.
- 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 state subject matter examination.
 - E. 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.

Sequence of Courses for Three Semester Option:

<i>Prerequisite course:</i>	<i>Units</i>
Educ. 429—The Community, the School, the Teacher and the Learner	(4)

Please note that Education 429 may be taken concurrently with Phase I.

Phase I:

* Educ. 422—Curriculum and Instruction	(2)
Educ. 424—School & Community Field Experience	(1)
Completion of subject matter requirements	

Phase II:

Educ. 424—School & Community Field Experience	(1)
Educ. 425—Secondary Student Teaching (one period)	(4)
Educ. 426—Seminar in Student Teaching.....	(1)
Completion of subject matter requirements	

Phase III:

** Educ. 406—Teaching of Reading in the Secondary School.....	(3)
** Educ. 406A—Secondary Reading Field Experience.....	(1)
Educ. 425—Secondary Student Teaching (two periods)	(8)
Educ. 426—Seminar in Student Teaching.....	(1)

Total units in Education (not including Ed. 429) for three semester program: 22

Candidate 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. Previous 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.

II. Phase II Admission Requirements (second semester):

- A. All of the above requirements met.
- B. Successful completion of Phase I.

* Must be taken in Phase I or Phase II.

** May be taken in Phase I, II, or III.

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Sequence of Courses for Two Semester Option:

Prerequisite course: *Units*

Educ. 429—The Community, the School, the Teacher and the Learner (4)
Please note that Ed. 429 may be taken concurrently with Phase I.

Phase I:

† Educ. 422—Curriculum & Instruction (2)
Educ. 424—School & Community Field Experience (2)
Educ. 425—Secondary Student Teaching (one period) (4)
Educ. 426—Seminar in Student Teaching..... (1)

Phase II:

†† Educ. 406—Teaching of Reading in Secondary Schools (3)
†† Educ. 406A—Secondary Reading Field Experience..... (1)
Educ. 425—Secondary Student Teaching (two periods) (8)
Educ. 426—Seminar in Student Teaching..... (1)

Total units in Education (not including Ed. 429) for two semester program: 22 units

A clear credential requires a fifth year, including a one-unit course in health education, drug abuse and a special education requirement (see advisor). Although it is not an admission requirement, applicants are advised to complete these requirements at the earliest possible date.

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

EARLY CHILDHOOD SPECIALIST CREDENTIAL

ADMISSION REQUIREMENTS:

1. A baccalaureate degree and a valid teaching credential.
2. Interview with department faculty.
3. Spontaneous writing sample.
4. Two sets of official transcripts on file with the Credentials Office in the Department of Education.

PROFESSIONAL COURSE REQUIREMENTS:

The Early Childhood Specialist Credential program is structured on a modular basis. Classes do not meet as traditional, distinct entities. Rather, a “block program” model is employed. The twenty-four unit program consists of two semesters. Each semester has two core focuses.

Semester I

CORE I Focus on Observation and Child Development in Diverse Settings

Units
Ed. 415A Social and Psychological Foundations for Diversity in Early
Childhood Education (2)
Ed. 415B Social and Psychological Foundations for Diversity in Early
Childhood Education (Field) (1)
Ed. 520 Advanced Studies in Child Development..... (3–4)

CORE II Focus on Community Involvement, Staff Development and the
School as a Community

Ed. 435 Intergroup Relations and the Pre-Schooler (Field) (3)
Ed. 493 An Interdisciplinary Approach to the Learning Environment (3)

† Must be taken in Phase I.

†† May be taken in either phase.

Semester II

CORE III Focus on Curriculum: Patterns of Classroom Structure and Environment; Issues and Trends; Reading; Arts in the Classroom; Individualized Instruction		
Ed. 437B	Integrated Curriculum in Early Childhood Education.....	(3)
Ed. 537	Developmental Approach to Reading.....	(3)
CORE IV Focus on Evaluation, Supervision and Administration		
Ed. 538	Supervision, Management, and Evaluation of Programs for Young Children.....	(3)
Ed. 505	Field Experiences with Young Children	(3-6)

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 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.

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. Structured on a modular basis with an integrated curriculum, classes do not meet as traditional, distinct entities; rather, a "block program" model is employed. Only full-time students, therefore, can be accepted into the program.

ADMISSION REQUIREMENTS:

1. A baccalaureate degree and a valid basic teaching credential.
2. Successful completion of Ed. 430 (Exceptional Children); and Ed. 441 (Field Experiences with Exceptional Children).
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.

PROFESSIONAL COURSE REQUIREMENTS:	<i>Units</i>
Ed. 452 Student Teaching (Exceptional Children)	(4-7)
Ed. 453 Seminar in Field Internship	(1-1)
Ed. 541 Education of the Emotionally Disturbed	(1-3)
Ed. 542 Mental Retardation	(2-3)
Ed. 543 Instructional Strategies in Special Education	(2-3)
Ed. 544 Language Disorders and Development	(2-3)
Ed. 545 Counseling and Rehabilitation of the Handicapped.....	(2-3)
Ed. 546AB Education of the Severely Handicapped	(2-3)
Ed. 547 Educational Assessment of Special Children	(3)
Ed. 548 Learning Disabilities	(2-3)
Ed. 549A Educationally Handicapped	(2-3)
Ed. 549B Educationally Handicapped	(2-3)
Ed. 588AB Curriculum and Materials Modification in Special Education	(2-3)

The above courses are listed in the approved program for Special Education. Prospective students should be aware that the program is competency based and committed to ongoing, intensive field experience.

BILINGUAL/CROSS-CULTURAL SPECIALIST CREDENTIAL

A cooperative effort among the Departments of Mexican-American Studies, Education, and Foreign Languages, this program is designed to provide credentialed teachers with a Specialist Credential in Bilingual/Cross-Cultural Education, utilizing both Spanish and English in instruction. It certifies teachers for instruction in Bilingual Education Programs such as those established under Title VII for instruction of Spanish speaking children. This credential program meets the criteria established by AB 2284, the Bilingual Education Act of 1972, and by the Commission for Teacher Preparation and Licensing (Ryan Act).

The minimum program competencies outlined in the guidelines of the Commission for the Credential are:

1. *Culture.* The history, culture, literature, and current way of life of the target population, as well as the mother culture of that population.
2. *Bilingual/Cross-Cultural Techniques.* Bilingual teaching strategies, bilingual curriculum development, and second language teaching techniques.
3. *Target Language Skills.* Listening, reading, writing, speaking, and linguistics.

First semester bilingual courses may be taken at the undergraduate level or concurrently with regular teaching credential course work. Admission to the field program and the work components is contingent upon possession of a valid basic California Teaching Credential. This is a competency based program: if students can demonstrate competence in program areas, course work will be waived. Late afternoon and evening courses will be offered for those teachers in the field who wish to enroll in the program on a part-time basis.

ADMISSION REQUIREMENTS:

1. Valid California basic teaching credential.
2. Students must successfully complete a Language and Culture Assessment before entering the program.

PROFESSIONAL COURSE REQUIREMENTS:

<i>Phase I</i>	<i>Units</i>
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

Phase II

MAMS 426—Target Language Skills for Speakers of Spanish.....	3
MAMS 557—Methods & Materials in Bilingual Education	5
MAMS 558—Teaching Reading to the Bilingual Child	2
EDUC 531—Bilingual Field Practicum	4
	14
TOTAL PROGRAM (MINIMUM).....	30

Applications for this program are available in the Department of Mexican-American Studies.

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 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.

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.

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. 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 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

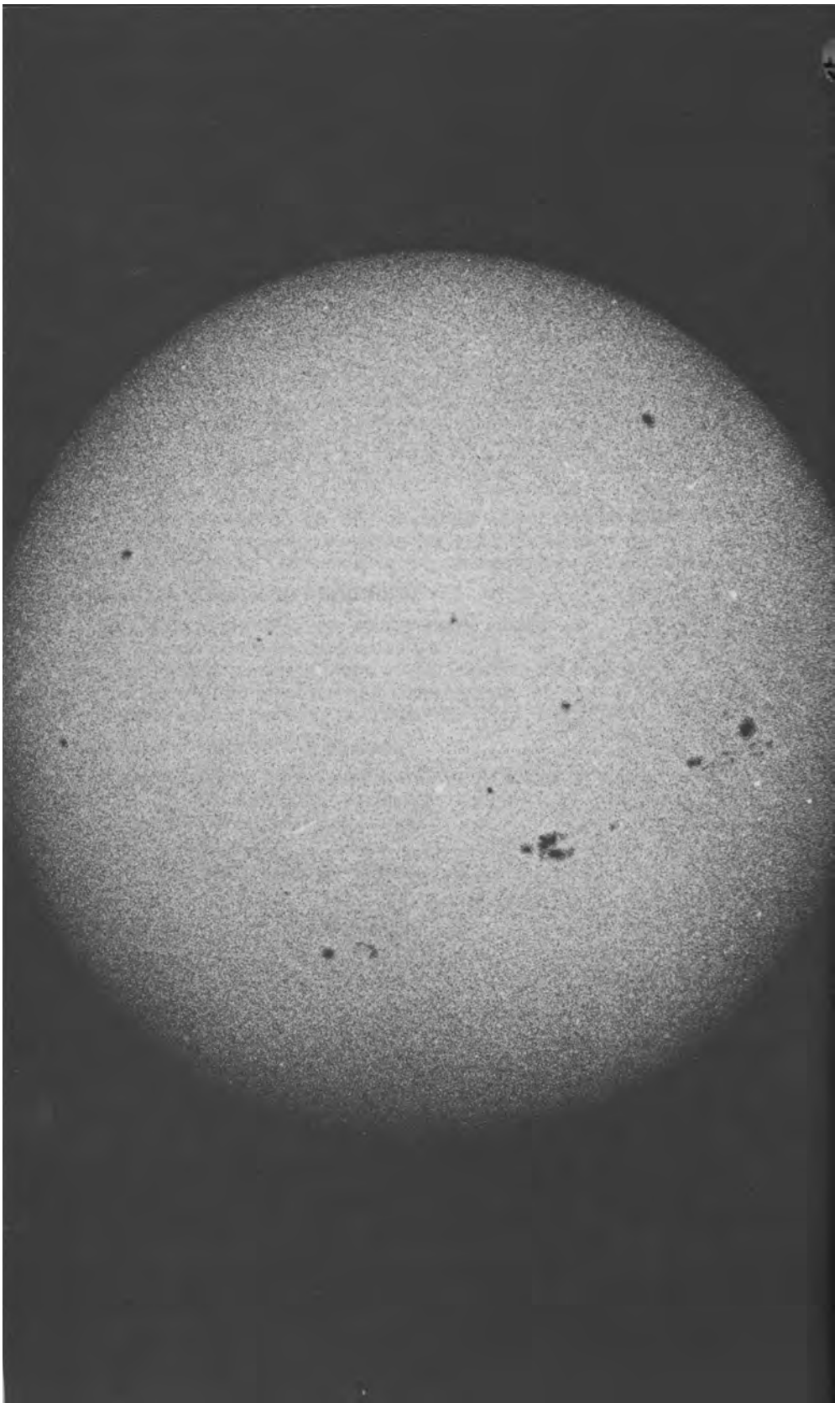
Department of Education

Sonoma State University

or

Credentials Office

(707) 664-2581



University Curricula

The Sun
photo by Steve Clark, SSU

UNIVERSITY CURRICULA

BACHELOR OF ARTS DEGREE

Major Programs

	<i>Page</i>		
Afro-American Studies	44	Techniques Option	
Anthropology	50	Weather Science Option	
Art	59	Geology	167
Biology	73	German	148
Botany Option		History	174
Cell Biology Option		Hutchins School of Liberal Studies	186
Ecology Option		India Studies	207
Marine Biology Option		Liberal Studies (B.A.L.S.)	206
Medical Technology Option		Management	214
Microbiology Option		Mathematics	228
Pre-Veterinary Option		Mexican American Studies	240
Water Quality Option		Music	247
Zoology Option		Music Education Option	
Chemistry	90	Performance Option	
Criminal Justice Administration	100	Philosophy	271
Economics	102	Physical Education	278
English	123	Elementary-Adapted-Motor De-	
Environmental Studies (Liberal		velopment Concentration	
Studies)	133	Teacher Preparation	
Expressive Arts (Liberal Studies)	141	Concentration	
French	144	Interdisciplinary Concentration	
Geography	159	Physics	289
Cultural Studies Option		Political Science	297
Environmental Problems Option		Psychology	306
Individualized Option		Sociology	322
Regional Studies Option		Spanish	154
		Special Major	210
		Theatre Arts	330

Minor Programs *

American Ethnic Studies	45	French	145
Anthropology	50	Geography	160
Astronomy	70	Geology	168
Biology	75	German	148
Career Minors	204	Gerontology	200
Human Services: Health Systems		Historic Preservation	201
Organization		History	175
Leisure and Recreation		India Studies	208
Information and Research		International Studies	213
Science-Technical Writing		Linguistics	202
Chemistry	90	Management	215
Economics	103	Mathematics	230
English	124	Mexican American Studies	241
Environmental Studies & Planning	135	Music	250

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

Minor Programs *—Continued

Native American Studies	259	Psychology	308
Philosophy	272	Sociology	323
Physical Education.....	279	Spanish	155
Physics	291	Women's Studies	199
Political Science	298		

**BACHELOR OF SCIENCES
DEGREE**

Major Programs

	<i>Page</i>		
Chemistry	88	Counseling.....	97
Geology	166	Education	108
Mathematics	288	Curriculum Option	
Applied Mathematics Emphasis		Early Childhood Education Option	
Computer Science Emphasis		Educational Administration Option	
Option in Statistics		Reading Option	
Nursing	265	Special Education Option	
Physics	288	English	124
Special Major (Interdisciplinary)	210	History	175
		Management	215
		Mathematics	237
		Physical Education.....	279
		Political Science	298
		Psychology	309
		Special Major (Interdisciplinary)	211

**MASTER OF ARTS
DEGREE**

Biology	75

**MASTER OF SCIENCES
DEGREE**

Special Major (Interdisciplinary)	211

AMERICAN MULTI-CULTURAL STUDIES

Department Chair: Ada Hall Mason

Faculty: Ronnie Blakeney, Billy Browning, Joseph Giovinco, James Gray,
LeVell Holmes, Eli Katz, Herminia Menez, William Alfred Jordan
III

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

The department offers a B.A. in Afro-American Studies, approached from 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	40
Core requirements	24
Electives	12
Total needed for Major	36
Supporting Electives	48
Total needed for Graduation	124

CORE REQUIREMENTS

	<i>Units</i>
AMCS 335 Black History, or	
AMCS 330 Introduction to African History	4
AMCS 472 Contemporary Afro-American Literature, or	
AMCS 300 Afro-American Musical Heritage/Jazz.....	4
AMCS 405 The Black Family, or	
AMCS 433 Aging and Ethnic Minorities.....	4
AMCS 435 African Literature, or	
AMCS 345 Folklore and Ethnicity	4
AMCS 495 Special Topics	4
And 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
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	The Black Family.....	4
AMCS 420	Sexism and Racism in the United States.....	4
AMCS 451	History of Western and Southern Africa.....	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 and Music	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 study of ethnic minorities in the United States and the socio-cultural, political, and economic factors which influence our multi-cultural society.

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. Afro-American Musical Heritage/Jazz History (4)

A survey of Afro-American music from its African and European origins through

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spirituals, work songs, shouts, blues, ragtime, swing, bebop, and contemporary musical genres, with emphasis on surviving African musical characteristics. (Cross listed as Music 319)

301. Experimental Courses (1-4)

Refer to current schedule of classes.

305. Contemporary Black Music (4) (Cross listed as Music 480)

310. Yiddish Literature in Translation (4)

A selection of prose and poetry translated from Yiddish and representing Yiddish Literature in the old and new worlds. Among the authors represented are Mendeleyev, Sholem Aleichem, I. L. Peretz, Sholem Asch, David Bergelson, I. J. Singer, Peretz Markish, Jacob Glatstein, and others.

315. Ethnic Arts and Music (4)

A survey and analysis of the aesthetic expression of American ethnic groups as represented in the fine arts. Includes field trips to attend performances.

320. Performing Arts Workshop (1-2) (Cross listed as Music 480)

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.

330. Introduction to African History (4) (Cross listed as History 330)

An introduction to the study of African History and culture until 1900.

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.

346. Afro-American Folklore (4)

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

356. Language and Ethnicity (4)

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.

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.

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 with various ethnic community organizations and health and social service agencies, including recreation programs, day care centers, senior citizen centers, etc.

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

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

405. The Black Family (4)

An analysis of the Negro family in the United States from the 17th Century to the present.

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 where 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)

A study and an examination of "support systems" and techniques needed to improve interpersonal interactions and to establish viable social relations.

432. Health and Culture (4)

Cultural/ethnic influences on health and health behavior, parallel medical traditions in a culturally pluralistic society, and strategies of 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 of 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 major historical and political events which have influenced the contemporary cultures of West and Southern Africa.

455. Jews in the United States (4)

The American Jewish community: its history, culture, institutional structure, political associations, and relations with the dominant society as well as with other ethnic minorities.

456. Italians in the United States (4)

History of Italian immigration and survey of the occupational, political, cultural, and

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social status of Italian-Americans at the present time. Field trips required.

471. Afro-American Children's Literature (4)

A study of literature written about and for Afro-American children, with emphasis on both traditional and contemporary materials.

472. Contemporary Afro-American Literature (4)

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

481. Special Topics (4)

Refer to current schedule of classes.

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)

ANTHROPOLOGY

Department Chair: Albert L. Wahrhaftig

Faculty: James Bennyhoff, Mildred Dickemann, David A. Fredrickson,
Sue T. Parker, William Alfred Jordan, III, David W. Peri, R.
Thomas Rosin, Shirley Silver

As a liberal arts education, anthropology provides individuals with a broad perspective toward 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 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 Resource 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 Resource Management should contact the Department Chair and/or the Coordinator of the Institute of Interdisciplinary Studies 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.

BACHELOR OF ARTS IN ANTHROPOLOGY**MAJOR**

	<i>Units</i>
General Education	40
Anthropology Courses.....	40
Foreign Language and/or Electives.....	44
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.

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 Anthropology course in Linguistics

Senior Seminar. To be taken in the Senior year.

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

ADVISORY PLANS FOR THE ANTHROPOLOGY MAJOR

As an option to the general Anthropology major described above, a student may elect to earn a B.A. in Anthropology by completing a concentrated Advisory Plan. Each Advisory Plan provides more concentrated training in the area specified. As some Advisory Plans require additional supporting subjects courses and/or modify upper-division course requirements of the general Anthropology major, interested students are advised to obtain a complete listing of the requirements for each plan. This information is available from the Chairman, the Secretary, or individual faculty members of the Anthropology Department.

CULTURAL RESOURCE MANAGEMENT ADVISORY PLAN

FOLKLORE FOCUS ADVISORY PLAN

HEALTH AND ILLNESS ADVISORY PLAN

HUMAN EVOLUTIONARY BIOLOGY ADVISORY PLAN

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 321 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.

ANTHROPOLOGY COURSES

Introductory Courses

*** 201. Human Evolution (4) (fall)**

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)

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

**** 203. Cultural Systems (4) (fall & spring)**

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.

Biological Anthropology

301. Human Races and Populations (4) (spring)

Investigations of human populations and races; their ages, their relative sizes; their geographic distributions; their genetic and morphological variations.

302. Human Ethology (4) (spring)

Ethological and sociobiological perspectives on human rituals, aggression, bonding, and bodily and behavioral displays of age, sex, status, and emotion.

303. Human Sociobiology (4) (fall)

Evolutionary approaches to primate and human mating systems and social structures with special attention to current sociobiological theory and analysis of human culture and behavior. Integration of biological and cultural aspects of anthropology.

312. Hominoid Paleontology (4) (fall)

Analysis of the fossil remains of apes and hominids from an evolutionary perspective; discussion of the problems involved in reconstructing grades and lines in hominid evolution.

314. Primate Social Behavior (4) (spring)

Comparative analysis from an evolutionary perspective of social structure, reproductive and parental behavior, socialization and social roles, play and intelligence, communication, aggressive and territorial behavior in nonhuman primates.

318. Human Development (4) (fall)

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

Archaeology

320. Archaeology of the Redwood Empire (4) (fall)

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.

* Fulfills General Education requirements in Biological Science.

** Fulfills General Education requirement in Social Science.

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321. Archaeology and Society (4) (fall)

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

328. Cultural Resource Management (4) (spring)

A review of federal, state and local regulations regarding protection and management of cultural resources, especially archaeological resources. Discussion of procedures employed in the identification and evaluation of cultural resources. Examination of cultural resources management programs.

331. Archaeology of North America (4) (fall)

Discussion of the origin of human populations and cultures in North America; examination of prehistoric traditions: sources, adaptations and development; discussion of archaeological method and theory as applied to North American material.

332. Archaeology of California (4) (spring)

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)

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

342. Organization of Societies (4) (spring)

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)

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)

An investigation of the interrelations between man and his environments: human biological and cultural responses to environmental influences and man's impact on the eco-system.

348. The Ritual Process and the Ritual Specialist (4) (fall)

Examination of ritual in terms of functional, cognitive and cybernetic theory. Discussion of the roles of shamans, curers, visionaries, and artists as ritual specialists in tribal and contemporary cultures.

349. Cognitive Anthropology (4) (spring)

The study of folk systems of knowledge through the extension of method and theory employed in the analysis of language to the analysis of culture; other models of how knowledge relates to human action and choice making.

350. Applied Anthropology (4) (fall)

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)

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)

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.

354. Educational Anthropology (4) (fall)

The application of anthropological field techniques to the study of educational institutions; cross-cultural analysis of formal educational systems in non-Western and Western societies and the operation of formal education in situations of culture contact.

355. Urban Anthropology (4) (spring)

A cross-cultural study of urbanization. Students will use Sonoma County as their urban field laboratory. Students will view the effects of urbanization in the County through their writing of life history and by detailing the networks of an individual.

356. Native American Philosophical systems (4) (fall) *

Among tribal peoples, knowledge generated by surviving together in a given environment is built into on-going social and ceremonial relationships, expressed and stabilized by collective symbols. This proposition is explored throughout the semester. The Ojibwa (Chippewa, Salteaux) and the Cherokee receive detailed consideration.

357. Medical Anthropology (4) (spring)

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.

358. Nutritional Anthropology (4) (spring)

An introduction to anthropological studies of food, nutrition and gastronomy, investigating the complex interactions of environment, dietary needs, social organization, ideology and cultural history which produce human nutritional behavior.

359. Art in Cultural Context (4) (fall) *

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.

Ethnographic Areas

361. Indians of California (4) (spring)

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

362. Indians of the Plains (4) (fall)

Description of the indigenous cultures of the Plains, their change and adaptation from the time of first contact with Europeans to the establishment of reservations.

* Not offered 1980–1981; to be offered 1981–1982.

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363. Ethnography of Mesoamerica (4) (spring)

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.

367. American Culture (4) (fall)

The study of American culture and society using the ethnographic perspective ordinarily applied to tribal and traditional societies. There will be emphasis on continuities in American culture and social structure from New England villages to contemporary suburbia.

369. African Cultures in the Western Hemisphere (4) (spring) (Cross-listed with AMCS 400: Black Cultures in America.)

An examination of the process by which West African cultures survived in the Western Hemisphere. West Africa is seen as the historical baseline for comprehending change. The course is concerned not only with African descendants in South America, the Caribbean, and North America, but also with the importance of "maroons" and the centrality of religion.

370. Cultures of the Pacific (4) (spring)

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) (fall)

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.

376. Peoples and Cultures of Africa (4) (fall)

An introduction to the peoples and cultures of Sub-Saharan Africa with attention to the impact of modernization and nationalism.

Anthropological Linguistics

380. Language and Culture (4) (fall)

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) (spring)

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) (fall)

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) (spring)

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 speech behavior as social interaction.

Prerequisite: Linguistics 200 or junior standing.

396. Experimental Courses (1-4)

Community Involvement

395. Community Involvement Program (1-4) (fall & spring)

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.

398. Ethnography of the Redwood Empire (4) (spring)

Survey of the ethnography and ethnohistory of the North Coast Ranges in the context of the cultural history of California with an emphasis on pre-contact culture and adaptation to European settlement.

399. Student Initiated Course (1-4)

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

Methods

400. Anthropology Praxis (1-4) (fall & spring)

Supervision and assessment of curriculum construction and execution for students in instructional or faculty adjunct roles.

422A. Archaeological Methods: Laboratory (4) (fall)

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 4 hrs.)

422B. Archaeological Methods: Field (2) (spring)

Field methods in archaeology, including archaeological site survey and excavation techniques; emphasis upon research design and archaeological ethics. (Lecture 2 hrs., Field 6 hrs.)

423. Advanced Archaeological Methods (2-4) (fall & spring)

Guided study of selected research topics in archaeology. Laboratory and field work, 3 hours for each unit. Course may be repeated for up to a total of 12 units.

Prerequisite: Anthropology 422 and consent of instructor.

441. Ethnographic Field Methods (4) (spring)

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.

Lecture, 2 hours; laboratory and field work, 6 hours.

444. Advanced Ethnographic Methods (2-8)

Field work and data analysis on selected research problems in ethnography. Three hours for each unit.

Prerequisite: Consent of instructor.

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482AB. Linguistic Field Methods (4; 4) (fall & spring)

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.

Advanced Studies

490. Seminar in Evolutionary Biology (4) (spring)

Seminar in various topics within the evolutionary biology of human and nonhuman primates, including play, mating systems, intelligence, and technology.

492. Seminar in Archaeology (4) (spring)

Advanced examination and application of archaeological interpretation; discussion of the relationship of research design to interpretation; examination of conceptual units employed in taxonomic systems.

Prerequisite: Upper division course in archaeology and consent of instructor.

493. Seminar in Cultural Anthropology (4) (fall & spring)

Intensive investigation of selected areas of cultural anthropology with an emphasis upon cross-cultural comparisons.

Prerequisite: Consent of instructor.

494. Seminar in Anthropological Linguistics (4) (spring)

Investigation of particular linguistic approaches, methods and theories used in the anthropological context.

Prerequisite: Linguistics 200 and Anthropology 203, or consent of instructor.

495. Special Studies (1-4) (fall & spring)

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; an appropriate upper division course; approval of supervising faculty member and approval of Department Chairman.

498. Senior Seminar: Historical and Theoretical Development in Anthropology (4) (fall & spring)

An opportunity for Senior majors to integrate their basic understanding of anthropology by investigation of selected topics in the history of Anthropology and anthropological theory.

Prerequisite: Senior standing.

499. Anthropology Internships (1-4) (fall & spring)

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 and 3 hours work per unit.

Graduate Courses:

500. Proseminar (4) (fall)

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)

Application of ecological theory to the reconstruction of human prehistory, with emphasis on the use of archeological data.

503. Seminar in Cultural Resource Management (4) (spring)

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

595. Special Studies (1-4) (fall & spring)

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.

599. Anthropology Internships (1-4) (fall & spring)

Students will have an opportunity to apply anthropological theory and methods and/or cultural resource management procedures working as interns with public and private agencies. Credit will be given for a seminar and 3 hours work per unit.

ART

Department Chair: William Morehouse

Faculty: Kathryn Armstrong, Marsha Bailey, Richard Beveridge, Gerald Bol, J. DeFeo, John deMarchi, John Doane, Leland Gralapp, Robert Gronendyke, Victor Krispin, Walter Kuhlman, Susan McKillop, Susan Moulton, Margaret Rattle, Peter Scarlet, Inez Storer, Shane Weare.

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, or Metal), Printmaking (Relief, Intaglio, Lithography, Silkscreen), Modern Media (Film, Video or Photography), Drawing, or an Interdisciplinary Option.

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

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. Modern Media
5. Drawing
6. Interdisciplinary Option

2. Entering freshmen or lower division transfer students will be accepted by the college 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. Class cards are issued at time of payment.

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	40
Major	43
Electives	41
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 and/or German, however the prospect of eventual specialization may make other languages advisable in particular instances.

Honors Program.

Students maintaining a 3.3 average may participate in the Art History honors program. They will be required to take Art 450B as well as Art 450A. In addition honors majors must either submit an honors essay or pass a comprehensive examination.

COURSE REQUIREMENTS

Freshman and Sophomore Years

	<i>Units</i>
Art 202, 203, 204, or 205—Beginning Drawing	2
Art 210, 211—Introduction to Art History	6
Art 251—Introduction to Art Studio Practices	3
A minimum of 1 course selected from among these studio courses	2
Art 208—Beginning Photography	
Art 220 or 222—Beginning Painting	
Art 230–232—Beginning Sculpture	
Art 240–244—Beginning Printmaking	
Art 270—Beginning Experimental Art	
Art 275—Beginning Video	
Art 285—Beginning Filmmaking	

Junior and Senior Years

	<i>Units</i>
Art 418ABC—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
TOTAL	43

Recommended For Electives:

Art 212—Introduction to World Film History
 Art 213—Introduction to American Film History
 Art 313—Classical Studies (Art History)
 Art 450B—Senior Honors Seminar in Art History
 Art 450C—Contemporary Criticism
 Art 460—Gallery and Museum Methods
 Art 491—Art Colloquium

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

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units of upper division period courses in the History of Art.

CONCENTRATION: STUDIO

	<i>Units</i>
General Education	40
Major	45
Electives.....	39
TOTAL	124

GENERAL COURSE REQUIREMENTS

The *Art Major With Studio Concentration* is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course offerings in studio and associated areas which allow for the development of an emphasis in one or more of the following: *Painting, Sculpture, Printmaking, Drawing, Modern Media and Interdisciplinary Option*

Freshman and Sophomore Years

	<i>Units</i>
Art 251—Introduction to Art Studio Practices	3
Art 210, 211—Introduction to Art History.....	6
Art 202—Beginning Drawing	
Art 203—Form, Color and Composition	
Art 204—Beginning Life Drawing	
Art 205—Objective Drawing	
Art 206—Animation Drawing	
Any combination to total.....	5
Art 208—Beginning Photography	
Art 220—Beginning Painting -	
Art 222—Beginning Watercolor	
Art 230—Beginning Clay and Plaster Sculpture	
Art 231—Beginning Wood Sculpture	
Art 232—Beginning Metal Sculpture	
Art 240—Beginning Relief and Intaglio	
Art 242—Beginning Lithography	
Art 244—Beginning Silkscreen	
Art 270—Beginning Experimental Art	
Art 275—Beginning Video	
Art 285—Beginning Filmmaking	
A minimum of 4 courses selected from among these studio courses * ..	8
Subtotal	22

Junior and Senior Years

	<i>Units</i>
Art 302—Intermediate Drawing	
Art 304—Intermediate Life Drawing	
Art 401—Advanced Life Drawing	
Art 402—Drawing Problems	
Art 486—Animation	
Any combination to total ‡	5

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

‡ The 5 units to fulfill upper division requirements in Drawing may be assembled from any combination of 300–400 drawing classes.

Art 418A—History of Modern Art.....	3
Art 418B or 418C—History of Modern Art	3
Subtotal	11

MINIMUM REQUIREMENTS FOR AREAS OF EMPHASIS

Painting:

Art 320—Intermediate Painting	
Art 322—Intermediate Watercolor	
Art 420—Advanced Painting	
Art 422—Advanced Watercolor	
Art 425—Materials and Techniques of the Artist	
Art 495—Special Studies in Painting	
Any Combination to total **	12

Sculpture:

Art 335—Intermediate Clay Sculpture	
Art 336—Intermediate Sculpture	
Art 430—Advanced Clay Sculpture	
Art 431—Advanced Sculpture	
Art 495—Special Studies 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	
Any Combination to total **	12

Drawing:

Art 302—Intermediate Drawing	
Art 304—Intermediate Life Drawing	
Art 402—Drawing Problems	
Art 401—Advanced Life Drawing	
Art 486—Animation	
Art 495—Special Studies in Drawing	
Any Combination to total **	12

Modern Media:

Art 212, 213—Introduction to World/American Film History or	
Art 313—Classical Studies	3
Art 308—Intermediate Photography	
Art 375—Intermediate Video	
Art 385—Intermediate Filmmaking	
Art 458—Advanced Photography	
Art 470—Advanced Experimental Art	
Art 475—Advanced Video	
Art 485—Advanced Filmmaking	
Art 486—Animation	
Any Combination to total **	9

** Each course may be repeated for credit.

Recommended as Electives For All Studio Majors:

Art 313—Classical Studies
 Art 401—Advanced Life Drawing
 Art 404AB—History of Printmaking
 Art 408–419—All Art History Period Courses
 Art 432—Advanced Mixed Media
 Art 450C—Contemporary Criticism
 Art 460—Gallery and Museum Methods
 Art 375—Intermediate Video
 Art 385—Intermediate Filmmaking
 Art 458—Advanced Photography
 Art 470—Advanced Experimental Art
 Art 491—Art Colloquium
 Art 497—Selected Topics in Art

INTERDISCIPLINARY OPTION

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.

	<i>Units</i>
Advanced Drawing (any 300 or 400 courses)	3
Art 418A, B, or C	3
Upper Division Studio Courses	5
Upper Division Courses in the Adjunct Discipline Approved by Advisor	12
Subtotal	23
TOTAL FOR MAJOR.....	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	10
Art History	12
Studio Practices	3
Studio Courses with 12 units in an area of concentration	20

(Including Art 200 and Art 400)	
Total	45
General Education	40
Electives.....	13
and	
Education	26
TOTAL	124

ART COURSES

199. Student-instructed course (1-4)

See current schedule of classes for details.

‡ * 200. Arts and Crafts (1-4) Gronendyke, Rattle

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) Department Faculty

A beginner's course in drawing from imagination and observation employing several media.

‡ 203. Form, Color and Composition (1-4) Kuhlman

Directed problems for the study of form, color and composition in two-dimensional art forms. Class problems will be assigned with periodic group and individual criticism.

‡ 204. Beginning Life Drawing (1-4) Department Faculty

An introductory course in drawing from the living model from a variety of approaches. Basic problems in dealing with the figure as subject matter.

‡ 205. Objective Drawing (1-4) Department Faculty

A basic course in the rendering of objects from observation. Problems in the use of line, form, and rendering three-dimensional shapes, and the principles of perspective.

‡ 206. Animation Drawing (1-4) Department Faculty

Theory and practice of animation sequence drawing. Continuity, timing, and graphic techniques for creating movement.

* ‡ 208. Beginning Photography (1-4) Bailey, Krispin

An introductory course for art majors interested in basic photographic processes and perceptions.

210. Introduction to Art History (3) McKillop

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) McKillop

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) Scarlet

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

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

‡ Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

be used to fulfill part of Humanities G.E. requirement.

213. Introduction to American Film History (3) Scarlet

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.

‡‡ 220. Beginning Painting (1-4) Kuhlman, Morehouse, Defeo

Studio course in painting in acrylic or oil media. Directed problems. Work from imagination, still life and the figure. Group and individual criticism.

‡‡ 222. Beginning Watercolor (1-4) Bol, Moulton

Studio course with directed problems in opaque or transparent watercolor painting.

‡‡* 230. Beginning Clay and Plaster Sculpture (1-4) Armstrong, Rattle

A studio course on the properties of clay, fabrication, firing, and finishing techniques, and moldmaking.

‡‡* 231. Beginning Wood Sculpture (1-4) Demarchi

A studio course on the properties of wood, joining and finishing, and use of hand and machine woodworking tools.

‡‡* 232. Beginning Metal Sculpture (1-4) Holsonback

A studio course on the properties of metal, use of hand and machine metal working tools, joining (mechanically, welding, etc.) and finishing.

‡‡* 240. Beginning Relief and Intaglio (1-4) Gralapp, Weare

Studio course with directed problems in various printmaking media including woodcut and linocut, etching, collagraph and engraving.

‡‡* 242. Beginning Lithography (1-4) Doane

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 and some color processes. Lecture, demonstration and laboratory work.

‡‡* 244. Beginning Silkscreen (1-4) Weare

Studio course directed towards the basic techniques in Silkscreen.

Prerequisite or corequisite: 2 units of Art 202 or equivalent.

251. Introduction to Art Studio Practices (3) Morehouse

An introduction to art as an activity and professional practice. Lecture, demonstration and basic experience in the tools, crafts and practices in art studios. Designed to precede and/or accompany enrollment in studio courses for art studio majors, and as a basic, requisite course for art history majors.

‡‡ 270. Beginning Experimental Art (1-4) Storer, Department Faculty

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. Course may explore kinetics, light, sound electronics, computers, and a broad spectrum of unrelated media as possible forms for artistic expression.

275. Beginning Video (1-4) Department Faculty

Basic studio experience with projected images, light, performance and video a expressive art forms.

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

‡‡ Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

*** 285. Beginning Filmmaking (1-4) Department Faculty**

Basic 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.

301. Assistance Projects (1-4) Department Faculty

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) Department Faculty

Directed problems in drawing for the advanced student. Work from imagination or nature.

Prerequisite: Art 202-206 courses or consent of instructor.

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, 206 or equivalent or consent of instructor.

* 308. Intermediate Photography (1-4) Bailey

Image perception and development in still photography.

Prerequisite: Art 208 or equivalent.

313. Classical Studies (1-4) Department Faculty

In-depth studies of individual artists or filmmakers and their works. (Consult class schedule for specific course content.)

Prerequisite: Consent of instructor

320. Intermediate Painting (1-4) Kuhlman, Morehouse, DeFeo

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) Bol, Moulton

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

Prerequisite: Art 222 or equivalent.

* 335. Intermediate Clay Sculpture (1-4) Armstrong

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

Prerequisites: 230 and either 231 or 232.

* 336. Intermediate Sculpture (1-4) Holsonback

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.

1S ## * 340. Intermediate Relief and Intaglio (1-4) Gralapp, Weare

A studio course on the intermediate level in aspects of either relief or intaglio. May be repeated for credit up to a maximum of 12 units.

Prerequisite: Art 240

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

Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

##*342. Intermediate Lithography (1-4) Doane

Continued 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) Weare

Continued 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 244

##375. Intermediate Video (1-4) Department Faculty

Intermediate work with video as an art form. Work with portable and studio equipment, special effects and tape editing.
Prerequisite: Art 275.

***##385. Intermediate Filmmaking (1-4) Davis**

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

395. Community Involvement Program (1-4) Department Faculty

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

399. Student-instructed course (1-4)

See current schedule of classes for details.

400. Elementary School Art Techniques (2) Gronendyke

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) Department Faculty

An advanced life drawing class with directed special problems related to drawing the live model.
Prerequisite: Art 304.

##402. Drawing Problems (1-4) Department Faculty

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 5 units of 202-205 or equivalent and 3 units of 300 series drawing courses or equivalent, or consent of instructor.

404AB. History of Printmaking (3-3) Gralapp, McKillop

Development of the principal media of printmaking from their origins to the present time.

* Laboratory fee, payable at time of class signup.

Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

Prerequisite: Art 211 or equivalent.

407. Pre-Classical Art (3) McKillop, Gralapp

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

408. Greek Art (3) McKillop, Gralapp, Moulton

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

409. Roman Art (3) McKillop, Gralapp, Moulton

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

410. Early Christian and Early Medieval Art (3) McKillop, Gralapp, Moulton

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

411. Romanesque and Gothic Art (3) Moulton

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

413. Northern Renaissance Art (3) McKillop, Gralapp

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

414. Northern Baroque Art (3) McKillop, Gralapp

Non-Italian art of Europe during the Seventeenth Century.

415AB. Italian Renaissance Art (3-3) McKillop, Moulton

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

415C. Italian Baroque Art (3) McKillop, Gralapp, Moulton

Italian painting, sculpture, and architecture from Caravaggio and the Carracci to G. B. Tiepolo and his followers (ca. 1590 to 1790).

417A. Oriental Art (3) Gralapp

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

417B. Oriental Art (3) Gralapp

Hindu art of India and Southeast Asia, Chinese art from the end of Han to the beginning of Sung dynasty, Japanese art of the Heian and Kamakura periods.

417C. Oriental Art (3) Gralapp

Chinese art from Sung dynasty to the present, and Japanese art from the Muromachi period to the present.

418A. History of Modern Art (3) Department Faculty

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

418B. History of Modern Art (3) Department Faculty

A survey of painting and sculpture of the Western World in the Twentieth Century. Prerequisite: For art majors or consent of instructor. Art 418A must precede Art 418B.

418C. History of Modern Art (3) Department Faculty

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

420. Advanced Painting (1-4) Kuhlman, Morehouse, DaFeo

May be repeated for credit up to a maximum of 12 units.

Prerequisite: Art 220 or equivalent.

Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

†† 422. Advanced Watercolor (1–4) Bol, Moulton

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.

425. Materials and Techniques of the Artist (3) Morehouse

The materials and methods of the visual arts. Historical survey of materials and techniques and an exploration of new media and their applications. Lecture. Limited to Art Majors.

Prerequisite of 2 units of Drawing and 2 units of Painting or Sculpture, or with consent of instructor.

†† * 430. Advanced Clay Sculpture (1–4) Armstrong

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) Holsonback

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) Department Faculty

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.

†† * 440. Advanced Relief and Intaglio (1–4) Gralapp, Weare

Advanced problems in relief and intaglio methods. May be repeated for credit up to a maximum of 12 units.

Prerequisite: Art 240 or equivalent.

†† * 442. Advanced Lithography (1–4) Doane

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: 242 or equivalent.

†† * 444. Advanced Silkscreen (1–4) Weare

Advanced problems in silkscreen. May be repeated for credit up to a maximum of 12 units.

Prerequisite: 2 units of Art 244 or equivalent.

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

Concentration 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.

450B. Senior Honors Seminar in Art History (3) Department Faculty

Required of all Art History honors candidates.

Prerequisite: Art 450A or consent of instructor.

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

†† Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

450C. Contemporary Criticism (3) Department Faculty

A seminar dealing with specific contemporary problems in art or film criticism for advanced Art History and Studio majors.

Prerequisite: Consent of instructor.

458. Advanced Photography (1-4) Bailey

Critical/Lecture course (no lab) designed to develop the student toward the creation of a personal, photographic statement.

Prerequisite: Art 208, 308.

460. Gallery and Museum Methods (3) Parker, Storer

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

Prerequisite: 418A, B, or C and 251.

470. Advanced Experimental Art (1-4) Storer, Department Faculty

Extended inquiry into a variety of media not traditionally considered fine art media.

Prerequisite: 251.

475. Advanced Video (1-4) Department Faculty

Advanced studio and field work with projected images, light, performance, photographic processes and/or video as expressive art forms.

Prerequisites: 208, 275, or 285.

*** # 485. Advanced Filmmaking (1-4) Scarlet**

Techniques for completing films in Super 8mm. Emphasis may vary each semester from individual projects to group productions.

Prerequisite: Art 285.

486. Animation (1-4) Department Faculty

Planning, designing, and shooting the animated film. Techniques of cell drawing and coloring, collage, and pixillation.

Prerequisite: Art 206.

491. Art Colloquium (1-3) Department Faculty

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

495. Special Studies (1-4) Department Faculty

For upper division art majors only.

497. Selected Topics in Art (1-4) Department Faculty

A 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.

595. Special Studies (1-4) Department Faculty

For post baccalaureate art students. Consent of instructor.

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Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

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

ASTRONOMY

Astronomy, offered as a minor in the Department of Physics and Astronomy, is the study of the universe beyond the earth's atmosphere. The field today deals with some of the most important questions in science, such as the origin of the universe, the processes by which the elements are formed, and the life cycles of stars and galaxies. Modern astronomy leans heavily on the concepts and techniques of physics and mathematics. A result of this dependence on other fields is that degrees in astronomy are generally granted at the graduate, not the baccalaureate, level. The minor in Astronomy, with a B.S. in Physics, is an excellent preparation for graduate study in astronomy.

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.

Sonoma's observatory, opened in 1976, has modern instrumentation that permits original research to be conducted. Several papers based on work at the Sonoma observatory have already been published by both students and faculty. Besides research work, the observatory is used for demonstrations and training in Astronomy courses.

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) Tenn, Spear, Johnston, Greene
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) Spear

Lecture, 1 hour; laboratory, 3 hours.

Principles of astronomical measurement techniques with field and laboratory studies of astronomical objects. Identification of constellations, astronomical coordinates, use of the telescope, techniques in spectroscopy and photography.

Prerequisite: Previous or concurrent enrollment in Astronomy 100 or 200.

301. Celestial Navigation (3) (Spring) Spear

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) Greene

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) Spear

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) Tenn, Greene

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.

306. Space Colonization (3) Spear

Lecture, 3 hours.

Exposition of the ideas of O'Neill, Bernal, Dyson and others on the colonization of space. Gravitation, rocket flight and the Lagrange points; the space shuttle and other space hardware; construction of space habitats; mining the moon and asteroids; industry in space; living in space; solar power stations; economic incentives; projects for the future.

Prerequisite: Astronomy 100 or Physics 100 or equivalent or consent of instructor.

310AB. Introductory Astrophysics (3-3) Greene, Tenn, Spear

Lecture, 3 hours.

Astrophysical quantities; stellar and interstellar spectroscopy; stellar and galactic structure and evolution; quasars; pulsars, cosmology.

Prerequisite: Physics 314; Math 211, or equivalents.

331. Astrophotography (2) (Spring) Spear

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.

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350. Cosmology (3) (Fall) Greene, Johnston

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) Tenn

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.

396. Selected Topics in Astronomy (1-3) Department Faculty

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.

482. Advanced Observational Astronomy (2) (Spring) Spear

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) Department Faculty

BIOLOGY

Department Chair: Philip T. Northen

Faculty: John Arnold (Emeritus), Ronald Baker, Paul Benko, Ruth Blitz, Joe Brumbaugh, Ralph Bushnell (Emeritus), Galen Clothier, Wesley W. Ebert, David Hanes, Colin Hermans, John Hopkirk, Donald Isaac, Chris K. Kjeldsen, Ching Liu, Thomas R. Porter (Emeritus), Joseph Powell, Charles Quibell, Robert Sherman.

It is the objective of the Department of Biology to enable students to become competent biologists, scientists and citizens. The Department is committed to the liberal arts and sciences as a means to these ends. Through general education and elective courses outside the major, students became aware of the changing societal context in which their own choices will be made. The major emphasizes development of a comprehensive view of the science of biology and its relationship to other sciences. Students all take a broadly-based core curriculum in biology and the necessary supporting courses from other sciences. Built on this foundation are a number of specific advisory plans in which advisors help students select courses that develop the conceptual and technical skills needed in the subdiscipline of biology that interests them most.

The department places a heavy emphasis on laboratory and field courses that give students practical experience in the discipline. Classes are small and relationships with faculty congenial. Laboratory courses train students to use a wide variety of instruments. Field courses draw upon the diversity of natural habitats within a few miles of the campus including the ocean, chaparral, redwood forest and a 160 acre natural preserve managed by the Department on Sonoma Mountain five miles east of the campus. The Department also houses the North Coast Herbarium of California with its extensive Milo Baker Collection.

The Biology Department participates in the Sonoma State University CLEP and the CSUC-SMET credit by examination programs. For further information on CLEP and SMET course equivalents in Biology, refer to the Appendix, page 418-420.

BACHELOR OF ARTS IN BIOLOGY

Major

General Education (40 units)	40
Physical science (15 units, 6 applied in G.E.)	9
Biological sciences (40 units)	40
Electives	35
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COURSE REQUIREMENTS

Lower Division

	<i>Units</i>
Knowledge of the fundamentals of biology	
Biol 115L—Introductory Laboratory.....	1
Biol 116—Biology of Plants	4
Biol 117—Biology of Animals.....	4
Biol 215—Introduction to Molecular Biology	2

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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.

ADVISORY PLANS FOR THE BIOLOGY MAJOR

Advisory plans are designed to provide guidelines for majors who wish to advance toward a specific goal in the biology major. All of the plans are advisory and within certain limitations may be modified for individual needs. Also, many general education courses are pertinent to each of these plans. Students should consult their biology advisor to identify those GE, biology, and supporting courses most appropriate for their specific goals. The required lower division biology courses, Biol 115L, 116, 117 and 215, are required for ALL plans. All courses in biology that are to be applied to the biology major must be taken under the traditional grading mode (A–F). Second semester seniors are encouraged to consider appropriate graduate level (500) courses as electives. Careful note should be made of prerequisites for advanced courses or other particular requirements of specific goal objectives. The department is happy to confer with students regarding details of these plans:

GENERAL BIOLOGY ADVISORY PLAN

AGRICULTURAL RESEARCH—BOTANICAL PLAN

AQUATIC BIOLOGY AND WATER QUALITY ADVISORY PLAN

BOTANY ADVISORY PLAN

ECOLOGY ADVISORY PLAN

ELECTRON MICROSCOPY ADVISORY PLAN

HUMAN EVOLUTIONARY BIOLOGY ADVISORY PLAN

MARINE BIOLOGY ADVISORY PLAN

MICROBIOLOGY ADVISORY PLAN

PARK SERVICE, JUNIOR MUSEUM AND WILDLIFE MANAGEMENT ADVISORY PLAN

PRE-DENTISTRY ADVISORY PLAN
PRE-GENETIC COUNSELING ADVISORY PLAN
PRE-MEDICAL ADVISORY PLAN
**PRE-MEDICAL TECHNOLOGY AND PUBLIC HEALTH MICROBIOLOGY
ADVISORY PLAN**
PRE-PHARMACY ADVISORY PLAN
PRE-VETERINARIAN ADVISORY PLAN
TEACHING CREDENTIAL ADVISORY PLAN (RYAN ACT)
ZOOLOGY ADVISORY PLAN

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, investigative 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

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programs are explained more 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*—Applicants who desire only postbaccalaureate course work and who do not intend to pursue an M.A. degree only need acceptance by Sonoma State University. The Biology Department does not review these applications.
3. *Conditionally Classified Graduate*—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 Status

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. The degree program can be completed in two semesters, however three semesters is a more realistic goal.

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 Status. Units completed during the term in which this status is acquired may be counted among these 15.

Advancement to Classified Status 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 Status;
2. Conferring with the Department Graduate Coordinator for referral to a possible major advisor and to obtain the required forms;
3. Obtaining a commitment from a faculty member that he or she will serve as an advisor, after determining compatibility of interests and availability of facilities;
4. Having the chosen advisor sign form G-1 (if the Department approves the candidate, on the recommendation of the Graduate Committee, the Graduate Coordinator will sign this form and forward it to the Graduate Studies Office);

5. Candidates who have submitted their requests for Advancement (form G-1) 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 (form 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-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 options require 30 units with at least a 3.0 cumulative G.P.A. and a minimum of 18 units in Biology.)

A. Thesis Option

	<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	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 Option—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. Written objective examination in general biology		
6. Written essay examination		

C. Examination Option—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 (Machine Programming) or Math 165 (Elem. Stat.).
3. 500 level courses 15 minimum
 - a. One 500 level Ecology course 4

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- 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. Written 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.

* † 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; photosynthesis; enzymes; cellular structure and function; cell division; Mendelian genetics; and the biology of a representative virus, bacterium, unicellular organism, fungus, monocot, dicot, insect and vertebrate.

General Education Courses: Specific Emphases

* † 116. Biology of Plants (4) (Fall and Spring) Department Faculty

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the plant kingdom with emphasis on various forms and groups. Meets university general education requirements.

Prerequisite: Biology 115 and 115L or equivalent.

* † 117. Biology of Animals (4) (Fall and Spring) Department Faculty

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the characteristics of the major groups of the animal kingdom. Meets university general education requirements.

Prerequisites: Biology 115 and 115L or equivalent.

201. The Human Species (2-3) (Fall and Spring) Department Faculty

Lecture 2 or 3 hours, depending on units.

A course emphasizing *Homo sapiens* as a biological entity. Topics for discussion will vary from semester to semester and will be influenced by the curiosity and interests of participating students and faculty.

201L may be taken concurrently to fulfill the general education laboratory requirement.

Prerequisite: Biology 115 or equivalent.

† 201L. The Human Species: Laboratory Component (1) (Fall and Spring) Department Faculty

Laboratory, 3 hours.

A laboratory course designed to accompany Biology 201. The selection of laboratory experiences will vary from semester to semester. With permission of the instructor,

* Counts within the Biology Major.

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

a student may enroll in Biology 201L without concurrent enrollment in Biology 201 to fulfill the general education laboratory requirement.

Prerequisite: Biology 115 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 and fulfills the general education requirement accordingly.

Prerequisite: Biology 115 or equivalent.

† 220. Human Anatomy (4) (Fall and Spring) Department Faculty

Lecture, 2 hours; discussion, 1 hour; laboratory, 3 hours.

A course surveying the body systems. Designed for Health Science and Physical Education Majors.

Prerequisite: Biology 115 or equivalent.

224. Human Physiology (3) (Fall and Spring) Department Faculty

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.

Prerequisites: Biology 115 or equivalent.

† 224L. Human Physiology Laboratory (2) (Fall and Spring) Department Faculty

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.

Prerequisite: Biology 224 (or concurrent with Biology 224) or equivalent.

312. Introduction to 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. Formerly Biology 112.

Prerequisite: Biology 115 or equivalent.

**† 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.

Prerequisite: Biology 115 or equivalent.

332. Plants and Civilization (3) (Fall) 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.

Prerequisite: Biology 115 or equivalent.

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

385. Contemporary Issues in Biology (3) (Fall or Spring) Department Faculty

Lecture, 3 hours.

Selected topics related to the quality of life today and the search for a perspective for the future.

Prerequisite: Biology 115 or equivalent.

Core Courses for Biology Majors and Minors

100. Credit by Examination (3-6) (Fall and Spring)

CLEP Examination—See page 352 of the catalog. Also refer to the Appendix, page 418.

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; photosynthesis; enzymes; cellular structure and function; cell division; Mendelian genetics; and the biology of a representative virus, bacterium, unicellular organism, fungus, monocot, dicot, insect and vertebrate.

† 116. Biology of Plants (4) (Fall and Spring) Department Faculty

Lecture, 2 hours; laboratory, 6 hours.

An introduction to the plant kingdom with emphasis on various forms and groups. Meets university general education requirements.

Prerequisite: Biology 115 and 115L or equivalent.

† 117. Biology of Animals (4) (Fall and Spring) Department Faculty

Lecture 2 hours; laboratory, 6 hours.

An introduction to the characteristics of the major groups of the animal kingdom. Meets university general education requirements.

Prerequisites: Biology 115 and 115L or equivalent.

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

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 and Spring) Northen, Sherman

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

Study of general principles relating to populations, natural communities, and ecosystems.

Prerequisites: Biology 116 or 117, or consent of instructor.

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

† 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.

Prerequisites: Three units in biological sciences and three units in physical sciences.

320. General Genetics (4) (Fall and Spring) Baker, Ebert

Lecture, 3 hours; discussion, 1 hour.

An introduction to genetics; the principles of Mendelian heredity are correlated with the recent advances in molecular genetics. Some consideration is given to the application of genetics with reference to agriculture, biology, and *Homo sapiens*.

Prerequisites: Biology 215 or consent of the instructor.

† 321. General Genetics Laboratory (1) (Fall) Baker, Ebert

Laboratory, 3 hours.

Exercises are carried out which will guide the student in performing certain genetics experiments. These experiments are carried out through actual contact with various organisms such as *Drosophila*, *Hordeum*, *Neurospora*, *E. coli*, and Phage.

Prerequisites: Biology 320 or 322, or concurrent registration.

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) (Fall and 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.

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

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† 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) 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) (Alternate, 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.

† 340. **General Bacteriology (5) (Usually Fall) Benko, Blitz**

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) (Usually Spring) Brumbaugh, Hermans**

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.

Basic concepts and 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) (Usually Fall) Hopkirk, Isaac**

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

Studies on the basic anatomy, 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.

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

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: One course in Biology and one course in 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.

**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) 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) 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) Department Faculty

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) 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.

†439. Mycology (4) (Alternate, Fall) Powell

Lecture, 2 hours; laboratory, 6 hours.

Introduction to structure, physiology, relationships, life cycles, and genetics of selected species of fungi.

Prerequisites: Biology 116, Biology 335 recommended or consent of the instructor.

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

Lecture, 2 hours; laboratory, 6 hours.

Study of the evolutionary relationships of the Lower Phyla, Echinoderms, and Proto-

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

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chordates 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)** **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.

† 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) 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 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) Department Faculty**

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) Blitz**

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) Liu**

Lecture, 3 hours; laboratory, 6 hours.

Principles of host-parasite relationships. Etiology, immunology, and epidemiology of infections of major importance to the human species. Laboratory techniques for the isolation and identification of pathogens. Pathogen studies: helminths, protozoa and bacteria.

Prerequisite: Biology 340 or consent of the instructor.

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

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

Lecture, 3 hours; laboratory, 6 hours.

Continuation of Medical Microbiology I. Pathogens studies: fungi mycoplasma, rickettsia, chlamydiae and viruses. While the two courses form a continuous sequence, either may be taken separately.

Prerequisite: Biology 340 or consent of the instructor. Biology 481 strongly recommended.

† 484. Hematology (4) (Fall) Liu

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.

490. History of Biology (2) Department Faculty

Lecture, 2 hours.

A concise history and presentation of the development of the major concepts in the biological sciences.

Prerequisites: Senior or graduate standing in biology or consent of instructor.

† 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)

A course for graduate students who are, or plan to be, engaged in a research project. 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.

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

† 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.

595. Special Studies in Biology (1–3)

Prerequisites: Graduate standing and consent of instructor and major advisor.

596. Coordinated Project in Environmental Biology. (4) (4)

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.

599. M.A. Thesis (1–3)

Prerequisites: See Master's Degree requirements.

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

CENTER FOR PERFORMING ARTS

Administrator: Floyd William Ross

The Center for Performing Arts is a department within the Division of 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, Jazz Workshop, African Music and Dance Ensemble, Opera Workshop, Theatre Ensemble, Dance Ensemble, Chorus, University Singers and Chamber Singers. In addition, a number of student-initiated senior projects in music, dance and drama are presented each semester, including noon concerts each Thursday.

The box office, located in the lobby of Ives Hall is open Monday through Friday from 9 a.m. to 5 p.m. Reservations are encouraged for all evening performances, (telephone 664-2353). Student rates, usually no more than \$1, are in effect for all performances.

CHEMISTRY

Department Chair: Donald D. Marshall

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

The Chemistry curriculum is designed to familiarize students with 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.

All candidates for the B.S. or B.A. degrees in Chemistry will take the Undergraduate Program Examination in Chemistry during their final semester.

The Chemistry Department participates in the Sonoma State University CLEP credit by examination program. For further information on CLEP course equivalents in Chemistry, refer to the Appendix, pages 418–420.

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	40
Major	40
Supporting Subjects	19
Electives or Minor	29
	128

COURSE REQUIREMENTS FOR THE B.S. DEGREE

<i>Chemistry Courses:</i>	<i>Units</i>
125AB *—General Chemistry (12 units—6 in Gen. Ed., 6 in Major)	6
335AB, 336—Organic Chemistry	10
375AB, 376AB—Physical Chemistry	10
381—Computer Programming	2
425—Advanced Inorganic Chemistry	3
494—Undergraduate Research	1
497—Seminar	1
Upper Division Chemistry Electives †	7
	40

† 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.

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

Supporting Courses for B.S. Degree

<i>Mathematics:</i>	<i>Units</i>
161, 211, 261—Calculus with Analytic Geometry IV (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 (4 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 Chemistry Course:

455. Advanced Analytical Chemistry (4)

Advanced Work:

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 courses in chemistry are Chemistry 436, 437, 441, 445, 446, 457, 470, 481, 494 (additional units), 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:

General Chem . . . with Quantitative
Analysis
Organic Chemistry
Physics
Mathematics

Third year:

Physical Chemistry
Computer Programming **

Fourth Year:

Advanced Inorganic
Chemistry ***
Advanced Analytical
Chemistry ***
Undergraduate Research
Seminar
Advanced Work

*** 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 introduces the necessary flexibility to allow 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 should the degree holder consider continuing education toward an advanced degree in chemistry or in biochemistry.

	<i>Units</i>
General Education	40
Major.....	33–34
Supporting Subjects.....	11–13
Electives or Minor	37–40
	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 Analytical Chemistry	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 with Analytic Geometry (3 units in Gen. Ed., 3 units in major) (Recommended sequence)	3
AND	
<i>Physics:</i>	
209AB and 210AB—General Physics and Laboratories	8
OR	
114, 116, 214, 216—Introduction to Physics and Laboratories.....	10
	11–13

ADVISORY PATTERNS FOR B.A. DEGREE

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 in the B.A. Degree to concentrate in the areas of analytical, inorganic, organic, physical chemistry, biochemistry, environmental science or pre-professional preparation. Typical advisory patterns are designed to provide guidelines for majors who wish to advance toward a specific goal in the chemistry major. See department for specifics.

BIOCHEMISTRY ADVISORY PLAN

PRE-HEALTH PROFESSIONAL PREPARATION ADVISORY PLAN

TEACHING CREDENTIAL ADVISORY PLAN (RYAN ACT)

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 and organic chemistry or a curriculum approved by the department. (Chemistry 125AB fulfills both general and quantitative analytical chemistry).

CHEMISTRY COURSES

102. Chemistry and Society (3) (Fall and Spring) Eck, Hoagland, Schaumberg

Lecture, 3 hours.

A descriptive survey course in chemistry with a major emphasis on the interaction of chemistry and society. In addition to fundamental theories in chemistry, topics may be chosen from such areas as pollution, drugs, chemistry of heredity, the energy crisis, chemical evolution, insecticides and food additives. This course is designed to fulfill the general education requirement; not suitable for science majors. Chemistry 102 is not open to students with credit in 115A or 125A.

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.

A course designed for those 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 (6-6) (Fall-Spring) Holmes, Rustad

Lecture, 4 hours; laboratory, 6 hours.

A course specifically designed for 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.

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.

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255. Quantitative Analytical Chemistry (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.

295. Community Involvement Program (1-4) (Fall and Spring) Department Faculty

C.I.P. involves students in basic community problems, performing such tasks as tutoring, reading for the blind, etc. In chemistry 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. May be taken by petition only and does not fulfill any requirements of the chemistry major.

310AB. Fundamentals of Physical Chemistry (2-2) (Fall-Spring) Brooks, Holmes

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 (3) (Fall) Karas, Poland

Lecture, 2 hours; laboratory, 3 hours.

Basic circuit theory; operation of tube and transistor devices; analysis of typical circuits used in power supplies, amplifiers, and electronic instruments; and the uses of operational amplifiers.

Prerequisite: Completion of the General Education requirements in mathematics and physical science and either junior standing or consent of instructor.

This course is the same as Physics 311.

320. Inorganic Chemistry (3) (Fall) Rustad

Lecture, 3 hours.

A systematic study of the unique and general chemical properties of the elements and their compounds relative to their positions in the Periodic Table with special emphasis on known biological and industrial applications.

Prerequisites: Chemistry 115B or 125B.

341. Clinical Biochemistry (4) (Fall) Keintz

Lecture, 2 hours; laboratory 6 hours.

The chemistry, metabolism, and analysis of amino acids, proteins, enzymes, carbohydrates, lipids, and other molecules of clinical interest. There is a strong emphasis on analytical measurements by means of instrumentation. This course fulfills the analytical requirement for the medical technology curriculum. Prerequisite: Chemistry 340.

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

Lecture, 4 hours; laboratory, 3 hours.

Basic course in the general theory and reactions of organic chemistry. Emphasis on basic principles. Recommended for science and pre-professional majors.

Prerequisite: Chemistry 115B or 125B or consent of instructor.

335B. Organic Chemistry (3) (Fall and Spring) Eck, Schaumberg, Trowbridge

Lecture, 3 hours.

Continuation of Chemistry 335A.

Prerequisite: Chemistry 335A.

336. Organic Chemistry Laboratory (2) (Fall and Spring) Eck, Schaumberg, Trowbridge

Lecture, 1 hour; laboratory, 3 hours.

Fundamental techniques of organic chemistry emphasizing synthetic organic chemistry, modern instrumental methods and qualitative organic analysis. Designed to complement Chemistry 335B.

Prerequisite: Chemistry 335A.

340. 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.

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.

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

Lecture, 1 hour; laboratory, 3 hours.

Physicochemical measurements with an emphasis on experiment planning and design, error analysis, instrumental techniques, report writing and presentation. Design and development of new experiments and projects in 376B.

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 IV programming with emphasis on applications in chemistry and physics. Same as Physics 381.

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

385. Molecular Spectroscopy (2) Holmes

Lecture, 1 hour; laboratory, 3 hours.

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

Prerequisites: Chemistry 255 or Chemistry 125B.

395. Community Involvement Program (1-4) (Fall and Spring) Department Faculty

C.I.P. involves students in basic community problems, performing such tasks as tutoring, reading for the blind, etc. In chemistry 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. May be taken by petition only and does not fulfill any requirements of the chemistry major.

397. Chemistry Practicum (1-4) (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. May be repeated for up to a total of 4 units.

Prerequisite: Junior standing or consent of the instructor.

94 / Chemistry

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 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.

441. Biochemical Methods (3) (Spring) Hoagland, Kientz

Lecture, 1 hour; laboratory, 6 hours.

Applications of biochemical techniques to the study of proteins, enzymes, and nucleic acids.

Prerequisites: Chemistry 232 or 335A; 340 or 445 or 446; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

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

Lecture, 3 hours.

A study of buffers, amino acids, proteins, carbohydrates, lipids, nucleic acids and protein synthesis. Emphasis is placed on the structure of macromolecules.

Prerequisites: Chemistry 335B; Foundation in spectroscopy, kinetics and thermodynamics, or consent of the instructor.

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

Lecture, 3 hours.

A study of bioenergetics, enzyme structure and function, and the metabolism of carbohydrates, lipids and proteins.

Prerequisites: Chemistry 335B; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

455. Advanced Analytical Chemistry (4) (Spring) Marshall

Lecture, 2 hours; laboratory, 6 hours.

Advanced theory and practice of analytical chemistry with emphasis on instrumental methods of analysis.

Prerequisites: Chemistry 375B or concurrent registration, or consent of instructor.

457. Environmental Chemistry (3) (Fall) Marshall

Lecture, 1 hour; laboratory, 6 hours.

A study of the problems of air, water, and land pollution with special emphasis on chemical analysis. Field trips will include trips to various centers involved in pollution control and/or analysis.

Prerequisites: Chemistry 255 or 125B; 335A; minimum of senior standing; Foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

470. Advanced Physical Chemistry (3) Brooks

Lecture, 3 hours.

Basic theories and methods of quantum chemistry and statistical thermodynamics. Emphasis on the application of these techniques to molecular structure.

Prerequisites: Chemistry 375AB, Mathematics 261.

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

Lecture, 2 hours.

This course offers working knowledge of nuclear radiations, radioactive sources and nuclear reactors. Interaction of ionizing radiation with matter, physical, chemical and biological effects. Radiochemical dating. Nuclear models. Nuclear reactor theory and neutron activation. Radioactive tracer methods. This course is the same as Physics 481.

Prerequisites: 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).

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.

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) Holmes

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.

COUNSELING

Department Chair: John T. Palmer

Faculty: Johanna Gladieux, Ben Karr, Fred A. Moore, Sara Sharratt

The graduate program in Counseling provides an opportunity for students to learn the essentials necessary for entry into the profession of Counseling and/or Student Personnel Services. The faculty is committed to the concept and training of counselors who will take an active role in helping to shape the social/environmental milieu in which they will work and live.

The program relies heavily on 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. 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: public schools, community colleges, mental health clinics, counseling centers, college-level student personnel departments, and marriage and family counseling agencies.

Special characteristics of the program include: (1) early observation of and involvement in actual counseling settings; (2) development of a core of knowledge and experience in the theory and practice of both individual and group counseling; (3) encouragement in the maintenance and development of individual counseling styles; and (4) self-exploration and personal growth through participation in peer counseling, individual counseling, and group experience.

In sum, there is emphasis in the 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 a sound foundation for a lifetime of continued professional growth for the student—a foundation which permits confident movement into an entry-level counseling position, but which does not pretend more. Within the compass of a thirty-unit program, the faculty sees such a goal as attainable and eminently worthwhile.

While the thirty-unit program can be completed within one academic year, some students may wish to move more slowly. Resources permitting, efforts will be made to accommodate individual patterns. For most students, eight units per semester will be considered a minimal number. *It should be stressed that individual patterns should be planned very carefully, since most courses are not offered every semester.*

Admission Requirements

- A. A baccalaureate degree—preferably one in the behavioral sciences, and optimally, one with sound preparation in Psychology. In addition, students are urged to have taken good basic courses in classical personality theory and in abnormal behavior.
- 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.)

- D. Completion of Counseling Department application forms, in addition to those required by the University.
- E. A personal interview may be 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

	<i>Units</i>
Couns 501 Seminar: Counseling Theory and Practice	4
Couns 503 Seminar in Dynamics of Individual Behavior	4
Couns 510 Seminar: Supervised Field Experience	4
Couns 512 Seminar in Group Process	4
Couns 513 Research Methods and Literature	4
Couns 514AB Supervised Internship	8
Electives	2
Total Required Units	30

PUPIL PERSONNEL SERVICES CREDENTIAL

With the establishment of the Master's Degree Program in Counseling in September 1972, the University was approved to offer the Pupil Personnel Services Credential.

Requirements for the Credential include a Master of Arts Degree in Counseling as well as 23 additional graduate units:

	<i>Units</i>
Couns 511 Career Development and Planning	4
Couns 521 Seminar in Pupil Personnel Services Concepts and Organization	4
Couns 525 Seminar in Tests and Measurements	4
Educ 430 Seminar in Remedial and Special Education	3
Couns 530 Advanced Supervised Internship	4
Couns 570 Cross-Cultural Awareness in Counseling	4
Total Required Units	23

Candidates for the P.P.S. Credential are urged to be mindful of the following:

- A. While it is possible to complete all the courses required for the Credential in a two-year period, such a program requires *extremely careful planning*. The Department will offer each of the required courses at least once in the regular program during the two years, but some courses will be offered *only once* in that time. The Department will publish a schedule indicating when P.P.S. courses will be offered; the schedule may be obtained from the Department secretary.
- B. Field experience for the P.P.S. Credential must satisfy two basic requirements:
 1. At least 240 clock hours of supervised field experience must be logged in one or more "K-through-12" settings.
 2. Field experience must include at least 120 clock hours in each of *two* out of the following three major areas: elementary school, high school (or junior high school) and the community college.

COMMUNITY COLLEGE COUNSELING CREDENTIAL

Completion of the M.A. degree satisfies all current requirements to apply for the Community College Counseling Credential.

MARRIAGE, FAMILY and CHILD COUNSELING LICENSE

As the specific requirements for certification for the examination for the above license become clear (through legislative and licensing authority actions,) the Department will make every effort to assist students in meeting these requirements.

APPLICATION PROCEDURES

Interested persons can obtain the standard state-wide application form from the Admissions Office of the state universities or colleges, or community colleges. Since students are accepted into the Counseling Program only once a year, applications are accepted during the month of November for admission the *following* Fall Semester.

COUNSELING COURSES

495. Special Studies (1-4) Department Faculty

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.

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

To develop the ability to understand the dynamics of individual behavior within the counseling relationship and to recognize the need for change in attitudes and behaviors on the part of the counselee to become a better functioning person.

510. Seminar: Supervised Field Experience (4) Department Faculty

The student is provided field experience in a variety of counseling settings to give exposure to diverse counseling activities. An integral part of this experience shall be relating traditional theoretical concepts to an experiential setting such as mental health centers, governmental agencies, hospitals, elementary and secondary schools and colleges.

Prerequisite: Counseling 501 or taken concurrently.

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. Since this is essentially a counseling course, 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 in 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 in Research Methods and Literature (4) Department Faculty

A survey of the principles of research design and techniques of investigation in the behavioral sciences, with a major emphasis on becoming an intelligent consumer of the literature.

Prerequisite: Demonstrated competence in basic statistical analysis.

514AB. Seminar: Supervised Internship (8) or (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 seminars will be held to discuss related internship problems and to evaluate the field experience.

Prerequisites: Counseling 501 and Counseling 510.

521. Seminar in Pupil Personnel Services—Concepts and Organization (4) Palmer

A seminar in organizing, supervising, and administering Pupil Personnel Programs in elementary and secondary schools and junior colleges; legal and financial aspects, as well as laws affecting children and child welfare.

525. Seminar in Tests and Measurements (4) Department Faculty

Investigation of the nature and rationale of educational measurement, both individual and group, with emphasis on the factors that affect the precision and relevancy of test scores. Identification of limitations and justification in the measurement of human characteristics as well as instruction in the clinical process itself.

530. Seminar: Advanced Supervised Internship (4) Department Faculty

Continued advanced clinical experience, at least one full day per week, under faculty supervision in a setting related to the professional goals of the student. In addition weekly seminars will be held on campus to discuss internship problems.

Prerequisites: Counseling 510, 514, and consent of the instructor.

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

A study of relationship counseling including conjoint family therapy and co-therapy in an investigation of family interaction and communication processes.

Prerequisite: Counseling 510 or consent of the instructor.

545. Family Law and Professional Ethics for the Counselor (2) Department Faculty

Basic survey of the law of Dissolution of Marriage, Adoption and Guardianship with a special focus on the role, both potential and presently existing, of the counselor from a legal perspective. A study of the California Codes and relevant case law pertaining to custody, community property and support is included.

570. Cross-Cultural Awareness in Counseling (4) Sharratt, Moore

A seminar for the in-depth study of applications of the major counseling theories with varicultured counselees, as well as an examination of the nature of personal bias, countertransference and their function in the counseling relationship.

595. Special Studies (1–4) Department Faculty

CRIMINAL JUSTICE ADMINISTRATION

Department Chair: James P. Driscoll

Faculty: James P. Driscoll, Kenneth K. Marcus, Homero E. Yearwood

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	<i>Units</i>
General Education	40
Major Requirements.....	36
Supporting Subjects.....	28
Electives.....	20
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.

	<i>Units</i>
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 and the relationship between law and society.

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.

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.

450. Punishments and Corrections (4)

The course will attempt to resolve 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 (4)

In consultation with the major advisor the student selects a public, private or community agency and gains field experience under the supervision of agency heads and meets with the faculty advisor in regularly scheduled weekly discussions. This course is graded on a CR/NC basis and may be repeated for a total of eight (8) units.

ECONOMICS

Department Chair: Barry Ben-Zion

Faculty: Gerald Egerer, Victor Garlin, Sue Hayes, Sandra Schickele,
Richard Van Gieson

Economics focuses on people and studies the ways in which they 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. This is accomplished through exposure to dialogue concerning desirable policies and institutional arrangements in both the American and international economy. The second goal is to meet the expectations of graduate schools and employers that students of Economics will possess the technical skills necessary to research and analyze problems and issues. Thus, majors receive training in research methods and materials, applied statistics, analytical methodologies, and models.

The Department offers majors a number of fields within economics which are faculty specializations and which normally consist of a basic course and a senior seminar. These include: labor economics, international trade, the developing nations, radical economics, urban and regional economics, public sector economics and finance, managerial economics, health care management, natural resource management, and mathematical economics-forecasting.* 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 individual faculty or the department chair early in their major to plan a program that meets their goals upon graduation, whether it be immediate employment or graduate training.

All majors contemplating a career in secondary social science education should see Page 321 for Ryan Single Subject Social Science Program requirements.

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 418–420.

BACHELOR OF ARTS IN ECONOMICS

Major

	<i>Units</i>
General Education	40
Economics Courses	40
Electives.....	44
TOTAL	124

* Not all fields offered every year.

COURSE REQUIREMENTS

	<i>Units</i>
1. All majors are required to take the following courses *	24
Econ. 201—Introduction to Economics.....	4
Econ. 304—Macroeconomic Theory	4
Econ. 305—Microeconomic Theory	4
Econ. 317—Applied Statistics in Economics (or Mgt. 315)	4
Econ. 484—Seminar in Macroeconomic Policy	4
Econ. 485—Seminar in Microeconomic Policy	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

	<i>Units</i>
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. 201—Introduction to Economics.....	4
2. Econ. 304—Macroeconomic Theory and Econ. 305—Microeconomic Theory	8
3. One 400 level seminar	4
4. Electives	4

OTHER PROGRAMS**1. Double Majors**

Management, Politics or History students may major in Economics also. For such students, the Economics Department has a special curriculum. Certain courses taken toward the completion of a degree in either Management, Political Science or History can also be used toward the completion of a major in Economics. A description of these double majors is available at the Economics Department office.

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.

* Majors should take Econ. 317 390 as soon as possible.

ECONOMICS COURSES

201. Introduction to Economics (4) Department Faculty

An examination of the basic characteristics of the American economy and the principles that determine its performance. Emphasis is given policy issues such as unemployment, poverty, growth, and inflation. This course satisfies the general education social science requirements.

210. Capitalism and Socialism (4) Schickele, Egerer

A study of the economic organization and ideology of the United States and countries such as the Soviet Union, China, France, Sweden, Great Britain, Cuba, and Yugoslavia. Criteria will be developed by which to evaluate economic performance, and to measure organization against ideology.

301. Power and Freedom in the American Economy (4) Garlin

A study of the impact on personal freedom of the exercise of economic power by major institutions such as the large corporations, labor unions, and government agencies. Alternative views of the relationship between economic and political power are discussed and evaluated in the context of the American experience.

302. International Trade: Theory and Policy (4) Egerer

An examination of the development of the modern theory of international trade, and of the available techniques for achieving equilibrium; all in relation to U.S. foreign economic policy and international economic institutions.
Prerequisites: Econ. 201 or its equivalent.

303. Development in the Third World (4) Ben-Zion

This lecture discussion course is designed to examine the prospects of third world countries that currently face population pressures, famines, the energy crisis, diminishing aid from the West, and growing domestic and international conflicts.

304. Macroeconomic Theory (4) Egerer, Garlin, Hayes

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. 201 or its equivalent.

305. Microeconomic Theory (4) Ben-Zion, Schickele, Van Gieson

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. 201 or its equivalent.

308. An Introduction to Mathematical Economics (4) Egerer

The application of simple mathematics to the kind of macro- and microeconomic analysis widely used in government and business, focusing upon linear systems and including elementary input-output models. Designed to help the student handle numbers with ease and to provide the basic background understanding needed for other courses in Economics and Management Studies, such as Econ. 317 and Management 415.
Prerequisites: Econ. 201 and Ma¹⁰⁵ ABC, or consent of instructor.

311. The Public Economy (4) Van Gieson

A basic introduction to the economics of the public sector designed to give the student a broad overview and the microeconomic tools of analysis by which government programs, policies, and enterprises can be evaluated. Emphasis is on the contribution that economics can make to the decision-making process in local, state, and federal government.

317. Applied Statistics in Economics (4) Ben-Zion, Egerer

Unlike courses which emphasize probability analysis, this course is devoted to techniques that are more 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.

318. Managerial Economics (4) Ben-Zion, Hayes, Van Gieson

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.

Prerequisites: Econ. 201 or its equivalent.

322. Urban Economic Planning (4) Van Gieson

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) Garlin

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.

Prerequisites: Econ. 201 or equivalent, or consent of instructor.

341. Working in America (4) Hayes

An examination of economic and social issues as they affect working people in the US. Unions, big business, discrimination, unemployment, and job alienation will be discussed, along with possible alternatives.

347. Women and Employment (4) Schickele

A history of women's participation in the modern American economy; a study of the kinds of jobs they have held, hold now, and will hold in the future; a look at what the discipline of economics has to say about the historic role of women and the value of their social contribution. This course will stress an examination of the future work role of the individual student.

ic 357. Economic Society in Films and Literature (4) Schickele

A review of selected films in economics and a comparison of the view of economic society they present with selected literature.

rd 381. Natural Resource Management (4) Hayes

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.

n 390. Research Methods and Materials in Economics (4) Ben-Zion

A course designed to acquaint students, early in their major, with appropriate research methodologies and the important sources of information (statistical and other) for term papers and research projects in economics and related social sciences.

393. Economics of Health Systems (4) Garlin

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) Ben-Zion

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) Egerer

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 417 recommended.

411. Seminar in Public Finance (4) Van Gieson

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.

417. Seminar in Economic Forecasting (4) Ben-Zion

Designed to familiarize the student with economic forecasting methods and models used widely by business and government. The course will cover those models used in forecasting population, GNP and its components, industry sales, level of prices, and other economic variables.

Prerequisites: Consent of instructor. Some background in economic and applied statistics and math techniques is desirable, courses such as Econ. 317, Mgt. 315, Econ. 408, and Math. 117.

420. Seminar in Urban and Regional Economic Planning (4) Van Gieson

A seminar devoted to explorations of the nature and scope of the growth problems confronting the urban areas. Emphasis will be given to government planning efforts to deal with pressing urban problems in areas such as land use, transportation, housing, and unemployment.

Prerequisite: Econ. 322, or 311, or 305, or consent of instructor.

421. Seminar in Labor Economics (4) Hayes

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, or 305, or 341, or consent of instructor.

425. Seminar in Radical Economics (4) Garlin

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) Schickele

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.

481. Field Study in Natural Resource Management (4) Hayes

Case studies and field visits to individuals and agencies involved in the economics of natural resource management. Course is designed to complement the introduction to natural resource management presented in Econ. 381.

Prerequisites: Econ. 381, or consent of instructor.

483. Seminar in Health Systems Economics (4) Garlin

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) Egerer, Garlin

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) Ben-Zion, Schickele

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.

495. Special Studies (1-4) Department Faculty

499. Internship (4) Department Faculty

EDUCATION

Department Chair: David Thatcher

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

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 concurrent 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 29.

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 Mexican American Studies (707) 664-2369; and for information regarding the Pupil Personnel Services Credential consult the Department of Counseling (707) 664-2544.

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 present program 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 (664-2121).

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 having completed 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. AREA OF CONCENTRATION**I. Reading Option**

Choose one:

(Educ. 516—Advanced Psychology of Education } 3

or

Educ. 517—The Psychology of the Reading Process) }

Educ. 507—Advanced Seminar: Curriculum and Research in

Reading..... 3

Educ. 560A—Diagnosis and Remediation 3

Choose One:

Educ. 560B—Diagnosis and Remediation (Practicum) } 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 Option

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 Option.

Two patterns of study are available, Pattern I for those who are candidates for the Specialist Credential in Early Childhood Education and Pattern II for those who wish to have the M.A. *only* e.g., already have a credential, or do not want a credential, and wish to work solely with pre-kindergarten programs, community sponsored programs, federal programs or agency sponsored programs. Those students working toward the Early Childhood Education Specialist Credential must take 33 prescribed units. Further information about this program may be obtained from the Department of Education.

IV. Administrative Services Option

In addition to general admission requirements listed on page 344, students in the administrative services option 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 Option

This new M.A. option 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 437AB—Integrated Curriculum in Early Childhood Education	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:

Units

- 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) 664-2121.

EDUCATION COURSES

200. Introduction to Education (3)

Understanding schooling in our society. An exploration of the philosophy, psychology and sociology theories that underlie methods of learning and patterns of behavior. Open to all students interested in exploring and understanding educational processes.

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.

301. Introduction to the Public School (1)

Must be taken concurrently with Education 302. Weekly seminar related to field experience.
Prerequisite: Approval of Education Department.

302. Field Experience in the Public School (2)

Must be taken concurrently with Education 301. Opportunities and challenges in public

school service explored by serving as an aide one morning per week in a classroom. Focus on the teaching-learning process and current problems.

Prerequisite: Approval of Education Department.

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.

350. Introduction to Teaching (3)

Introduction to the responsibilities of a public school teacher. Includes learning theory, social and cultural diversity, classroom management, evaluation. Observation required.

Prerequisite: Education 301–302 and approval of Education Department.

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) (2)

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

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; Salt Point State Park Educational Project.

402. Curriculum of the Elementary School (Mathematics) (2)

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) (2)

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 (7–8)

Full-time teaching experience in an elementary school under the guidance of a cooperating teacher.

Prerequisite: Approval of Education Department.

406. 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.

406A. Secondary Reading Field Experience (1)

An observation/participation field experience designed to provide the teacher candi-

date 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.

407A. 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.

407B. Elementary Reading Field Experience (1)

Field experience includes observation and participation in teaching reading in the elementary school.

Prerequisite: Approval of Education Department.

408. Curriculum of the Elementary School (Language Arts) (2)

Principles, methods, and materials of instruction in the elementary school of writing, spelling, speaking and listening, including Audio-Visual.

Prerequisite: Approval of Education Department.

415A. Social and Psychological Foundations for Diversity in Education (2-3)

Devise classroom techniques and materials that provide for diversity in pupil abilities and that also provide for ethnic and socio-economic factors. May be taken simultaneously with Educ. 415B.

415B. Social and Psychological Foundations for Diversity in Education (1)

Field component for Educ. 415A. Must be taken concurrently with Educ. 415A.

419. Movement and Drama in the Classroom (3)

Movement and Drama in the Classroom is an activity workshop in which the participants can experience and 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. Child Development (3-4)

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-I. Secondary School Curriculum and Instruction (2)

Scope, sequence and methods of instruction in the several fields of the secondary school curriculum. Planning instruction and evaluating learning. Examination of underlying assumptions regarding instructional goals in the several fields, and evaluation of conflicting theories.

422A. Art

422B. English

422C. Foreign Language

422D. Life Sciences

422E. Mathematics

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422F. Music

422G. Physical Education

422H. Physical Sciences

422I. Social Sciences

424. School and Community Field Experience (1–2)

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, and community activities. An opportunity in a field setting to explore theoretical concepts dealt with in the School and Community course. Must be taken concurrently with Educ. 429. May be repeated for credit.

Prerequisite: Admission to the Single Subject Credential program.

425A–J. Secondary Student Teaching (4–12)

A two semester student teaching experience requiring the candidate's presence in the school for a prescribed time each regular day.

425A. Art

425B. English

425C. Foreign Language

425D. Life Sciences

425E. Mathematics

425F. Music

425G. Physical Education

425H. Physical Sciences (Chemistry, Physics)

425I. Social Science

425J. History (MAMS)

Prerequisites: Admission to the Single Subject Credential program; successful completion of Phases I and II of the program; successful completion of the university approved undergraduate subject matter and/or major degree requirements, or successful completion of the State subject matter examination.

426. Seminar Accompanying Student Teaching (Secondary) (1–1)

An examination of the problems faced by the enrollees in their student teaching. Emphasis on the planning and evaluation of instruction, and the evaluation of learning. Classroom management and control, record keeping. To be taken concurrently with Educ. 425. May be repeated for credit. Prerequisite: Approval of Education Department.

429. The Community, the School, the Teacher and the Learner (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. Practicum and Field Experience (Pre-School/Kindergarten) (3)

Classroom observation and experience in a pre-school/kindergarten setting, 15–18 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. Seminar: Inter-Group Relations and the Pre-Schooler (3)

Educating teachers of young children on specific goals and objectives toward inter-group relations.

Prerequisite: Consent of instructor.

437A-B. Seminar: Integrated Curriculum in Early Childhood Education (3)

A multi-disciplined 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.

439. Teaching Educationally Disadvantaged Children (3)

Current theories concerning the society of the "culturally disadvantaged"; family structures, values, child-rearing practices, cognitive styles, emotional problems and language patterns; new programs and new possibilities for teaching.

441. Field Experiences with Exceptional Children (3)

Variety of field observations and field experiences with exceptional children. Minimum of 6 hours field study per week plus seminar.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

450. The Gifted Child (3)

Intensive study of gifted children.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

451. Recreation for the Handicapped (3)

Principles, techniques and organization of recreation programs for the handicapped. Some field work required.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

452. Student Teaching with Exceptional Children (4-7)

Student teaching with at least two groups of exceptional children.

Prerequisite: Consent of Special Education Coordinator.

453. Seminar in Student Teaching (1-1)

Discussion of progress and problems for student teachers in special education. (Concurrent with Education 452.)

456. Precision Teaching (3)

Behavior modification principles and application. Field work required.

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.

460. Issues and Problems in Working with Developmentally Disabled Adults (3)

An overview of ethical, moral, legal, and programmatic issues and problems in working with developmentally disabled adults, from the perspectives of consumers, service agencies, and society.

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

Study of the issues, problems, and techniques related to helping the handicapped child 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 handicapped child 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.

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.

493. 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). The course will combine field work and seminar sessions.

495. Special Studies (1-4)

500. Problems of First-Year Teachers (2)

Focused on the concerns and problems of first year teachers to help them develop additional strengths during their early weeks in the classroom.

501. Seminar for Supervising Teachers of Student Teachers (2)

Problems arising from work with student teachers. Coordination of university and classroom supervision of student teachers in the public schools. Open to teachers supervising student teachers or to those having prior approval of instructor. May be taken twice for credit.

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.

520A. Seminar: Advanced Studies in Child Development (3-4)

An in-depth examination of divergent theories of child development and their effects upon program design, teaching strategies and school policy. Current research critically studied in the context of trends and issues in child rearing and education.

Prerequisite: Admission to M.A. and specialist program or 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.

535. Curriculum Development in Secondary Schools (3)

Principles of course construction; critical comparison of various types of course construction. Includes some individual research of new developments in instructional methods in specific subjects in junior and senior high schools.

536. Curriculum Development—Elementary Schools (3)

An inquiry into types of curriculum in elementary schools; how to construct criteria for curriculum construction; the psychology, sociology, 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. May be applied to Children's Center Supervisor Permit.

Prerequisite: Consent of instructor.

539. Issues and Problems in Early Childhood Education

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 in conjunction 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 the Handicapped (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. Education of the Severely Handicapped. (2-3)

Study of education and rehabilitation problems of severely retarded children. Observations and participation assignments required.

Prerequisite: Educ. 542 and admission to Special Education program.

547. Educational Assessment of Exceptional Children (3)

Educational assessment and interpretation of diagnostic instruments used with exceptional children. Some field experience required.

Prerequisite: Educ. 430.

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. Educationally Handicapped (2-3)

Study of programs and problems of the educationally handicapped in California. Some field work required.

Prerequisite: Educ. 430 or concurrent enrollment in Educ. 430.

550. Special Education for Administrators (4)

Human Diversity: The learner with special needs, emphasizing assumptions underlying 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,

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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)

Identify sources of research in education; interpret research findings in layman's language; master 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 adminis-

tration. 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)

Practice in individual and group diagnosis, in prescription of corrective instructional procedures, and in remedial teaching.

Prerequisite: Consent of instructor.

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 will be identified and discussed. Students will be expected to collect data to support and refute positions and statements.

Prerequisite: Approval of Education Department.

563. Administration and Supervision in Special Education(3)

Organization and operation of various special education programs will be studied. Recent federal and state legislation in special education will be reviewed. Procedures for writing proposals and grants will be studied and students will be expected to submit an acceptable project proposal as part of the course requirement.

Prerequisite: Approval of Education Department.

564. Seminar: Research in Special Education (3)

Researchable problems in special education will be identified and discussed. Students will be expected to review the research literature and submit an acceptable research proposal.

Prerequisite: Approval of Education Department.

565AB. Seminar: Advanced Field Problems (1) (1)

A one-unit course for all students pursuing an M.A. in Special Education. The 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.

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569. Resource Teachers in Special Education (2-3)

A basic need has arisen in the public schools due to the current trend to mainstream special education children. This course is designed to prepare special and regular teachers in techniques and methods for helping special students in the regular class. Prerequisite: Approval of Education Department.

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 (2-3)

Analysis of curriculum and materials modifications. Emphasis is on the educable level retarded.
Prerequisite: Educ. 442.

595. Special Studies (1-4)

ENGLISH

Department Chair: Janice "J.J." Wilson

Faculty: Martin Blaze, David Bromige, Robert Clayton, Robert Coleman, Nirmal-Singh Dhesi, Sally Ewen, Judith Gottlieb, Gerald Haslam, Richard Hendrickson, James Kormier, Hector Lee (Emeritus), William Lee, Dorothy Overly, Don Patterson, Mary Rich, Alan Sandy, Eugene Soules, Caroline Zainer

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.

To achieve these ends, the department requires students to take courses which develop their skills in written expression, research, and critical reading, as well as to assemble elective courses in specific subject areas which meet their educational and career objectives. Students may major or minor in two general areas of English study, Literature and Communication. In the Literature plan, fields of study include English literature and American literature. In the Communication plan, fields of study include language studies, media studies, and writing skills. The major in English serves as the basis for a liberal education, as preparation for graduate study in English and related disciplines, and as background for professional training in such fields as law, journalism, teaching, business and advertising.

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 418–420.

BACHELOR OF ARTS IN ENGLISH

Major

Literature Plan

	<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, 429, 452.	
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

Communication Plan

Introduction to Literary Analysis: Seminar (English 301)	3
Principles of Communication (English 372)	2
Studies in Communication (English 374)	1
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
College Composition (English 375)	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

An individualized, project-oriented alternative plan for completion of the B.A. degree in English. Students are not required to take specified courses in the regular B.A. program but must present individual proposals for satisfying major requirements. This program is recommended for students who have a high degree of motivation and special interests within the areas of literature and language.

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, 2 units) and at least 1 unit of Studies in Communication (English 374) to be taken concurrently, followed by 17 units of electives chosen from the courses listed under English: Communication.

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.

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 at least half of the 30 units in courses numbered in the 500 series.

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 Teaching Composition: Seminar	2
III. Literature: to include 3 units from each of the following categories....	9
A. Survey: (235, 236, 237, 238, 239, 240)	
B. Children's Literature (English 342), or Youth in Literature (English 343)	
C. Genre: (369, 371, 373, 399, 494)	
IV. Electives *	6
TOTAL	20

ENGLISH COURSES

Composition/Creative Writing/Media Studies

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.

102. Research Paper (1)

A course designed to make the techniques of research paper writing available to all lower division students. The course may serve as an "adjunct" to a variety of general

* 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), Creative Writing, or Media Studies.

education subject matter courses. Emphasis will be placed on organization of information, research paper format, and use of library resources.

103. English as a Foreign Language (3)

Limited to 15 students, this course is for non-native speakers of English. Students may be advised to take other writing classes concurrently. Emphasis is on proficient writing in English at the college level.

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.

307. Fiction Writing

Prerequisite: Consent of instructor.

308. Explorations in Creative Writing

An experimental course in creative writing that will include subjects not normally offered in the regular curriculum (i.e., biography, autobiography, etc.). See class schedule for current titles. May be repeated for credit.

318. Poetry Writing

Prerequisite: Consent of instructor.

329. Stage-Film-TV Script Writing

Prerequisite: Consent of instructor.

352. Personal Essay

Prerequisite: English 375 or consent of instructor.

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.

368. Media Workshop (1-4)

Provides opportunity for supervised field experience and internships with newspapers, periodicals, radio and television stations, etc. May be repeated for a maximum of six units.

Prerequisite: English 361.

372. Principles of Communication (2)

A comprehensive survey of the nature and function of human communication, written, spoken, and non-verbal. Students in this course must enroll concurrently in 1 unit of *Studies in Communication* (English 374).

374. Studies in Communication (1)

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. Topics and format vary; see class schedule for current offerings. May be repeated for credit to a maximum of 3 units.

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, 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.

407-418-429-452 Advanced Creative Writing (3-3-3-3)

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. The following prerequisites (or their equivalents) are required.

407. Advanced Fiction Writing

Prerequisite: English 307.

418. Advanced Poetry Writing

Prerequisite: English 318.

429. Advanced Stage-Film-TV Script Writing

Prerequisite: English 329.

452. Advanced Personal Essay Writing

Prerequisite: English 352

477. Special Studies in Media (1-3)

Detailed study of a major area or topic in communication: language study, media study, film study, video narrative, writing skills, and/or speech communication. See class schedule for current offering. May be repeated for credit.

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. Can be repeated for credit.

LITERATURE

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)

Introduction to the major literary genres: short story, novel, poetry, and drama. Emphasis will be on the analysis of these literary forms.

It is strongly recommended that students have completed English 101 or the equivalent before they enroll in English 214.

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 science-religion controversy, the Decadents, the anti-Victorians, surrealism.

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.

313. Classical Studies (3)

In-depth study of individual works and writers. See class schedule for current listing.

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.

342. Children's Literature (3)

A study of children's books, with emphasis on both traditional and modern materials. Consideration of children's reading interests and criteria for selection of books.

343. Youth and Literature (3)

A study of books, both traditional and modern, that are of interest to adolescent and young adult readers.

345. Women Writers (3)

A survey which, while the focus varies 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.

367. Introduction to Short Story (3)

369. Introduction to Poetry (3)

371. Introduction to Novel (3)

373. Introduction to Drama (1-3)**398. Explorations in Genre (3)**

An experimental course in genre that will include subjects not offered in regular curriculum (e.g., biography, autobiography, etc.). See class schedule for current titles. May be repeated for credit.

401. Literary Criticism (3)

The historic and present responses to the problems of evaluation of literature.

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. Course 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. Feminist Perspectives on Literature

An advanced course in reading, writing, and research from the newly emerging feminist perspectives, interdisciplinary in approach and using a seminar format. Can 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 Political Science), 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.

481. Studies in English Literature (3)

Close study of topics unique to English literature. See class schedule for current offering. Course may be repeated for credit. (May sometimes be offered at 381.)

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. Course 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. Course may be repeated for credit.

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 to vary 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. Graduate 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.

Language/Linguistics

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.

379. The Study of Language (3)

Introduction to the nature of language, examining philosophical approaches as well as the insights of modern linguistic science.

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.

588. Graduate 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.

Speech

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.

Alternative Major

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.

Related Studies and Research

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.

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.

392A. Advanced Library Research Tools (1)

In depth study of reference works in different disciplines. Library assignments will be the preparation of three pathfinders or guides to materials in major subject divisions.

Prerequisite: English 292.

392B. Bibliography (1)

Preparation of annotated bibliography on a limited topic and a search strategy describing the research methods employed. Prerequisite: English 292.

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.

491A. Seminar in Teaching Writing (2)

A workshop devoted to researching, discussing, and demonstrating various methods of teaching writing. Designed for tutors, teachers, and prospective teachers who wish to expand their repertoire of methods of teaching writing and who wish to develop a rhetorical base from which to create teaching materials.

491B. Practicum in Teaching Writing (2)

Recommended that this course be taken in conjunction with the seminar (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)

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.

554. Seminar: Experimental Studies (1–3)

Specialized studies currently needed or requested by students but which may not justify a permanent place in the curriculum (e.g., teaching college English). Course may be repeated for credit.

595. Special Studies (1–4)

598. Special Studies Seminar (3)

599. Thesis and Accompanying Directed Reading (6)

Prerequisite: English 500 and admission to candidacy.

ENVIRONMENTAL STUDIES AND PLANNING

Provost: Jean A. Merriman

Faculty: Lester Feldman, Roy Irving, Raymond E. Krauss, Lawrence Livingston, Jr., J. Bruce Macpherson, Stephen A. Norwick, James C. Stewart, Kenneth M. Stocking (Professor Emeritus), Margaret F. Wheaton, Sydney H. Williams, Bruce E. Woelfel

The School of Environmental Studies and Planning offers upper division interdisciplinary programs based on a core which has a balance between the biological and physical sciences on the one hand and the humanities and social sciences on the other. Solid strength in both areas is augmented by studies associated with an in-depth senior project or internship. The B.A. degree in Environmental Studies and Planning has emphases in 1.) environmental studies, with advisory plans in general environmental studies; environmental education; natural resources and parks; health and the environment; water quality studies, and energy studies; or 2.) in planning, with advisory plans in city and regional planning, or in rural planning.

The School of Environmental Studies and Planning 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. Its graduates, with both broad-based and specialized knowledge of the natural and man-made environment, will be able to pursue careers in government, teaching, industry and business, or will be prepared to enter graduate school. This school, like the other cluster schools, is granted considerable autonomy in designing its own curriculum and administering its programs.

Internships with private and governmental agencies, particularly in park work, planning, education and water quality, are an important part of a number of the study plans in our school.

BACHELOR OF ARTS IN ENVIRONMENTAL STUDIES

ADMISSION REQUIREMENTS

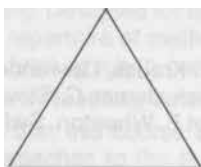
After being admitted to Sonoma State University, a student may apply for admission to the School of Environmental Studies and Planning by writing to the Provost. A student seeking admission should:

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. Submit a brief paper indicating her or his past, present, and possible future environmental concerns and activities. In most cases, have a conference with a faculty member.
4. In meeting the general education requirements, to have completed the following advisory plan as nearly as possible.

ADVISORY PLANS FOR THE FRESHMAN AND SOPHOMORE YEARS

Our School encourages students to follow a program of study and to pursue practical experience which will give them breadth in the following three areas as well as some depth in one of the areas.

3. Analytical
Process



We emphasize both breadth and depth in considering applications and we value diversity in student background.

1. Awareness &
Creativity

2. Social Concern &
Understanding

NOTE:

In the following recommendations, course numbers are those listed in the 1980–81 Sonoma State University catalog. Students at other institutions, and even at SSU on occasion, should use them as a general guide, but should maintain flexibility in getting the best that their institutions have to offer in courses and instructors. The freshman and sophomore program in Hutchins School of Liberal Studies is well suited to meet not only the university general education requirements but also the breadth and depth requirements which follow.

BREADTH RECOMMENDATIONS

These will give students a common background of experience as well as method.

1. Awareness and Creativity.

Include courses which emphasize creative activities, awareness of the environment, and literature—as in (a) various humanities courses (b) critical thinking, and (c) an introductory psychology course.

2. Social Understanding and Concern.

Basic courses in the nature of society and in social, political, and economic systems such as (a) Ethnic Studies: AMCS 210, (b) Cultural Anthropology, Anthro 203 (c) Introduction to Economics, Econ. 201, (d) Amer. Political System, Politics 200.

3. Analytical Process.

Basic science and mathematics such as: (a) Plant or animal science (Biol. 116 or 117), (b) Chemistry and Society (Chem. 102), (c) Geography 201 or 302, (d) Geology 102, 202, and (e) Physics or mathematics (Physics 100 or 210A, or Mathematics 105, 107, 114, 115, 117).

DEPTH RECOMMENDATIONS

An in depth study of 13 or more units in one of the following areas of emphasis will better prepare each student for specialization in upper division studies. Students considering a second major may wish to concentrate this study in one department. The Sonoma State University courses listed below or similar ones are appropriate.

1. Awareness and Creativity

Courses selected from: MAMS 219, NAMS 200, PHIL 200, 302, PSYCH 250. Appropriate seminars from the Hutchins School (vary from semester to semester). Courses in Creative or Performing Arts, e.g., Art 285. Courses in creative writing and literature.

2. Social Concern and Understanding

Courses Selected from: AMCS 255, ANTHRO 201, AMCS 370, NAMS 200, MGMT 225, POLITICS 201.

3. Analytical Process

Courses selected from: Biol. 116 or 117 and Biol. 215. Chemistry 115AB instead of Chemistry 102. Additional courses from Geology 120, 233. Mathematics 117 or 165.

ENVIRONMENTAL STUDIES EMPHASIS

REQUIREMENTS FOR THE B.A. DEGREE (Applies to all Study Plans)

	<i>Units</i>
* ENSP 301—The Human Environment	3
* ENSP 311—The Social Environment	3
* ENSP 321—The Biological Environment	4
* ENSP 331—The Physical Environment	4
or	
ENSP 350—Introduction to Environmental Studies & Planning	16
ENSP 341AB—Current Issues	2
ENSP 441AB—Current Issues	2
**ENSP 490—Senior Project-Seminar	4–8
Electives in Environmental Studies & Planning	0–16
TOTAL UNITS FOR GRADUATION	36

Eight of the 36 units required in any study plan may, in consultation with the advisor, be taken outside of the School of Environmental Studies and Planning.

STUDY PLANS (Details of all Study Plans are available from ENSP Office)

PLAN I: INDIVIDUALLY DESIGNED PLAN

PLAN II: ENVIRONMENTAL EDUCATION, ELEMENTARY CREDENTIAL (RYAN ACT)

PLAN III: NATURAL RESOURCES AND PARKS

PLAN IV: WATER QUALITY STUDIES

PLAN V: ENERGY

PLAN VI: HEALTH AND THE ENVIRONMENT

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.

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, (or 350) 341AB, 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.

* 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.

ENSP 350 may be taken instead of ENSP 301, 311, 321, 331.

** A minimum of 4 units must be taken.

The Senior Project may be closely related to and include ENSP 351, 409, 411, 492 or 499, and must be part of an emphasis of at least 20 units.

ENVIRONMENTAL STUDIES AND PLANNING COURSES

200. Understanding Environmental Concerns (3) (Fall and Spring) Department Faculty

Lecture-Discussion 3 hours, Laboratory 1 hour.

A short introduction to Environmental Studies and Planning. 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. An all day field trip.

**** 301. The Human Environment (3) (Fall and Spring) Department Faculty**

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) Department Faculty

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. Field trips.

306. Rights of Living Things (3) (Fall) Department Faculty

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.

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) (Spring) Department Faculty

Energy teaching techniques for use in schools, environmental centers, public forums; the nature of energy, energy alternatives, energy resources their formation and use; political and social conditions necessary to live as energy conservatively as possible.

**** 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.

** ENSP 350 may be taken instead of 301, 311, 321, 331.

311A. Introduction to Planning (4) (Fall and Spring) Department Faculty

A comprehensive survey of urban planning; its historic precedents, its evolution, and its present practice in the U.S. Emphasizes physical aspects of planning and current and evolving implementation techniques.

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 (3-3) (Fall and Spring) Norwick

An intensive study of the classics in Environmental Studies, such as Aldo Leopold's *Sand County Almanac*, or in Planning, such as Jane Jacob's *Death and Life of Great American Cities*. Lectures, discussions, films, field trips, projects. This course may be repeated for credit.

314AB. Architectural Design and Energy Efficiency (3-3) (Fall and Spring) Woelfel

Basic architectural graphic skills and design considerations for small energy conserving buildings. Site planning, interior arrangement, heating and ventilating, mechanical equipment, building materials, and construction techniques. Translation of design to completed buildings. Building codes, varieties of building types, site planning for difficult topography and for groupings of buildings.

315. Environmental Impact Reporting (3) (Spring) Krauss

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 Methodology (4) (Fall) Livingston

An introduction to basic analytical and methodological skills that are 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.

317. Small Rural Community Development (3) (Spring) Department Faculty

Introduction to rural development planning with case study emphasis on small intentional communities in Northern California. Field trips, class discussions; an analysis of a small rural community. Cooperatives, collective production and consumption of food, collective land purchase, and relevant legal/financial issues.

318. Land Use Planning (3) (Fall) Krauss

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.

319. Planning for Historic Preservation (4) Department Faculty

An introduction to the law of preservation at the national, state, and local levels, and to the tools of resource surveys, organizational analysis, neighborhood conservation, and finance, through lectures, discussion, field trips and community involvement.

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****321. The Biological Environment (4) (Fall and Spring) Merriman**

Lecture 3 hours; laboratory 3 hours.

Studies of ecosystems; populations, succession; biological controls; species extinction. Field trips.

Prerequisites: A basic course in life science.

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. Organic Food Production (2) (Fall and Spring) Department Faculty

Botanical principles of organic food cultivation. Effects of plant community structure in inhibiting pests, diseases, weeds. Methods of soil enrichment, water conservation through composting, mulching, use of non-synthetic fertilizers. Biodynamic and French intensive techniques. Lecture/discussion and field application. Prerequisite: Course in basic botany, ENSP 321, or permission of instructor.

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. Educating 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) Merriman

A study of food additives and nutrition, carcinogens, industrial/occupational safety, pollutants, holistic health, stress, et al. Different topics each semester.

****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. 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 (3) Norwick

An introduction to soil science emphasizing the physical and chemical origin of soil and the impact of soil on both natural and agricultural systems. Field trips.

334. Fundamentals of Energy Use (3) (Fall) Department Faculty

Natural and man-made systems in terms of energetic principles. Energy considered as a fundamental measure of organization, structure, and transformation in systems. Perspectives on the current energy crisis.

335. Problems in Water Quality Management (2) (Fall) Feldman

Introduction to natural, modified, and man-made water pollution control systems. Principles of wastewater chemistry, aquatic microbiology, and water quality planning will be emphasized. Lectures-Field Trips.

** ENSP 350 may be taken instead of 301, 311, 321, 331.

336. Water Quality Assessment (2) (Spring) Feldman

Monitoring the natural, modified and man-made aquatic environment is highlighted. The regulatory framework for wastewater treatment and disposal, and the science of water quality standards. Examples of water quality monitoring programs. Lecture-Field Trips. Prerequisites: Math 105, Chem 115 AB, and Biol 340.

337. Solar Energy, Direct Uses (3) (Fall) Irving

The derivation of the basic formulae used in designing solar powered devices. Emphasis is on heat transfer and storage. Practical applications. Prerequisite: MATH 114 required, MATH 107, PHYS 210A recommended.

338. Environmental Problems and Aquatic Systems (2) (Spring) Feldman

This course will focus on current water quality issues affecting the Marin-Sonoma communities. Exploration of the interaction of ecosystems and managerial procedures. Environmental economics, politics, and sociology as they relate to water resource development and reuse. Lecture-discussion.

341AB. Current Issues in Environmental Studies (1-1) (Fall and Spring) Department Faculty

Regular weekly school meeting. Student and other reports on environmental action and opportunities for environmental action. Outside speakers, audio and video presentations.

****350. An Introduction to Environmental Studies (16) (Fall) Department Faculty**

Principles of natural science philosophy and history of human relationships to the environment, the development of self, form and design, dynamic systems, informational analysis, politics, economics, the human social condition. Extensive Field Trips. Prerequisite: Permission of Instructor and at least one course in Philosophy, two in the social sciences, one in life sciences, and one in the physical sciences.

351. Environmental Analysis (8) (Spring) Department Faculty

Development of basic skills of the natural and social sciences to study human uses of the land. Group projects which analyze the human, social, biological, and physical aspects of sites and their surroundings. Development of intrinsic suitabilities, constraints, goals, and ideas for use. Workshops, speakers, discussions, field trips, presentations.

Prerequisites: ENSP 350 or 301, 311 or 311A, 321, 331 or consent of the instructor. (4 units applicable to Senior Projects.)

352. Coastal Planning (4) Livingston

A survey of the California Coastal Commission's planning program covering regional planning precedents, the Coastal Zone Conservation Initiative of 1972, the Coastal Act of 1976, and current preparation of Local Coastal Programs. Emphasizes permit activities and plans for the North Central Coast Region in the context of the statewide program.

353. Energy Efficient Transportation (3) (Fall) Woelfel

The automobile as a major energy user, compared with alternative strategies. The background of our transportation dilemmas; 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 to focus on planning for housing; 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.

** ENSP 350 may be taken instead of 301, 311, 321, 331.

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355. Life in Steady-State Society (3) (Spring) Macpherson

An exploration of the individual, regional, national and global implications of life in the emerging steady-state society.

357. Environmental and Planning Law (3) (Spring) Department Faculty

A survey of state and federal statutory and case law in the fields of environmental protection, urban planning, land use regulation and growth management, covering current and evolving techniques of control and their social and economic implications.

360. Assistance Projects (1-4) Department Faculty

Offers work experience to students functioning as facilitators or assistants under faculty supervision.

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.

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 or consent of instructor.

411. Planning Workshop (4) (Fall) Williams

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)

437. Advanced Solar Energy Seminar (3) (Spring) Irving

Economics of active and passive solar heating systems and energy conservation measures. The trigonometry of shading devices and reflectors. The use of computers in solving complex solar design problems. Current status of solar legislation. Prerequisite: ENSP 337, MATH 107 or 108 or MATH 105ABCD.

441AB. Current Issues in Environmental Studies (1-1) (Fall and Spring) Department Faculty

For seniors. (See 341AB)

490. Senior Project-Seminar (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.

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.

EXPRESSIVE ARTS

Provost: William McCreary

Faculty: Ernest L. Caillat, Elizabeth Herron, Wright W. Putney, Hobart F. Thomas,
Lynn Waddington

The School of Expressive Arts is designed to provide a highly personalized structure where students accept major responsibility for their own education. The curriculum is designed for the individual who believes that there exists inside him or her a demand for concrete expression.

The School is interested in attracting those students who are willing to involve themselves as totally as possible in individual or group expressive projects, to risk failure, to face uncertainty, and who are not afraid of hard work. The students and faculty are engaged in the creation of a unique educational climate with the hope of establishing a place that is open enough and inviting enough that anyone who has ever thought of becoming involved in the expressive arts in depth will have the incentive to explore the possibility of doing so.

The curriculum of the School focuses on the quality of the creative process, on designing the place and time for the work, developing a conscientious self-discipline, and pursuing the related skills and research needed to attain quality in the product. Expertise in a variety of disciplines is offered by both faculty and students and is available in workshops and on an individual basis. Students and faculty share their work in weekly assemblies and small groups.

The faculty do not function in traditional fashion as "experts" in the classroom. They might be described as being "in residence," identified in part by their traditional academic discipline. However, such focus is not in any way the exclusive and limiting contribution of the faculty members. They take part in the activities of the school as participants and learners, and students are urged to assume leadership and responsibility in the same way as faculty.

BACHELOR OF ARTS IN EXPRESSIVE ARTS

ADMISSION REQUIREMENTS

Students who have been admitted to Sonoma State University may apply for admission to the School of Expressive Arts by writing to the School of Expressive Arts directly. Prerequisites:

1. First semester junior standing.
2. Completion of all, or nearly all, of the General Education requirements.

To apply:

1. Applicants should write a letter to the Provost, School of Expressive Arts, Sonoma State University, Rohnert Park, California 94928. They should state as clearly and definitely as possible their interest in the School, touch on past experiences, personal and educational, discuss the degree of focus they are currently expressing in their educational interest, their specific or general goals, and what they have to offer to those in such an experimental curriculum.
2. The applicants' letters should include their address and a telephone number where they may be contacted.
3. Students are asked to come in for a personal interview with our faculty and students to determine the appropriateness of the curriculum for them and to allow them to make an informed choice of direction.

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MAJOR

General Education	40
Expressive Arts	48
Electives	36
Total	124

CURRICULUM

Work in Expressive Arts is largely independent. That is, it centers almost entirely around the individuals themselves and their process of expression. However, a minimal structure is provided to insure the individual student's having contact with a variety of individuals, faculty and students. Accordingly, the junior year consists of a 12 unit block:

301AB. Self Exploration through the Arts 12-12

A focus on the individual student to discover inner resources, to define in some depth important life factors and to explore significant personal meaning through various expressive media such as creative writing, photography, cinematography, painting, ceramics, music, dance, theatre arts and other arts. The senior year will consist of the following block:

401AB. Integration of Creative Process 9-9

Continued development of a flexible curriculum responsive to the concerns and needs of each student's learnings in the arts, aimed at a deep immersion in one's inner experiences through one or more of the expressive arts.

498AB. Senior Project 3-3

The senior project is a culmination of the individual's experience in the School of Expressive Arts. Special attention will be directed toward the task of giving concrete expression to each person's educational venture.

These block classes will be supplemented by the following special courses:

396 Junior Tutorial	1-6
495 Independent Study	1-4
496 Senior Tutorial	1-4
499 Special Problems	1-2

The choice of which of these supplementary courses may be appropriate is made by students in consultation with their advisor. The description of a student's work by specific courses is an attempt to facilitate the recording process within the university. It is not intended to imply specific structure in a student's profoundly independent venture. The major consists of 48 units in the Expressive Arts.

FOREIGN LANGUAGES AND LITERATURES

Department Chair: Yvette M. Fallandy

Faculty: Mary Arnold, Russian; Philip Beard, German; Sterling Bennett, German; Aaron Berman, Teacher Education and Second Language Teaching; William O. Cord, Spanish; Earl F. Couey, French and Language Laboratory; Adele Friedman, French; Francisco Gaona, Spanish; William Guynn, French; Raymond Lemieux, French; Howard Limoli, French; Marion Nielsen, German; Giovanni Previtali, Spanish; Pablo Ronquillo, Spanish; Rosa Vargas-Arandia, Spanish.

To know the language of another people is to understand its way of life, attitudes, traditions, values, and contributions to civilization. To know a foreign language is to understand another great culture in addition to one's own. The languages and literatures of France, Germany, Italy, Russia, Spain and Spanish America, and of ancient Greece and Rome, represent rich cultures accessible to students through the Foreign Languages program.

Students whose knowledge and understanding extends to other nations join the world of nations, and while knowledge of a foreign language does not of itself guarantee employment, combined with other skills, it does provide broader job opportunities.

Foreign Languages at Sonoma State University are taught in the target language with oral fluency and reading ability the primary goals. In addition to language and literature studies, the Foreign Languages Department offers courses in regional studies: French Canada, provinces of France, and areas of Germany and Mexico.

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.

INTERNATIONAL PROGRAMS

Sonoma State University students who participate in the International Programs of the California State University and Colleges may undertake a full academic year at designated foreign institutions of higher learning. Students are advised that courses taken abroad in the CSUC International Program may be counted toward the major or minor.

For additional information see page 386.

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:

Courses Numbered

1. Fewer than 2 years of high school study 101

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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.

CREDIT BY SPECIAL EXAMINATION

Students may challenge any foreign language course (see "Credit by Challenge Examination," on page 38 of this catalog.) In the case of such a challenge, an examination in the specific course will be administered by a member of the foreign language faculty.

Foreign Literature in English (FLIE)

The Department of Foreign Languages and Literatures regularly offers a number of courses in foreign literatures in English, for which there is no foreign language prerequisite. Some of the courses may be repeated as the specific content of the course may vary from semester to semester. These courses are listed below:

	<i>Units</i>
French 313A–B French Classical Studies in English	(3–3)
French 370 Creative Women in France	(3)
German 306 German Culture and Civilization in English	(3)
German 313 German Classical Studies in English	(3)
German 335 From German Poetry to German Song in English	(3)
German 340 German Literature in English	(3)
German 341 Individual German Author in English	(3)
Russian 410 Survey of Classic Russian Literature in English.....	(3)
Russian 411 Survey of Soviet Russian Literature in English	(3)
Russian 412 Tolstoy and Dostoevsky in English.....	(3)
Russian 413 Soviet Russian Nobel Prize Winners (Sholokhov, Pasternak and Solzhenitsyn) in English	(3)
Spanish 316 Spanish OR Spanish-American Literature in English	(3)
Spanish 485 The Civilization and Culture of Spain	(3)
Spanish 490 The Civilization and Culture of Spanish America.....	(3)

GRADUATE STUDY IN FOREIGN LANGUAGES

While the Department of Foreign Languages and Literatures offers no graduate courses, it enjoys a high degree of success in placing its students in the graduate programs of other institutions. *Students interested in pursuing graduate studies in foreign languages should consult their advisers early in their undergraduate program in order to assure appropriate preparation.*

BACHELOR OF ARTS IN FRENCH

The French major is fully acceptable to the Education Department for any credential offered at Sonoma State University.

MAJOR

The major in French for the B.A. degree shall include a minimum of 30 semester units in upper division courses (300–400 courses) consistent with the pattern of course requirements. Students are cautioned to study carefully the prerequisites for upper division courses.

COURSE REQUIREMENTS

Upper Division	<i>Units</i>
301–302. Advanced Grammar and Composition	6
310–311. Junior Seminar	6
425. Applied Linguistics	3
496. Senior Seminar	3
12 units selected from French 320–485	12
(except for 425, see above)	30 units

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 425.

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	6 units
French 310–311 Junior Seminar	6 units
French 425 Applied Linguistics	3 units
French 496 Senior Seminar	3 units
12 units selected from French 320–485	12 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.

101L–102L. Language Laboratory, French (1-1)

A minimum of 2 hours (100 minutes) weekly of practice sessions in the Language Laboratory. Must be taken concurrently with 101–102. Credit, no credit only.

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.

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201L–202L. Language Laboratory, French (1-1)

A minimum of 2 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 (2)

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.

250–251. Conversational French (2-2)

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 (3-3) Yr

Written composition; style and idiom; oral analysis of literary texts. Prerequisite: French 202 or equivalent.

310–311. Junior Seminar (3-3)

Introduction to the study of French culture: historical background, the arts, literature. Study of poetry, theater, and prose. Techniques of interpretation. Use of slides and recordings. Prerequisite: French 202 or equivalent. 301–302 should be taken concurrently.

320. Popular Culture (3)

The way of life (values, struggles, aspirations, amusements), past and present, of the French people. Study of speech, music, food, customs; emphasis on regional differences and relations between popular and official culture. Prerequisite: French 202 or equivalent.

350. Advanced Conversational French (3)

Systematic development of fluency, pronunciation and idiomatic usage in a framework of both free and directed conversation. For students whose undergraduate work in French is nearing completion and who want a final opportunity for oral practice. Prerequisite: Upper division standing or permission of the instructor. May be repeated.

370. Creative Women in France (3)

A critical examination of the myths and stereotypes of women's role in French society through study of literature, music, and art. Taught in English. Counts toward the Women's Study minor. May count toward the major or minor in French by arrangement with the instructor; all work will be done in French.

Prerequisite: upper division standing.

375. Aspects of Film Theory (3)

The semiotic approach to film studies: language and cinema, cinematic codes; analysis of film, the filmic text; the filmic experience, the spectator; film theory and film practice. Christian Metz, Roland Barthes, Raymond Bellour and others will be read and discussed. Conducted in English. Majors and Minors may earn credit by doing

all work in French. Open to anyone with a serious interest in film.

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 (3)

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: Two years of French or permission of the instructor.

425. Applied Linguistics (3)

Contrastive analysis of the French and English sound systems and grammatical structures, with emphasis on those problems which confront teachers of French. Prerequisite: French 302 or equivalent.

430. French Literature (3)

Times and ideas as reflected in French literature. Study of an author, genre, movement, or period. May be repeated for credit. Consult current Class Schedule for topic. Prerequisite: French 302 or equivalent; 311 recommended.

465. Aesthetic and Intellectual Movements in France (3)

The relationships between French literature and the arts; and the impact of ideas on the cultural and social life of France. Limited in any semester to a particular period or theme. May be repeated for credit. Consult the Class Schedule for current topic. Conducted in English. Majors or minors may earn credit by doing all work in French. Prerequisite: upper division standing; French majors or minors: French 301, 310.

466. French Theater—Performance (3)

Preparation of scenes from the French theater for performance. Intensive work in corrective phonetics as well as expressive use of French.

480. World Literature of French Expression (3)

Black literature of French expression, literature from the Arab world, *littérature séparatiste* of French Canada. Includes the study of the social and political context in which this literature has been written.

Prerequisite: French 301–302. French 310 or 311 recommended.

485. French Civilization (3)

Study of French art, institutions, ideas, events and personalities. No prerequisites for English-speaking students; for French speakers: French 302 or equivalent.

495. Special Studies (1-4)

Directed and individual study, discussions, and reports on selected topics.

Prerequisite: French 301–302 and French 310–311 or equivalent.

496. Senior Seminar (3)

Study and research in specific problems, including their bibliography, historical and/or biographical aspects, literary criticism and analysis.

Prerequisite: French 301–302 or equivalent; French 310–311 highly recommended.

BACHELOR OF ARTS IN GERMAN

INTERDISCIPLINARY GERMAN MAJOR

The requirements for the major in German are divided into two sections:

- I. Basic Requirements: 31 units, to be completed by all students; and
- II. Areas of study: 21 units in one of six disciplinary areas of study to be chosen by the student.

BASIC REQUIREMENTS

		<i>Units</i>
G101X-102X	Fail-Safe German, Beginning (or equivalent)	8 (4-4)
G101L-102L	Laboratory for First-Year Students	2 (1-1)
G201X-202X	Fail-Safe German, Intermediate (or equivalent)	6 (3-3)
G201L-202L	Laboratory for Second-Year Students	2 (1-1)
G220A or B	Introduction to Reading German Literature	2
G250 or G251	Conversation and Pronunciation.....	2
G301AB	Conversation and Composition.....	6 (3-3)
G496	Senior Seminar: Contemporary Issues	3
		<u>31</u> units

AREAS OF STUDY (See department for details)

- I. German Language and Literature
- II. Literature and Fine Arts
- III. History and Culture
- IV. Philosophy and Literature
- V. International Business and Foreign Policy
- VI. Linguistics

MINOR IN GERMAN

Students wishing to take a Minor in German must complete a minimum of 20 units in German, of which 9 units must be in approved upper-division courses and include German 425.

GERMAN CREDENTIAL WAIVER PROGRAM

The following program is 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.

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)
German 250	Phonetics and Conversation.....	2 units
German 310AB	Conversation and Composition	6 units
German 414	The Young Goethe and 'Sturm und Drang' or	
	German 415 The Age of Goethe or	
	German 430 Faust	3 units
German 425	Applied Linguistics	3 units
German 496	Seminar for Majors	3 units
	13 units selected from German 300-400 level courses	<u>13 units</u>
	Total units in German.....	30 units

GERMAN COURSES

The German language will be used extensively in all German courses except where noted "taught in English".

101. Elementary German (4)

Employing the direct method, this course provides students with fundamental linguistic skills, basic cultural understandings, and confidence in speaking German. Highly

motivated students may arrange to complete more than the scheduled 4 units in the first semester. Students should supplement this course with German 150 (Beginning Conversational German).

102. Elementary German (4)

Continuation of 101. Completion of 101 and 102 guarantees that the student has been exposed to, and has practiced extensively, all the essential grammatical structures of German. Students should supplement this course with German 150 (Beginning Conversational German).

101L-102L. Language Laboratory, Elementary German (1-1)

To be taken concurrently with German 101-102 or other elementary courses. Required minimum in the laboratory is 2 hours (100 minutes) per week.

150. Beginning Conversation (2)

Practice in free conversation, games, and songs. For first-year students.

Prerequisite: enrollment in 101 or 102, or equivalent experience.

201. Intermediate German (3)

Employing the direct method, this course offers students a review of material taught in German 101 and 102, as well as a broader view of German Syntax. The study of grammar is meant to support reading German in the sciences and humanities, with emphasis on poetry and prose selections from German masterpieces. Speaking and writing skills are emphasized.

Students should supplement this course with German 250 or 251 (Intermediate Conversation in German).

202. Intermediate German (3)

Continuation of 201. Completion of 202 shall mean that the student is ready to engage in specialized readings in the sciences or humanities, or to concentrate in perfecting speaking skills for interpreter work. Student should supplement this course with German 250 or 251 (Intermediate Conversation in German).

201L-202L. Language Laboratory, Intermediate German (1-1)

To be taken concurrently with German 201-202. Required minimum in the laboratory is 2 hours (100 minutes) per week.

220AB. Introduction to the Reading of Literature in German (2-2)

Readings designed to serve as an introduction to the reading of literary works in German, to assist in the building of reading vocabulary, and the development of ability to discuss and analyze literary work. May be taken concurrently with German 201, 202.

Prerequisite: One year of college-level German or equivalent. Required for majors, but open also to qualified non-majors.

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.

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301AB. Conversation and Composition (3-3)

Practice and extensive discussion in German 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 (3)

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.

310. Germany Today (3)

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.

313. German Classical Studies in English (3)

A detailed and thorough study of a classical text of literature, in translation, as a point of departure toward an understanding of the author and of his time. Conducted in English.

No prerequisite.

320. German Lyric Poetry (3)

A survey of the works of the great German poets from the middle ages to 1832 (the year of Goethe's death). Poets to be studied include Walther von der Vogelweide, Hans Sachs, Hölderlin, Schiller, Novalis, Goethe, and others.

321. German Lyric Poetry (3)

From 1832 to the present: a study of the major German poets after Goethe, including Mörike, Heine, Rilke, Benn, Brecht, and others.

325. Narrative Prose of the 19th Century (3)

A survey of representative prose works by such authors as Tieck, Hoffmann, Keller, Meyer, Storm, and Fontane, with special emphasis on the *Novelle*.

330. German Drama of the 19th Century (3)

Reading and analysis of plays from Kleist to the early work of Gerhart Hauptmann. Prerequisite: German 202 or equivalent.

335. From German Poetry to German Song in English (3)

Poems from Goethe, the Romantic poets, and others of the later 19th century in the musical settings of Schubert, Schumann, Brahms, Wolf and other composers. The literary inspiration for the German *Lied*.

No prerequisite.

340. German Literature in English (3)

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.

341. Individual German Author in English (3)

A course conducted in English with all readings in English. No knowledge of German required.

No prerequisite. 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 tasks performed. A total of 6 units of C.I.P. credit may be applied toward a degree. Does not count toward major.

405. The Art of Translation (3)

Intensive practice in translation from German to English, and vice versa, of prose (both literary and media-style), drama, and poetry. Thorough attention will be paid to the pitfalls of translation as well as to developing the special artistry which good translation demands.

412. The Medieval Epic and Medieval Poetry (3)

The *Nibelungenlied*, Hartmann von Aue's *Der arme Heinrich*, and portions of Wolfram von Eschenbach's *Parzival*; the poetry of Walter von der Vogelweide.

Prerequisite: German 202 or equivalent.

414. The Young Goethe and *Sturm und Drang* (3)

The critical and philosophical foundations of the *Sturm und Drang* movement; Goethe's early poetry and his *Götz von Berlichingen* and *Die Leiden des jungen Werthers*. The dramas of Lenz and other contemporaries of the young Goethe.

Prerequisite: German 202 or equivalent.

415. The Age of Goethe (3)

A study of the Age of Goethe in its broadest sense: Rationalism and the literary and critical work of Lessing; Goethe and his work after 1776; Schiller.

Prerequisite: German 202 or equivalent.

418. The Modern Novel (3)

A study of representative plays by German authors in the 20th century.

Prerequisite: German 202 or equivalent.

419. The Modern Drama (3)

A study of representative novels by German authors in the 20th century.

Prerequisite: German 202 or equivalent.

425. Applied Linguistics (3)

Contrastive analysis of the German and English sound systems and grammatical structures, with emphasis on those problems which will be of greatest help to future teachers of German.

Prerequisite: German 202 or equivalent.

426. History of the German Language (3)

A systematic study of the stages through the Germanic family of languages developed from the Indo-European, the emergence of "Low German" and "High German" speech areas in Central Europe, and then the transition from Old German through Middle High German to New High German. The course deals with the major phonological and morphological changes which characterize this development. Enrichment of the German vocabulary through direct borrowings and loan-translations from other languages, especially the Latin and French, is treated in some detail, as are the factors which led to the emergence of a standard literary language.

430. Faust (3)

The historical Faust and the development of the Faust legend; reading and detailed study of the text of Goethe's *Faust* I; summary of *Faust* II, with portions assigned for reading and analysis.

Prerequisite: German 202 or equivalent.

432. German Romanticism (3)

The critical and philosophical foundations of the Romantic Movement in Germany; reading of selected works of the major writers of the movement, poetry and prose.

Prerequisite: German 202 or equivalent.

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435. Individual Author (3)

May be repeated for credit for different authors.

Prerequisite: German 202 or equivalent.

495. Special Studies (1-4)

Directed individual study; discussions and reports on selected topics.

Prerequisite: German 202 or equivalent.

496. Senior Seminar: Contemporary Issues (3)

This course is designed to provide a synthesizing, common focus for students from the diverse Area Emphases of the German Major. Students will apply the knowledge and insights they have gained from their special areas to the study of the most important social, economic, and cultural issues confronting contemporary Germany.

ITALIAN COURSES

101-102. Beginning Italian (3-3)

Study of language and culture (art, music, narrative readings). Use of slides, films and recordings. See instructor for details. Students must take 101L-102L concurrently. Minimum one hour weekly conversation in Italian.

No prerequisite.

101L-102L. Language Laboratory, Beginning Italian (1-1)

Practice sessions in the language laboratory for a minimum of 2 hours (100 minutes) weekly is required.

201-202. Intermediate Italian (3-3)

Study of language and culture from St. Francis to Mastroianni, art, history, short readings and music, including opera. Student must take 201L-202L concurrently.

Prerequisite: 1 year college Italian or equivalent.

201L-202L. Language Laboratory, Intermediate Italian (1-1)

Practice sessions in the language laboratory for a minimum of 2 hours (100 minutes) weekly is required.

495. Special Studies (1-4)

Directed individual study.

Prerequisite: Consent of 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.

201-202. Readings in Latin (2-2)

Readings from Latin prose and poetry.

Prerequisite: Latin 102 or equivalent.

495. Special Studies (1-4)

Prerequisite: Four semesters of college Latin or equivalent.

RUSSIAN COURSES

101–102. Elementary Russian (4–4) Yr

Systematic study of the fundamentals of the Russian language with practice in the four basic skills of understanding, speaking, reading and writing. Students will know approximately: $\frac{2}{3}$ of all structures in the language and a vocabulary of 1500 words. Students must take 101L–102L concurrently.

No prerequisite for 101.

Prerequisite for 102: Russian 101 or equivalent.

101L–102L. Language Laboratory, Elementary Russian (1–1)

To be taken concurrently with Russian 101–102. Required minimum in the Laboratory is 2 hours (100 minutes) per week.

201. Intermediate Russian (4) Yr

Continuation of the study of the fundamentals of the Russian language, with emphasis on practice on an intermediate level in the basic skills. Students will have a command of all structures in the language, with time for reinforcement, and a vocabulary of approximately 3000 words.

Prerequisite for 201: Russian 102 or equivalent.

201L. Language Laboratory, Intermediate Russian (1)

To be taken concurrently with Russian 201. Required minimum in the Laboratory is 2 hours (100 minutes) per week.

410. Survey of Classic Russian Literature in English (3)

Major authors, literary and cultural trends in the 19th century, from Pushkin to Chekhov.

Prerequisite: upper division standing.

411. Survey of Soviet Russian Literature in English (3)

Major authors, literary and cultural trends in the Soviet period, from the immediate pre-revolutionary decade to the present day.

Prerequisite: upper division standing.

412. Tolstoy and Dostoevsky in English (3)

In-depth study of representative major works of these authors, set in the historical and cultural events of the second half of the 19th century, and their significance for the contemporary world.

Prerequisite: upper division standing; Russian 410 highly recommended.

413. Soviet Russian Nobel Prize Winners in English (3)

Major works of Soviet post-revolutionary writers, winners of the Nobel Prize for literature (Sholokhov, Pasternak, and Solzhenitsyn) in the context of the building of a “new society” in Russia.

Prerequisite: upper division standing; Russian 411 highly recommended.

414. Soviet Russia Today (3)

Major cultural developments since the 1917 Revolution in the framework of the political and economic goals of the Soviet society, based on official and dissenting documents and literature. Emphasis on the post-Stalin period from the 1970's.

Prerequisite: upper division standing.

495. Special Studies (1–4)

Directed and individual study, discussions, and reports on selected topics.

Prerequisite: Russian 302 or equivalent, or consent of instructor.

SECOND LANGUAGE TEACHING

Second Language Teaching courses are designed to train undergraduate students in the problems and solutions of second language acquisition.

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SLT 300. Applied Linguistics for Second Language Teaching	3 units
Contrastive linguistic analysis. Emphasis on first and second language acquisition phenomena in and out of the classroom. No prerequisite.	
SLT 441. Second Language Teaching and Learning Strategies: Theory.....	3 units
Modern theories of teaching and learning a second language and culture. A study of the anthropological, linguistic, sociolinguistic and psychological aspects of second language acquisition.	
May be taken concurrently with but not before SLT 300.	
SLT 442. Second Language Teaching and Learning Strategies: Practice.....	3 units
Application of second language teaching theories in peer mini-situations. Students will prepare short lessons in grammar-pattern practice, six stages of reading lessons as well as guided and free composition. They will peer teach and be evaluated by their instructors, peers and selves.	
Prerequisite: SLT 300.	
SLT 445. Field Practice in Second Language Teaching	3 units
Supervised field teaching of developed mini-units of second language materials. Teaching will take place in regional schools and/or Federally funded projects.	
Prerequisites: SLT 442 and Eng 489.	15 units

BACHELOR OF ARTS IN SPANISH

Students are advised that courses taken abroad in the CSUC 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. *Plan Selection*—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

PLAN SELECTION (see department for details)

PLAN I Concentration in Linguistics

PLAN II Concentration in Hispanic Culture

PLAN III Concentration in Literature

* 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.

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 5 hours (300 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 5 hours (300 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.

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101L–102L. Language Laboratory, Elementary Spanish (1–1)

To be taken concurrently with Spanish 101–102. Required minimum in the Laboratory is 2 hours (100 minutes) per week.

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 $\frac{1}{2}$ hour practice sessions per week in the laboratory or at home will be required.

No prerequisite.

150. Elementary Conversation (2)

Directed conversation in Spanish for elementary level students. Includes individual and class assignments in language laboratory.

Prerequisite: Spanish 101 or equivalent OR current enrollment in Spanish 101.

195. Elementary Special Studies (1–4)

Directed and individual study, discussions, and reports on selected topics.

Prerequisite: Spanish 102.

201–202. Intermediate Spanish (3–3) 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 (1–1)

To be taken concurrently with Spanish 201–202. Required minimum in the Laboratory is 2 hours (100 minutes) per week.

203. Spanish for Speakers of Spanish (3)

A course for students whose mother tongue is Spanish and who seek a greater knowledge of grammar and proficiency in the language.

Successful completion of this course will serve in-lieu of Spanish 202 as a prerequisite for admission to upper division courses.

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.

301. Advanced Composition (3)

Compositions, including preparations of critical essays and studies, to improve skills in writing.

302. Literary Analysis (3)

Discussion and critical essays in the principal genres designed to develop the ability to analyze literature.

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.

313. Spanish Classical Studies in English (3)

A detailed and thorough study of a classical text of literature, in translation, as a point of departure toward an understanding of the author and of his time. Conducted in English. No prerequisite. Does not count toward the major or minor.

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.

355. Women in Latin America in English (3)

A study of Latin American women in literature and art. Conducted in English.
No prerequisite.

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 16th 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.

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420. Literature of the Golden Age (3)

Major literary works of the 17th century.

202

425. Spanish Linguistics (3)

Phonology and morphology of the Spanish language in historical perspective, from spoken Latin to modern regional dialects.

ills

426. Seminar in Modern Varieties of Spanish (3)

Phonetic and morphological character of contemporary spoken Spanish: national

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languages and regional variants (e.g., Galician, Judeo-Spanish, Afro-Cuban, Gaudesque).

Prerequisite: Spanish 425.

430. 19th Century Spanish-American Literature (3)

The poetry and prose of Spanish-America.

440. 19th 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. 20th Century Spanish-American Literature (3)

Prose and poetry of Spanish America.

470. 20th Century Spanish Literature (3)

Poetry, drama, fiction and/or essay from 1898 to the present.

480AB. Don Quixote (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.

GEOGRAPHY

Department Chair: Claude R. Minard, Jr.

Faculty: Timothy A. Bell, William K. Crowley, Joseph W. Frasca, William J. Frazer, Alan Lipkin

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. Emphases available within the major include: Weather Science, Cultural Studies, Techniques, Regional Studies, and Environmental Problems. 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.

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.

Geography majors contemplating a career in secondary Social Science Education should refer to page 321 for Ryan Single Subject Social Science Program requirements.

BACHELOR OF ARTS IN GEOGRAPHY

Major	<i>Units</i>
General Education	40
Geography Courses	42
Supporting Subjects	8
Foreign Language and/or electives	34
TOTAL	124

COURSE REQUIREMENTS

The Geography course requirements (42 units) are divided into three groupings: Basic, Electives, and Senior Seminar. In addition, the Geography student is required to complete eight units in supporting courses from outside the major which should be chosen to enhance the student's particular emphasis within the field of geography. Prior approval of supporting courses by the major advisor is required. Upon completion of the Basic Courses, which should be accomplished during the first year of the major, students should develop a program reflective of their interests and goals in geography with the aid of an advisor. To complete the Geography Major, a student must fulfill the following requirements:

	<i>Units</i>
I. <i>Basic:</i> 300 (Introduction to Methods of Geographical Analysis), 302 (Physical Geography), 303 (Cultural Geography)	10
II. <i>Electives:</i> The student must complete twenty-four (24) units from	

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- the following list. At least four (4) units must be taken from each category (A, B, C, D). In category D, the student must take either 380 (Map and Air Photo Interpretation) or 385 (Introductory Cartography and Graphics) 28
- A. Physical: 305, 306, 310, 360, 370, 416
- B. Cultural: 320, 330, 335, 338, 340, 343, 345, 350
- C. Regional: 390, 391, 392, 420, 430, 440, 460
- D. Techniques: 307, 318, 380, 385, 485
- III. Senior Seminars: 490A (Geographic Thought), 4 units
- 490B (Senior Problems), 4 units 8
- IV. Supporting Courses: Eight (8) units in supporting courses are required. These must be chosen in consultation with the student's advisor and should be reflective of the option chosen by the student. Up to five (5) units of the Geography Intern Program (Geog. 499) may be utilized as a supporting course with the permission of an advisor. 8

OPTIONS

Within the framework of the GEOGRAPHY MAJOR COURSE REQUIREMENTS, a student may create a concentration of subject matter (Option). The Option may be student created and worked out with an advisor. Such individualized options are especially recommended for students considering a teaching credential or an advanced degree in geography. However, the student may instead select an Option that will allow concentration in one of the following areas of specialization: **Weather Science, Environmental Problems, Cultural Studies, Techniques, or Regional Studies**. The specific courses applicable to each of the above Options are outlined in the departmental brochure. The student will select sufficient units from these courses listed under the chosen Option to fulfill the Major Course Requirements (as described in the previous section). Consultation with an advisor is required to insure that the program fulfills both the student's need and the department's requirements. Supporting subjects should also be chosen to enhance the selected Option.

MINOR IN GEOGRAPHY

The Geography Minor provides an effective means of strengthening the student's academic area of interest. The minor may be completed by fulfilling twenty (20) units within one of the Options outlined in the previous section (Weather Science, Environmental Problems, Cultural Studies, Techniques, or Regional Studies) or with the assistance of a Geography Advisor, a special minor may be developed to suit a student's specific academic needs.

GEOGRAPHY COURSES

General**

101. Elementary Map Reading (2) Frasca

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.

201. Man and Environment (4) (Fall semester only) Crowley

A survey of the interrelationships of the physical and cultural environments. Topics to be examined include weather and climate, vegetation, maps and air photos, popu-

** Courses in this section are designed for non-majors.

lation, settlement patterns, resources and economic development.

(This course is designed as a one semester course which provides background work for advanced geographical work, or satisfies the Social Science Division elective in the General Education program.)

202. World Regional Geography (4) (Spring semester only) Frazer

Selected cultural regions are utilized as the basis for study. Economic development, political problems and man-land relationships are stressed.

(This course is designed as a one semester course which satisfies the Social Science Division elective in the General Education Program or satisfies the needs of the credential programs.)

311. Geography of California Wines (2) Crowley

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) Crowley

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) Minard

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.

315. Gold Mining Landscapes (1) Crowley

An examination of the impact of gold mining on the landscape in Yuba and Nevada Counties. Stress will be placed on: (1) the gold mining process, (2) the physical alteration of the land resulting from various types of gold mining, and (3) the settlement network developed as a result of gold mining activities. The course includes preliminary lectures and a weekend field trip.

377. Current Topics in Geography (1) Department Faculty

A series of lectures designed to acquaint the student with the interests of professional geographers in the 1970's. May be repeated for up to four (4) units of credit.

Basic

300. Introduction to Methods of Geographical Analysis (2) (Fall semester only) Frasca, Minard

Introduction to methods used in current geographic field and library research through the study of a selected local area. Course involves exposure to research design and variety of modes of data gathering, analysis, and presentation.

302. Physical Geography (4) (Fall semester only) Lipkin, 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.

303. Cultural Geography (4) (Spring semester only) Bell, Crowley

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.

Electives

A. Physical

305. Oceanography (4) Lipkin

An introductory course which considers the age, origin, and topography of the ocean basins, the composition of seawater, the ocean's energy budget, climate, tides, currents, and waves. The resource potential, ecological problems, shoreline processes, and the relationship of humanity to the sea, past, present, and future is explored.

306. Environmental Geology (3) Anderson

Lecture, 3 hours.

Study of geological principles and processes as they relate to our natural environment emphasizing the impact of man on the geological environment. Major topics will include earthquakes and their associated hazards; landslides, slope stability, and building construction; groundwater and pollution; shoreline processes and coastal development; engineering geology and construction of highways and dams; development of natural resources, conservation, and ecology. Specific content will vary from year to year depending on individual instructor. Prerequisite: Geology 102, Geography 302 or consent of instructor.

310. Elementary Meteorology (4) Lipkin

A systematic study of the earth's atmosphere stressing those elements (temperature, humidity, solar radiation, pressure and wind) which influence the weather on a local and world-wide scale. Work with weather instruments and maps is an integral part of the course.

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 302, Geology 102 or consent of instructor.

370. General Climatology (4) Lipkin

An exploration of the atmosphere, how it differs from place to place and time to time. The role of radiation, temperature, humidity, evaporation, cloudiness, precipitation, and surface factors: topography, exposure and altitude in differentiating world climates. Climate's influence on man physically and culturally in history and prehistory. Climate change, drought and flood, and solar radiation are among the topics investigated in detail.

416. Biogeography (4) 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.

B. Cultural

313. Geography of Recreation (4) Frasca

A survey of outdoor recreation and the leisure ethic in the American culture. Topics include federal and state park systems, urban outdoor recreation, tourism, and the economics of outdoor recreation. Examples of outdoor recreation systems in California will be examined. Field trips to recreational areas will be scheduled.

320. Political Geography (4) Frazer

An inquiry into the structure and characteristics of political units in order to compare the concepts of state and nation state. The nature of boundaries, frontiers and shatter zones is studied in detail and the development of geo-political theories is traced.

330. Historical Geography of North America (4) Bell

A study of the settlement history of North America and of the changing concepts of man-environment relationships in the chronology of the Europeanization of the American landscape. Investigations into where and why people settled as they did, and the origins of the economic and spatial relationships that constitute the present American scene will be the focus of the course.

335. Rural Geography (4) Bell

The origin, change, and spread of domesticated plants and animals. Consideration of diverse agricultural systems, rural settlement types and land uses, and modern trends in rural land uses and agriculture.

338. Social Geography (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.

340. Resource Utilization and Energy Development (4) Frazer

The distribution, production and problems of man's mineral and agricultural resources are discussed. The potential and problems of energy development in the United States and the world are included in topics studied.

343. Economic Geography (4) Frazer, Crowley

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.

345. Third World Development (4) Crowley

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.

350. The City (4) Crowley

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.

C. 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 (4) Bell

Offerings will vary and will focus upon special topics of interest, such as problems of population growth and distribution, resources and economic development, and regionalism in the continent.

392. Latin America: Culture and Environment (4) Crowley

A consideration of topics of special importance to Latin America, including population growth, urbanization and economic development. Specific countries will also be examined in detail with an emphasis on settlement patterns and environmental characteristics.

420. Seminar in the Regional Geography of Western Europe (4) Bell

Offerings will vary and will focus upon special topics of interest, including the physical, cultural, historical, and economic relationships of Europe and its regions.

430. Seminar in the Regional Geography of Asia (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.

440. Seminar in the Geography of the Pacific (4) Bell

Offerings will vary and will focus upon special topics of interest, such as the origin and movement of culture groups and problems of economic and political development.

460. Seminar in Area Studies (4) Frazer

This course will provide offerings in special problem areas. For example: China and South East Asia, arid lands, and underdeveloped lands may be discussed.

D. Techniques

307. Remote Sensing of the Environment (4) Frasca

Examination of the principles and concepts of remote sensing. Emphasis is placed upon basic remote sensing principles and the development of interpretative techniques using remote sensing materials in supplying both physical and cultural information concerning the earth.

Application of remote sensing information to land use and planning, resource evaluation, agriculture, environmental problems, structural geology, and archaeological considerations is examined.

318. Field Experience—Baja California, Mexico (3) Crowley

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 and Air Photo Interpretation (4) 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.

385. Introductory Cartography and Graphics (4) Frasca

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.

485. Seminar—Cartographic Problems (2) Frasca

An examination of special cartographic topics and problems. Topics include computer graphics and mapping, scribing, and advanced thematic mapping.

Prerequisites: Geography 385 (Introductory Cartography) and enrollment in Geography 499 (Geography Internship Program).

Senior Seminars and Special Programs

490A. Seminar in the Development of Geographic Thought from Ancient to Modern Times (4) (Fall semester only) Frazer

Prerequisite: Senior year Geography Majors; open to others with permission of instructor.

490B. Seminar: Senior Problems (4) (Spring semester only) Department Faculty

The seminar will provide a framework within which advanced students will apply the techniques and methodologies acquired in their area of interest (option) within the Geography major. Research topics or problems will be based on the student's interest, but will focus on a common area such as the North Bay Region.

495. Special Studies (1–4) Department Faculty

499AB. Geography Internship Program (3–5) Department Faculty

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: Rolfe Erickson

Faculty: Thomas Anderson, Walt Vennum, G. Davidson Woodard,
William H. Wright III

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 several major programs that lead to either the B.A. (Liberal Arts and Pre-Professional Plans) 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	2
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
	24

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.....	45
General Education	45
Supporting Courses	20
Electives.....	14
	124

Course Requirements

Geology Core Courses	24
Geology 320—Field Geology	4
Geology 427—Adv. Field Geology	4
Geology 413—Paleontology	4
Geology 450—Senior Seminar	3
Upper Division Geology Electives.....	6
	45

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 three 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.....	44
General Education	40
Supporting Courses	16
Electives.....	24
	124

Course REquirements

Geology Core Courses	24
Geology 320—Field Geology	3
Geology 427—Adv. Field Geology	4
Geology 413—Paleontology	4
Geology 450—Senior Seminar.....	3
Upper Division Geology Electives.....	6
	44

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

LIBERAL ARTS GEOLOGY PLAN

This plan is intended for students who wish to study geology as a general interest. It is intended to be a terminal degree in geology and is *not* for students intending to

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pursue graduate study in geology. Persons training for work as a geologic technician or park service naturalist should consider this option.

	<i>Units</i>
Major Courses.....	32
General Education	40
Supporting Courses	6
Electives.....	46
	124

Course Requirements

Geology 205—Mineralogy	2
Geology 303—Advanced Principles of Geology.....	4
Geology 304—Introduction to Field Mapping	1
Geology 326—Stratigraphy and Earth History	4
Geology 317—Structural Geology	4
Geology 318—Structural Geology Field.....	1
Geology 495—Special Studies—Petrology	2
Upper Division Geology Electives.....	14
	32

Required Supporting Courses

Mathematics 107 or equivalent	4
Courses in Physics <i>and</i> Chemistry including a laboratory (6 in G. E.)	2
	6

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. This program is designed for students wishing to teach in California secondary schools.

Basic Core	<i>Units</i>
Astronomy 200	3
Biology 215	4
Chemistry 115AB	10
Geography 310	4
Geology 303 and 304.....	5
Physics 210AB, 209AB.....	8
Mathematics 107.....	4
	38
<i>G.E. Remainder</i> (40 units—12 in core)	28
The Liberal Arts degree in geology (27 units + the 303 and 304 in the core; see catalog description of the major)	27
Education Courses.....	24
Electives.....	7
Total	124

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. Numerous field trips will be taken. Not intended for geology majors.

120. Regional Field Geology (3) (Alternate Spring) Vennum, Anderson

Lecture, 1 hour; 10-day field trip.

Field study of rocks, minerals, and landforms and the processes which form them. Geologic history of the western United States. A 10-day field trip will be taken during spring vacation to study geology in classical localities such as Death Valley and Grand Canyon National Parks. Not intended for geology majors.

Prerequisites: Geology 102 or equivalent; concurrent enrollment acceptable.

202. Rocks, Time and Evolution (3) (Fall) Erickson

Lecture, 3 hours.

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.

Properties and origin of common silicate and ore minerals. Laboratory exercises emphasize hand specimen identification of minerals.

Prerequisites: Geology 303 or concurrent enrollment in Geology 303, Chemistry 115A or concurrent enrollment in Chemistry 115A.

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 with lab. 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.

302. Geological Oceanography (3) (Spring) 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.

303. Advanced Principles of Geology (4) (Fall and Spring) Woodard, Wright

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 and Spring) Department Faculty

Field studies done in conjunction with Geology 303. Required weekend field trips.

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Prerequisite: should be taken concurrently with Geology 303.

305. Optical Mineralogy (2) (Fall) Erickson, Vennum

Lecture 1 hours; laboratory 3 hours.

Introduction to crystallography, crystal chemistry and the principles of optical mineralogy. Laboratory exercises emphasize crystal symmetry determination, stereonet crystal analysis, and mineral identification with the petrographic microscope.

Prerequisites: Geology 305A or equivalent or concurrent enrollment in Geology 305A. Math 107 required.

306. Environmental Geology (3) (Fall) 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; 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, Vennum

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 305B or equivalent. Chemistry 115B or concurrent enrollment in Chemistry 115B.

308. Igneous and Metamorphic Petrology Field Course (1) (Spring) Erickson, Vennum

Field studies done in conjunction with Geology 307. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 307.

311. Stratigraphy and Sedimentation (4) (Fall) Anderson

Lecture, 2 hours; laboratory, 6 hours.

The origin, classification and physical stratigraphy of sedimentary rocks. Modern techniques of studying sediments and sedimentary rocks including extensive use of petrographic microscope.

Prerequisite: 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 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 hours; 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.

Water as a natural resource, the hydrologic cycle, distribution of water on the earth. Atmospheric water, soil water, runoff, and groundwater flow 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.

326. Stratigraphy and Earth History (4) (Alternate Spring) Anderson

Lecture, 3 hours; laboratory, 3 hours.

The principles of historical geology will be discussed with special emphasis given to the application of these principles to the geologic development of North America. The geologic history of California will be treated in detail. The use of sedimentary rocks, fossils, and structural and tectonic principles will be discussed, especially as they relate to our understanding of historical geology. Laboratory work will include a study of sedimentary rocks and their properties, fossils and their occurrence and distribution, the construction and interpretation of various types of geologic maps, and detailed studies of selected maps representative of the various geologic provinces of North America.

Prerequisites: Geology 303 or consent of instructor.

360. Geomorphology (4) (Spring) Minard

Lecture 3 hours; laboratory 3 hours.

Detailed study of the earth's landforms; emphasis upon geologic structures, erosional and depositional processes and interrelationships with soils, vegetation and hydrology. Use of topographic maps, geologic maps and cross sections and aerial photos in the interpretation of landforms. Field trips and field reports.

Prerequisites: Geography 201, 202, 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 and does not fulfill any requirements of the geology major.

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.

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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 390 and Chemistry 400.

Prerequisites: Upper class standing and consent of the instructor.

405. Advanced Optical Mineralogy (2) (Alternate, Fall) Erickson, Vennum

Lecture, 1 hour; laboratory, 3 hours.

Advanced topics in crystallography and optical mineralogy.

Introduction to the universal stage.

Prerequisite: Geology 305 and consent of instructor.

406. X-Ray Analysis of Geologic Materials (2) (Fall) Anderson, Vennum

Lecture 1 hour, laboratory 3 hours.

Introduction to the use of x-ray diffraction and powder techniques.

Prerequisite: Geology 305B.

410. Geophysics (3) (Alternate Fall) Wright

Lecture, 3 hours.

The principles of physics as they are related to the earth. Physical basis for the methods of geophysical investigation: seismology, gravity and magnetics. Application of geophysical methods of geological problems such as oil exploration and continental drift.

Prerequisites: Geology 102, or 303, Math 162, or consent of instructor.

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; 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) (Fall) Woodard

Lecture, 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

Lecture, 2 hours; laboratory, 3 hours.

Physical and chemical controls on ore deposition, including the origin and transport of ore bearing solutions, differentiation of magmas, supergene enrichment of ores and stratigraphic and structural controls on ore formation. Discussion of various mining districts (including exercises with selected ore suites) and methods in ore exploration are included.

Prerequisite: Geology 307 or concurrent enrollment in Geology 307.

***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 and consent of instructor.

430. Advanced Igneous Petrology (2) (Alternate, Fall) Vennum

Lecture, 1 hours; laboratory, 3 hours.

Advanced principles of igneous petrology. Laboratory exercises will emphasize microscopic petrography and will utilize rock suites from classical petrologic localities. Introduction to the universal stage. Offered Fall semester, alternate years.

Prerequisites: Geology 307, Geology 308 and Consent of Instructor

431. Advanced Metamorphic Petrology (2) (Alternate Spring) Vennum

Lecture, 1 hours; laboratory, 3 hours.

Advanced principles of metamorphic petrology. Laboratory exercises will emphasize microscopic petrography and will utilize rock suites from classical petrologic localities. Offered Spring semester alternate years.

Prerequisites: Geology 307, Geology 308 and Consent of Instructor. Geology 430 recommended.

450. Senior Seminar in Geology (3) (Spring) Department Faculty

Critical study of problems in current geological research; course content will vary from year to year. Extensive reading in, and discussion of articles from major professional journals. One or more papers on selected topics.

Prerequisite: Senior status in Geology.

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.

Prerequisites: Approval of advisor, and Division Chairman.

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.

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* 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 College.

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

History is an integrative discipline which allows students to analyze the interrelationship of individual and group behaviour as reflected in social, economic, cultural, and political institutions and activities. It provides perspective, encouraging one 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 "roots", a 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, in that of the world's major civilizations, and in that of "third world" cultures. 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 wells 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 418–420.

BACHELOR OF ARTS IN HISTORY

Major

Each student plans his/her major program in consultation with a departmental advisor.

COURSE REQUIREMENTS

A. Lower Division (all courses or transfer equivalents required:	<i>Units</i>
1. History 100	2
2. History 251*	0–3

3. History 201 and 202*	3
B. Upper Division:	
1. History 391	4
2. One upper division survey course from among the following: History 304, 330, 336 or 339	4
3. History 498—Senior Seminar, or History 499—Senior Thesis	4
C. Additional courses (to be chosen in consultation with a departmental advisor and of which at least 14 units must be in upper division courses)	21
Total History units required	38–41
D. General Education Courses	40
E. Minor and/or Elective and/ Foreign Language and/or Credential Courses	43–46
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. This specialized major consists of (1) History Major Requirements—21 units; (2) “Third World” history courses—16 units; and (3) two courses outside History on “third world” cultures—6–8 units. Interested students should consult Dr. Tony White, History Department.

MINOR IN HISTORY

The History minor consists of any 20-unit pattern in history courses chosen in consultation with a departmental faculty advisor. Students planning a history minor for teaching purposes are urged to complete the entire lower division basic survey sequence covering both World and United States history and a course in “The Study of History.”

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 475 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 in History from an accredited institution. Students with majors in other fields may be considered on the basis of their GRE scores, academic records, and letters of recommendation.
2. An over-all and major field grade point average of 3.0 or better for all college work 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

* Courses used to fulfill general education requirements may not be used to satisfy major unit requirements.

- 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 applications 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 six 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 and at least 21 units of the pattern must be completed in residence at Sonoma State University. All courses are to be taken for 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 five years from the time of admission to candidacy.
4. With the approval of the student's committee chairman and the Departmental Graduate Adviser, the satisfactory completion of one of the following two options:
 - A. Master's Thesis Option (*chosen in consultation with committee chairman*):Units

Courses at the "300" or "400" level	15
Graduate courses at the "500" level.....	9
Master's Degree Thesis Research (History 599)	6
<i>Total Units Required for the M.A. in History</i>	<i>30</i>
 - B. Field Examination Option (*chosen in consultation with committee chairman*):

Courses at the "300" or "400" level	15
Graduate courses at the "500" level.....	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>

HISTORY COURSES

Lower Division

100. Approaches to History (2) 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.

150. U.S. History: Credit by Examination (3)

CLEP Examination—See pages 352 and 418 of the catalog. The State Code requirement in U.S. History may be satisfied by passing an examination such as the CLEP Examination in American History: Subject Examination and Essay. Approval of the exam and passing levels are determined by departmental policy. (Confer with the History Department Chairman.) May be used as an alternative to challenging a specific course.

151. World History: Credit by Examination (3)

CLEP Examination—See pages 352 and 418 of the catalog. The general education requirement in World History may be satisfied by passing an examination such as the CLEP Examination in the History of Western Civilization: Subject Examination and Essay. Approval of the exam and passing levels are determined by departmental policy. (Confer with the History Department Chairman.) May be used as an alternative to challenging a specific course.

201. Foundations of World Civilization (3) 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) 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)

251. History of the United States to 1865 (3) 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) 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)

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) 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**

A study of the cultures of southwest Asia and the east Mediterranean from the emergence of the early civilizations in the fourth millennium to the rise of Islam in the sixth century A.D.

305. Islam (4) Poe

A history of the Arabic speaking peoples from their earliest records through their cultural florescence in the middle ages to the Turkish domination of the Middle East.

306. The Middle East Since 1453 (4) Mellini

Major themes in Near Eastern and Islamic history since the rise of the Ottoman Empire. The course of European dominance, the Islamic and Arab nationalist movement, and the twentieth-century social and economic changes will be stressed.

310. Law and Society in the Western World (4) Laferriere, Brown, Markwyn

The course will endeavor to study the development of certain aspects of law and legal systems in western civilization. Emphasis will be on Roman Law and English Common

Law and their impact upon shaping western society.

320. Ancient Thought and Culture (4) Poe

Using translations of ancient sources from the earliest written records through the emergence of Christianity, the course will trace the intellectual and spiritual adventure of the Ancient Near East.

321. European Thought and Culture (4) Watrous

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. (Staff)

322. European Social History (4) Watrous

Pre-industrial and industrial society in Europe, as seen through class and family structures, rural and urban life, youth and adults, diet and disease, technology and transport, education and leisure, housing and dress, against a background of changing religious, cultural and economic values.

323. European Economic History (4) Laferriere

History of the economic growth and development of Western Europe from the time of the commercial revolution to the present. Emphasis will be on the industrial age including an analysis of the impact of industrialism in society.

324. Emergence of European Labor (4) Laferriere

This course will trace the development of European labor from the pre-industrial era (agricultural and commercial) to the present. An attempt will be made to ascertain the social, economic and political condition of Europe's working men and women. Some attention will be given to the forces, as well as the means, that contributed to the betterment of the laborer's status, be it social, economic or political.

329. Death in Western Civilization (4) Price

A central concern of history is the mind of the past and changes in thought and feeling over time. Dr. Samuel Johnson observed that when a man knows he is to be hanged it concentrates his mind wonderfully. All humans have been sentenced to die, and the ways in which, in different times and places, that has concentrated their minds is the subject of this course.

330. Introduction to African History (4) Holmes

Survey of African civilizations from the 18th 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 polities to survive foreign domination. Cross-listed as AAMS 330.

336. Introduction to the Far East (4) Lin

An analysis of the lifestyle, culture and history of the Far East, including religion and ancestor-worship, trade and cuisine through their historical evolution to present practices. An examination will be made of both similarities and differences among Chinese, Japanese, Korean and Vietnamese culture and developments as well as the practical value and relevancy to Western audiences of the subject matter.

339. Introduction to Latin American History (4) Wexler, White

A one-semester survey of Latin American society and culture from pre-Columbian times to the present. Includes pre-Columbian Indian cultures, conquest and colonization, slavery, religion, wars of independence, race relations, nationalism, industrialization, urbanization, relations with the United States, women, and contemporary revolutions. Fiction, music, painting, and folklore will be used as well as more traditional historical sources.

345. The Study of Revolution (4) White

Comparative analysis of major twentieth century revolutionary movements, including their historical roots, nature and role of personalities, influence of ideas and intellectual and social groups, phases of development, foreign factors and the consequences of these revolutions.

346. Comparative Communism (2-4) Lin, Watrous

A comparative study of specific Communist societies, from pre-revolutionary times to socialist transformation. Issues include the nature of revolution, power structure and leadership, economy and culture, elite and masses, freedom and authority, and relationships with socialist and capitalist states.

347. Renaissance Personality (2) Watrous, Laferriere

A study of prominent men and women of the Italian Renaissance, their characteristics in common and their individual distinctiveness. An analysis of artistic, philosophical, social, religious and political views through inquiry into childhood and family experiences, social origins, environment, aspirations and ideals.

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. Major Historical Problems (1-4) Department Faculty

Studies of particular themes, issues and individuals that are of special interest to historians. These courses are designed for the general student, as well as majors.

351. History and Human Aggression (4) Brown

This course examines various psychological theories of human aggression and tests them historically by case studies involving Hitler and the Camps, Robespierre and the Reign of Terror, and Gandhi and the liberation of India.

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 (3-4) Mellini, Markwyn

re 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. The Redwood Empire: Studies in Regional and Community History (2-4) Markwyn, Harris

re 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 regional history.

364. Nature and American History (4) Markwyn

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za- 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. Collecting Local Stories (3) Morse, 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 LIBS 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.

391. The Study of History (4) 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) 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.

396. Psychohistory (4) Wexler

Introduction to psychological approaches to historical issues, particularly psychobiography, the impact of mass trauma, the emotional meanings of social change. Includes study of theoretical contributions of Erik Erikson, Robert J. Lifton and Bruno Bettelheim.

399. Prehistory of the East Mediterranean and Europe (4) Poe

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

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

A history of the Roman people from the Age of the Gracchi to the Age of Constantine. The course will emphasize the social, political, economic and cultural changes that occurred during that period with a view to understanding the impact that Rome made on the world.

402. The Middle Ages, 476-1450: The Age of Chivalry (4) Laferriere

"Mediterranean" history from the fall of Rome through the decline of the Holy Roman Empire. Coverage includes 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.

402A. The Gothic Cathedral in History (2-3) Laferriere

Introduces students to the society that built some of Europe's great Gothic cathedrals, eternal monuments to human genius and piety. These engineering marvels of glass and stone gave us insight into and an understanding of the medieval mind, the technological capabilities of the age, and the financing, construction, evolution and meaning of the cathedral.

- 403. Europe, 1450–1650: Renaissance and Reformation (4) Laferriere, Watrous**
 A study of Western European history covering the flowering of Italian art and literature, its expansion and influence, the religious conflict, the loss of European unity, the rise of nation states, the Age of Discovery, and related political, social, economic, and intellectual developments of the period.
- 404. Europe, 1650–1789: The Age of Absolutism and Enlightenment (4) Brown, Watrous**
 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**
 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**
 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 20th Century (4) Brown**
 Through history, literature and film this course will examine the meaning of war and peace as a theme of 20th century civilization. Topics to include: national and class war, the League of Nations, the death camps, militarism and pacifism.
- 411. History of Spain (4) White**
 A study of the evolution of the Spanish people from the first Iberians to the present, with particular emphasis on the Spanish Civil War. Also includes Roman, Visigothic, and Muslim Spain; the Reconquest; Spanish Inquisition; Golden Age; the War of Independence, and national characteristics and cultural values.
- 412. France: People, Power and Culture (4) Brown, Laferriere**
 An examination of French civilization across its history, power structures, and culture, designed to provide a basic understanding of French civilization and its fundamental role in shaping the course of Western and World civilizations.
- 414. The Rise of Modern Germany (4) Watrous**
 An analysis of the major features of German history since 1800. Special attention is given to the emergence of romanticism and nationalism, unification and the Age of Bismarck, World War I and the Weimar Republic, the rise of Hitler and the Third Reich, World War II and the post-war republics.
- 418. Origins of Modern Russia (4) Watrous**
 From the roots of Russian history in the Kievan, Mongol and Muscovite periods to the rise of Imperial Russia under Peter the Great up to the Crimean War. Topics include the nature of Russian society, culture and government and Russia's relations with the West.
- 419. Modern Russia and the Soviet Union (4) Watrous**
 The transformation of Russia through reform, industrialization, war, and revolution. Focus includes Populism and Marxism, the Revolution of 1905, the transition to a Soviet state in 1917, and the Soviet Union under Lenin, Stalin, and their successors.

420. Tudor and Stuart Britain, 1485–1714 (4) Brown

A study of English history from the end of the Wars of the Roses through the reign of the Stuarts. Includes late renaissance England, the development of the Tudor national state, the Elizabethan Age, the English Civil War, and the Glorious Revolution.

421. Modern Britain, 1707 to the Present (4) Mellini

The evolution of British society from a constitutional monarchy to the welfare state. Topics include the British overseas, the industrial revolution, Victorian culture, the impact of the two twentieth-century wars, and the evolution of the welfare state.

435. History of China (4) Lin

A general survey of the history of China from earliest times to the present. Particular emphasis will be given to the rise of the People's Republic of China and its impact on pre-revolutionary political, social, economic and cultural patterns.

436. Chinese Thought and Culture (4) Lin

A study of Chinese thought and culture from the stone age to the present, concentrating on the development of Confucianism, Taoism, and Buddhism; Chinese science, technology, and medicine; literature, the concepts of peace and war, sinicization of Western ideas, and the thought of Mao Tse-tung.

438. History of Japan (4) Lin

A study of the development of Japan from earliest times to the present day. Particular emphasis will be given to Japan's modern transformation, especially in the twentieth century.

440. Ancient and Colonial Mexico (4) White

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.

441. Modern Mexico (4) White

The evolution of the Mexican nation from independence to the present with a major emphasis on the Revolution of 1910. Includes the study of Mexico's colonial legacy, Mexican Catholicism, *machismo* and women, political and economic development, artistic and literary expression, and personalities such as Santa Anna, Juarez Díaz, Madero, Zapata, Villa, Cárdenas, Rivera, Orozco, etc.

444. Twentieth Century Latin America (4) Wexler, White

A study of the major political, social, economic and cultural developments in Latin America since 1900. Includes political movements and their leaders, problems of economic development, literary and artistic expressions, the Catholic Church, students and education, the role of females, cultural values, and relations with the United States.

446. Women in American History (4) Wexler

The changing roles, status and consciousness of women in North and South America. Emphasizes the origins and expressions of sexism, feminist thought and strategy, and female contributions to American society and culture.

447. Women's Biography (4) Wexler

Studies of the lives and ideas of selected women from the United States, Europe and Latin America.

448. Military History (4) Laferriere

An examination of strategic planning, tactical innovation, military systems, and campaigns from the invention of gunpowder to the development of nuclear power. Particu-

lar attention will be paid to the wars of the twentieth century, their causes and consequences.

449. Historical Themes and Issues (1–4) Department Faculty

Topical studies in historical themes, issues and for areas extending beyond the scope of conventional political, geographic, and/or chronological subdivisions. Consult the class schedule for the specific topic selected by the instructor.

450. Colonial America to 1750 (4) Markwyn

Studies 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. The United States, 1750–1815: The New Nation (4) Markwyn

Studies the emergence of the United States from its revolutionary origins through the “second war of independence.” Topics include the effects of the Great Awakening and of European thought on colonial society, the movement toward independence, the Constitution of 1787, and the ideological and social divisions of the early republic.

452. The United States, 1815–1877: Expansion, Reform and Civil War (4) Price

Territorial expansion, including the War with Mexico, economic sectionalism and national politics, the rise of Jacksonian democracy and social and political reform, the widening rift between the sections, the secession of the southern states, Civil War and the idealism and failure of the Reconstruction era.

453. The United States, 1877–1933: Emergence of Modern America (4) Harris, Johnson, Karlsrud

A study of the major political, social, economic, diplomatic and cultural developments in the transformation of the United States to an urban, industrial nation. Includes settlement of the last frontier, the new immigration, imperialism, and political reform.

454. The United States, 1933–Present: Recent America (4) Grivas, Johnson

A close analysis of the Great Depression years with emphasis on Franklin Roosevelt and the New Deal. Emergence of the United States as a major world power, first with its involvement in the Second World War, and then in the evolution of the Cold War. Problems and policies of America’s political leaders from Roosevelt to Carter, with emphasis upon foreign affairs, political parties, and social conflict.

459. Mass Violations of Civil Liberties (4) Johnson

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.

460. American Thought and Culture (4) Harris, Markwyn, Price

Studies ideas and culture in the United States from the age of colonization to the present. Chronological focus and topics will vary according to the instructor. When the class is offered prospective students should consult the departmental course descriptions for the period and topics to be covered.

463. Family History (4) Harris

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

Examination of the outstanding figures (and scoundrels) who made fortunes in merchandizing, international trade, banking, railroading, manufacturing, advertising and speculation—their motivations, institutions, and their impact upon the eras in which

they lived. Includes an analysis of the historical and present-day significance of the stock markets and commodity exchanges. Cross-listed as Management 494.

466. United States Foreign Relations (4) Harris, Price

An examination of American diplomatic history and practice from the Revolutionary era to the present time. Coverage includes 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.

467. American Labor History (4) Karlsrud

A study of labor and laboring classes in an industrializing and urbanizing America with particular emphasis on the working people themselves—union and non-union, employed and unemployed—and the conditions in which they lived.

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 emphasis, 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.

470. Religion in American History (4) Markwyn, Price

Studies the role of religion in American history since the sixteenth century. Topics include the impact of the Reformation, the rise of denominationalism, the role of religion in the slavery controversy, in territorial expansion, and in industrialism, church-state relations, and the resurgence of religious concerns in the present day.

471. The American West (4) Grivas

A regional history of the Trans-Mississippi West. Coverage includes an analysis and evaluation of the major political, social, and economic events relating to the western United States.

472. California: Spanish and Mexican Periods (4) Grivas

Colonization and expansion of New Spain. The development of political, social, and economic institutions of Mexican California. The American conquest and the early decades of California as a State in the Union.

473. California Since the Gold Rush (4) Grivas

An analysis and evaluation of the major issues in California history from the late nineteenth century to the present with emphasis on the political, social, and economic currents of twentieth century California.

476. The American Constitution and the Bill of Rights 1787–1791 (4) Markwyn

This course studies the period 1787 to 1791 in an effort to understand the ideal and material background of the Philadelphia Convention and the intent of the men who established the documents which have formed the basis of the American Republic.

477. American Social History Since 1865 (4) Karlsrud

The development of American society from the Civil War to date: social mobility, class structure, social movements and institutions in American life.

495. Special Studies (1–4) 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) 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) 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) 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**
- 595. Special Studies (1-4) 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) 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) 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) 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) 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.

I and

HUTCHINS SCHOOL OF LIBERAL STUDIES

Provost: Jeannine Schuler-Will

Faculty: Les K. Adler, Susan Barnes, Maurice Blaug, Michael Coleman, Lu Mattson, Lou Miller, Edgar Morse, J. Anthony Mountain, Warren Olson, Frederick Rider, Jacqueline Strain, Richard Zimmer

The Hutchins School of Liberal Studies is a four-year, interdisciplinary school granting a B.A. in Liberal Studies. It is one of three Cluster Schools within Sonoma State University.

Interdisciplinary education focuses on the interrelated nature of knowledge and offers innovative ways of bridging the traditional divisions among disciplines. The Hutchins program, which is designed to provide a unified liberal arts education, is taught by a faculty drawn from the humanities, social sciences and natural sciences. The School provides students with integrated intellectual skills and the opportunity to define and develop personal and professional interests leading to a variety of career options.

Education in the Hutchins School is a process of active and interactive learning requiring self-motivation and responsibility from students. It combines careful advising, accessibility to faculty and a community atmosphere. The learning environment consists primarily of small seminar discussions and close student-faculty interaction, with increasing emphasis on independent study.

The Hutchins program thus offers students both the structure necessary to guide intellectual development and the flexibility which allows for and supports individual growth and choice.

All Hutchins students can 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 either for the Fall or Spring semesters and at any undergraduate level. 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 the Hutchins School's own application form directly to Hutchins School. These may be obtained at the Hutchins office or by writing to the Provost in care of Hutchins School.

LIBERAL STUDIES DEGREE REQUIREMENTS

Students must fulfill the degree requirements specified for all graduates of Sonoma State University. In addition, to graduate from the Hutchins School, each student must complete:

	<i>Units</i>
General Education Requirements	40
(Taken in the Hutchins School Interdisciplinary General Education Program, in the Disciplinary General Education Program at S. S. U., or at another institution.)	
Hutchins Major	40
(Taken in the Hutchins School.)	
Electives.....	44
(Taken in the Hutchins School or elsewhere in SSU.)	
TOTAL	124

CURRICULUM

LOWER DIVISION

The interdisciplinary lower division program of the Hutchins School fulfills the Sonoma State University General Education requirements for its majors. The requirements are met through four interdisciplinary seminars. (LIBS 101–202) of 12 units each. These seminars focus on specific issues and themes in both Western and Non-Western cultures for which common readings from many disciplines are drawn. With these materials students and faculty together grapple with current problems in light of their contemporary meaning with reflection on their historical rootedness.

Hutchins School is dedicated to the use of seminars (small 10–15 student discussion groups) because of the degree to which seminars allow students to participate directly and meaningfully in their education. Students over the four semesters in the lower division consider and discuss together a variety of important issues. Students are also encouraged to discover and develop their artistic self-expression, to carry out directed independent study projects, do considerable expository writing and explore various research methods.

The use of seminars in the lower division is intended to accomplish a number of things. Students are introduced to important material and are encouraged to learn various ways to discuss and assess significant issues. Just as important, students have an opportunity to consider, explore and articulate their own intellectual and emotional development. This is often called the process of “learning how to learn,” and it is, as much as anything else, the object of the Hutchins G. E. program.

Only Credit and No Credit grades are used in the Hutchins G. E. seminars. The emphasis in these seminars is entirely on the educational experience for its own value and not for the value of a letter grade. It is possible, however, for a student to receive “Credit” with a probationary or terminal qualification. If a student receives the latter (or remains on probation for two semesters), he or she must transfer from the Hutchins program.

At the end of every semester, each student receives a written evaluation of his or her work. This evaluation considers strengths as well as weaknesses and tries to put the student’s work in an over-all perspective. Students are also encouraged to evaluate themselves, their educational commitment and all aspects of their seminar experience. In fact, evaluation by all participants is considered an integral and on-going part of each seminar.

Lower Division Course Offerings

101. The Human Enigma (12)

An introduction to some of the complexities involved in understanding human nature and the development of culture. Drawing materials from kinship societies, ancient Greek culture, and contemporary civilization, the course concentrates on the growth of self-awareness, the development of abstract thought, and the role of man as a meaning-maker.

102. Exploring the Unknown (12)

A study of the human attempt—as expressed in language, myth, the arts, religion, and science—to understand the limits of our situation and to reach beyond. Approaches to the unknown which employ reason, intuition, artistic expression, mystical insight, and experimentation will be examined and evaluated. Materials will be drawn from both Western and Eastern traditions.

201A. In Search of Self (9)

An exploration of the ways in which social environment, personal history and unconscious processes influence our perceptions and actions. This course attempts to

develop 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)

An examination of the major political, economic, social and cultural ingredients in the American experience of the recent past. This fulfills 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)

An exploration of modern social, psychological, political and ecological problems in light of the changes wrought by the revolutionary thinkers of the 19th and 20th centuries—Darwin, Marx, and Freud. Contemporary responses to the issues raised by these thinkers will be confronted in our examinations of the problems and promises implied in social revolutions, technological advance, economic theory, and the arts.

UPPER DIVISION

The Hutchins School major, which consists of 40 units, leads to a B.A. in Liberal Studies. In the Hutchins upper division, a course of study may draw upon the following modes of learning: interdisciplinary SEMINARS, INDEPENDENT STUDY, WORKSHOPS, TUTORIALS, LECTURE COURSES and SPECIAL STUDIES, as well as COMMUNITY INVOLVEMENT PROGRAM and FIELD EXPERIENCE. ELECTIVE SEMINARS, usually comprised of 10–15 students, approach an interdisciplinary theme through discussion of a shared reading list. Small group WORKSHOPS are available for students interested in specific activities (e.g., in the arts). STUDENT INSTRUCTED SEMINARS may be planned and offered by students with the approval and supervision of the faculty. In guided INDEPENDENT STUDY and SPECIAL STUDIES the student works with a faculty member on projects of particular interest to the student. Together the student and instructor negotiate a contract for the work and agree upon the number of units to be awarded. Students who are pursuing similar interests in independent study may be grouped together in INDEPENDENT STUDY TUTORIALS.

The Hutchins School offers a choice of several programs of study for the major.

- I. CORE SEMINAR PROGRAM
- II. INDIVIDUALLY DESIGNED PROGRAM
- III. MULTIPLE SUBJECT CREDENTIAL

In each of these options the student plans with an advisor a course of study which will lead to a broad background in liberal studies. A student may also select an area of emphasis to gain access to deeper knowledge of a field which is of particular personal interest. It is the role of the faculty advisor to help the students first to clarify their own aims and then to select the appropriate means of furthering their interdisciplinary understanding and expertise. Hutchins students who have developed a broad background in the liberal arts have entered a variety of graduate programs, including American studies, early childhood education, English, anthropology, history, law, management, religion, sociology. Others have qualified for careers in education, politics, media, social work and theater arts.

REQUIREMENTS FOR ALL UPPER DIVISION PROGRAMS:

All programs require the introductory JUNIOR CORE SEMINAR (4 units) and INTRODUCTION TO INDEPENDENT STUDY (2 units). The Junior Core Seminar, required of entering upper division students, is devoted to developing skills of interpretation and communication—both oral and written—which are essential to effective work in the program. In completing the 40 unit major, the student may pursue up to 16 units of independent study. More than 16 units of independent study may be allowed for students who demonstrate strong ability to do independent work and who

have designed programs for which more independent study is appropriate. ALL programs except the Multiple Subject Credential include a SENIOR PROJECT (Independent Study units 1–4) which may be a thesis, creative project or an internship. This project affords the 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.

DESCRIPTION OF THREE PROGRAM OPTIONS FOR THE MAJOR

PLAN I: CORE SEMINAR PROGRAM

In each of the four semesters the student who selects this option will enroll in a CORE SEMINAR of four units. In the student's first semester of study, this seminar will meet the JUNIOR CORE SEMINAR requirement mentioned above and will be taken with 2 units of INTRODUCTION TO INDEPENDENT STUDY. The four core seminars, SOCIETY AND SELF, THE INDIVIDUAL AND THE MATERIAL WORLD, THE HUMAN EXPERIENCE AND THE ARTS, CONSCIOUSNESS AND REALITY, will be offered sequentially over four semesters. These seminars are designed to address major issues, ideas and thinkers of the contemporary world with significant historical background included. We believe that students should be prepared to focus on and make informed decisions about contemporary problems in the socio-political realm and in the area of science and values and have an understanding of human inquiry in the arts, philosophy, religion and psychology. These core seminars will provide a forum for questioning, discussion and research of important topics. (See also Internship/Field Experience below.)

PLAN II: INDIVIDUALLY DESIGNED PROGRAM

This plan is designed for students who have a need to pursue a direction of study which may not be offered in the classroom and who have a considerable degree of self-motivation. It gives students maximum flexibility to develop a course of study around a problem or areas of their own interest. Students in this plan are required to take the JUNIOR CORE SEMINAR and INTRODUCTION TO INDEPENDENT STUDY. In consultation with their advisor and Junior Core Seminar instructor, a student can then design a program of study including independent study, elective seminars, workshops and lecture courses. This option includes planning of complementary courses selected outside of Hutchins to foster the student's individual program. (See also Internship/Field Experience below.)

PLAN III: MULTIPLE SUBJECT CREDENTIAL (Ryan Act)

Students seeking a credential must, under the Ryan Act, complete a multiple-subject major. This major can be completed in the Hutchins School concurrently with a series of professional training courses in the Education Department. Students who enter Hutchins in either the lower or upper division can be certified as having met the multiple-subject major requirements provided they complete a total of eighty-four units of academic work in four specified areas: English, mathematics and science, social science and humanities. By law, students must complete from eighteen to twenty-four units in each of these four areas. These units accrue from all appropriate lower and upper division courses that the student has taken. In the Hutchins upper division seminars and independent study, the student earns the appropriate units he or she needs to complete the distribution in the four specified areas. Among their eighty-four units, students must include four required upper-division courses, one in English (including a linguistics component), one in science, one dealing with drug abuse, and one in mathematics. Furthermore, the student must have completed three additional units in mathematics. Students in this plan should contact the Ryan Advisor at Hutchins School at the beginning of their first semester for assistance in planning their curriculum.

INTERNSHIP/FIELD EXPERIENCE

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.

NEW DIRECTIONS IN THE HUTCHINS SCHOOL

The Hutchins School is also involved in special areas of investigation and in unique methods and techniques of study. Currently the School is developing simulation approaches to historical material ("Experiencing History" and "Experiencing Scientific Revolutions"). In addition, the Hutchins School is a participant in the MAMS Bilingual education option.

HISTORIC PRESERVATION

Hutchins School majors may also minor in Historic Preservation. This new program, which is described elsewhere in this catalog, is intended to take an interdisciplinary perspective on the nature and value of the "built environment".

UPPER DIVISION COURSE OFFERINGS

Course offerings in the upper division at the Hutchins School fall into the following categories:

Required Courses

Junior Core Seminar	LIBS 301
Introduction to Independent Study	LIBS 302

[NOTE: these courses are *not* required of students who have done their lower division work at Hutchins School. They *are* required of all new upper division Hutchins students.]

Electives:

Elective Seminars:	LIBS 320, 322, 326, 327, 328, 329, 330, 331, 332, 333, 336, 337, 338, 339, 340, 345, 348, 352, 370A, 370B, 371A, 371B, 381, 382, 420, 421, 422, 423, 424, 425, 426, 428, 430, 432, 436, 440, 465	
Senior Seminar:	LIBS 401	
Senior Project	LIBS 402	
Workshops:	LIBS 360, 460	May be repeated for credit
Independent Study	LIBS 310; 410	May be repeated for credit.
Independent Study Tutorials:	LIBS 361; 461	May be repeated for credit.
Student Instructed Seminars:	LIBS 350	May be repeated for credit.
Special Studies:	LIBS 315; 415	May be repeated for credit.
Community Involvement Program:	LIBS 395	May be repeated for credit
Field Experience:	LIBS 398	May be repeated for credit.

HUTCHINS UPPER DIVISION COURSE DESCRIPTIONS

Required Courses:

301. Junior Core Seminar (4 units)

Practice of the skills needed for effective seminar learning and independent study: small-group dynamics, interpretation of texts, research and expository writing. To be taken in conjunction with LIBS 302.

302. Introduction to Independent Study (2 units)

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.

310. Independent Study for Juniors (1-7)

315. Special Studies (1-4)

320. Elective Seminars (3)

These courses will be offered under different titles each semester, as new topics arise.

322. Microcosm and Macrocosm (3) Blaug

An interdisciplinary course which explores the breadth and interrelatedness of scientific explanation. While designed for students pursuing the Multiple Subject major, this course is open to all upper division students.

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.

327. The English Language (4) Mountain and Mattson

Restricted to Hutchins students; this course is designed for students pursuing the Multiple Subject Major.

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.

330. 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.

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 explored through popular books like Sheehy's *Passages*, Erickson, and various literary works, such as Lessing and Fitzgerald. It is designed to complement our offerings around child development, to show that developmentality in all ages must be considered.

333. Myth, Thought, and the Arts of Ancient Middle Eastern Civilizations (3) Schuler-Will

The nature of life and thought in Sumerian, Assyrian, Hebrew and Minoan cultures will be studied with readings in history, mythology, epics, and art history. The course will also study and compare various theoretical models for interpreting the nature and function of myth (Kirk, Eliade, the Functionalists, the Symbolists and Levi-Strauss).

336. Yoga & Vedanta: An Intro 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 the technology change social relationships, particularly on a micro-level. The course emphasizes projects done in a field situation. There are site visits.

338. Literature and Science: Metaphors for Experience (3) Morse and Mountain

This seminar will consider the immense impact of the physical science on both our culture and our personal attitudes, assumptions, and relations with ourselves and with the physical world. Readings will include Shakespeare, Jane Austen, Joyce, Henry James, T. S. Eliot, Nabakov, Borges, Einstein, and others.

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. Emphasis is made on children and stigma. Readings include Allport, Goodman, Ellison and Goffman.

340. Philosophy in Literature (3) Mountain and Coleman

This seminar investigates how philosophical themes are expressed in literature. Readings are drawn from a variety of cultural and religious traditions, and include both ancient and contemporary works.

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.

360. Workshop (2) Staff

Topics and material for this course will be developed individually by instructors and will vary from semester to semester.

361. Interdisciplinary Tutorial (1-4)

370A. Consciousness & Reality (3) Rider

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 concepts of consciousness and the unconscious found in phenomenology, psychobiology, sociology, psychoanalysis, transpersonal psychologies, body therapies, and Zen Buddhism.

370B. Workshop: Self-awareness (2) Rider

Methods of exploring the 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 when taught by different instructors.

371A. 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.

371B. Workshop: 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.

381. Collecting Local Stories (3) Morse

Practical experience and discussion of the problems of collecting and transcribing "oral history" from long-time residents of the North Bay region. Concurrent enrollment in LIBS 360 Workshop: Collecting Local Stories, is required.

382. Old Building Construction and Restoration (3) Morse

Theoretical and practical study of how old buildings were built, why particular materials were chosen, and how study of buildings can reveal how life was lived in the farms, towns, and cities of the past. Study of how old buildings can be made a part of contemporary existence.

395. 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

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major credit. See all University regulations covering C.I.P.

398. Field Experience (3)

This course is designed to provide supervised field experience to students in their chosen field. May be repeated for credit.

399. Student Instructed Course (2)

401. Senior Seminar (3)

Taken usually in the Spring semester, this seminar is primarily initiated by seniors and is intended to provide either a focus for the completion of independent study projects or a means to study other areas of interest before graduation.

402. Senior Project (1-4)

410. Independent Study for Seniors (1-7)

415. Special Studies (1-4)

420. Elective Seminars (3) Staff

These courses will be offered under different titles each semester, as new topics arise.

421. 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. Among these will be included 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 19th 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 with different levels of 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 20th century arts as a concept comprising a mystical and revolutionary world view embracing painters, sculptors, architects, composers, writers. New directions and interrelations in the arts at the turn of the century that laid the foundation for modern art forms. Readings from Eliot, Jarry, Joyce, Kafka, Kandinsky, Nietzsche.

425. Autobiography (3) Rider

This course combines the writing of your own autobiography with studying how other writers have done it. This process raises questions about the nature of self-knowledge and interpretation. We shall read Fritz Perls, St. Augustine, Cardano, Montaigne, Rousseau, and possibly Jung, Joyce, Gide, or Gertrude Stein.

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 or essays.

428. The Law: An Interdisciplinary Approach (3) Zimmer

A workshop seminar on the many facets of the law. The overall focus of the seminar will be to see 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 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.

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 the deep changes occurring in those cultures. Part I: A survey from the Greeks through the 18th Century. Part II: A close investigation of the 19th Century. Homer, Plato, Dante, Shakespeare, Defoe, etc.

440. Theater and Ritual (3) Zimmer

This course examines the similarities between theatre and ritual in different cultures. Symbolic communication will be emphasized. Students will participate in both types of situations.

460. Workshop (2) Staff

The topics and materials for this course will be developed individually by instructors and will vary from semester to semester.

461. Independent Study Tutorial (1-4)

465. Experiencing History (4) Adler and Miller

An experimental course employing simulation techniques to recreate the experiential reality of current and historical events in the classroom.

Other Elective Seminars taught in the past and which will be repeated upon sufficient demand: The American Dream (Adler, Mountain, Zimmer); Creativity (Blaug, Mattson, Barnes); James Joyce and the Odyssey of Western Man (Rider); 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).

INSTITUTE OF INTERDISCIPLINARY STUDIES

Coordinator: Shirley Silver (Anthropology)

The Institute of Interdisciplinary Studies (ITDS) coordinates a wide variety of programs and courses, bridging established disciplinary and departmental offerings, provides a valuable stimulus to interdisciplinary and cross-cultural studies within the liberal arts and sciences curriculum of the University. Interdisciplinary colloquia and lecture series on selected topics are some of the more important of the Institute's contributions to the campus.

Each semester, the Institute offers experimental interdisciplinary courses which are open to students in any major. Because the content of these courses differs each semester, the Institute provides an information sheet and/or poster, which describes each new course in detail; copies are available at Cluster School 66, the Institute office. Current offerings are also listed under Interdisciplinary Studies in the Schedule of Classes.

Offered within ITDS are:

<u>Programs</u>	<u>Minors</u>	<u>B.A./B.S. Degree</u>	<u>Master's Degree</u>
Media Studies	Gerontology	Liberal Studies (B.A.)	Special Major
Women's Studies	Historic Preservation	India Studies (B.A.)	
	India Studies	Special Major (B.A./B.S.)	
	Linguistics		
	Career Minors:		
	Human Services: Health Systems Organizations		
	Leisure and Recreation		
	Information and Research		
	Science-Technical Writing		
	Women's Studies		

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.

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.

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. Prerequisite: ITDS 200

300B. Bibliography (1)

Prepare an annotated bibliography on a limited topic and write a search strategy describing the research methods employed. Prerequisite: ITDS 200

301. Interdisciplinary Series (1-2)

Varies in theme and format from semester to semester (see ITDS poster), but in approach is invariably interdisciplinary, drawing on faculty and other speakers from many areas of interest. The series is open to the general public, but may also be taken for unit credit. Consult faculty coordinator or ITDS office for details.

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)

595. Special Studies (1-4)

**599AB. Thesis and Interdisciplinary Research For Special Majors M.A./M.S.
Only (2-4)**

ITDS PROGRAMS

MEDIA STUDIES

Program Coordinator: Hal Skinner (Instructional Resources)

A wide range of courses (see list below), related to various aspects of the media, is available in the following departments and programs:

Art, American Multicultural Studies, Anthropology, English, Environmental Studies and Planning, Geography, History, Hutchins School of Liberal Studies, Management Studies, Music, Politics, Sociology and Women's Studies.

It is possible to develop an interdisciplinary emphasis in media studies through the ITDS; for information and advising contact (1) the Coordinator of the Institute of Interdisciplinary Studies and (2) the ITDS Media Studies Program Coordinator.

In addition, the English Department offers media studies both as an elective program in the regular major and as a course of study through the English Alternative Major; for information, contact the Department of English.

MEDIA STUDIES COURSES

	<i>Units</i>
ART 206 Animation Drawing	1-4
ART 208 Principles of Art Photography.....	1-4
ART 212 Introduction to World Film History.....	3.0
ART 213 Introduction to American Film History	3.0
ART 270 Experimental Art: How to Read a Film.....	1-4
ART 275 Beginning Video	1-4
ART 285 Basic Filmmaking	1-4
ART 308 Intermediate Photography	1-4
ART 313 Classical Film Studies	3.0
ART 375 Intermediate Video	1-4
ART 385 Intermediate Filmmaking	1-4
ART 470 Advanced Experimental Art	1-4
ART 475 Advanced Multi-Media Arts.....	1-4
ART 485 Advanced Filmmaking	1-4
ART 486 Advanced Animation	1-4
AMCS 392 Images in Film	4.0
ANTH 359 Art in Cultural Context	4
ANTH 380 Language & Culture.....	4.0
ANTH 389 The Ethnography of Communication	4.0
ENG 211 Publication Workshop	1-3
ENG 387 Public Speaking	3.0
ENG 389 Interpersonal Communication Workshop.....	3.0
ENG 366 Writing for the Media.....	3.0

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ENG 292	Introduction to Library Research.....	2.0
ENG 352	Personal Essay	3.0
ENG 340A	Advanced Library Research Tools.....	1.0
ENG 340B	Bibliography	1.0
ENG 361	Fundamentals of News Media.....	3.0
ENG 368	Media Workshop	1-4
ENG 377	Film Studies.....	3.0
ENG 410	Small Systems Video.....	3.0
ENG 478	Special Studies in Media	1-3
ENG 452	Advanced Writing—Personal Essay	3.0
ENG 435	Alternative Major	1-3
ENSP 308	Environmental Education and Media	4.0
GEOG 385	Introductory Cartography and Graphics	4.0
HIST 360	Photography in History	1.0
ITDS 310	Media in America.....	4.0
ITDS 350	Seminar: Media in America	4.0
* LIBS 320	Sticks, Stones, and Space	3.0
* LIBS 320	Media and Perception	3.0
* LIBS 320	Media, Perception and Politics.....	3.0
LIBS 326	Censorship and the Arts.....	3.0
LIBS 399	Internship: Media	3.0
LIBS 424	Expressionism in the Arts.....	3.0
LIBS 440	Theater and Ritual.....	3.0
MAMS 302	Seminar in Communication Skills	1-3
MGT 360	Marketing Environment.....	4.0
MGT 361	Advertising Management	4.0
MGT 466	Organized Communication	4.0
MUS 261	Introduction to Electronic Music	3.0
MUS 461	Advanced Electronic Music Composition	1-3
POLS 461	Politics and the Media.....	3-4
POLS 467	Campaign Management and Voting Behavior	3-4
POLS 490	Government Regulation of Business	4.0
SOC 318	Films for Sociology	4.0
SOC 339	Seminar: Mass Media	4.0
WOMS 450	Women and Media.....	2-4

WOMEN'S STUDIES

Program Coordinators: Ruth Mahaney and Adele Clarke

Women's Studies is the study of women through interdisciplinary perspectives, encouraging analysis and redefinition of women's changing roles within society. The goals of the program are to recognize the historical and present oppression of women, to provide a supportive learning experience about and for women and to research and investigate women's potentiality in the world. Our focus is upon research and analysis of social, economic and political institutions as they relate to women's oppression and social change. We stress that our courses deal with the diversity of women and the different struggles we face in our lives. The Interdisciplinary curriculum of the Women's Studies Program is augmented by course offerings in various departments. Courses taught under the WOMS rubric may be taken as electives.

Each semester the Women's Studies Program publishes a brochure listing all

* Elective seminar offered in the Hutchins School of Liberal Studies on a random basis.

program offerings and courses on women in various departments. Copies of this brochure may be obtained in the Women's Studies Office, Cluster Schools 32. The Women's Studies Program will attempt to assist students in the program with child care needs. Students may contact the office (707) 664-2840 or their teachers for information regarding child care.

WOMEN'S STUDIES COURSES

WOMS 199 Student Instructed Course (1-4)

A course designed by an advanced student, approved by the Program Coordinators and Women's Studies Planning Board and taught by the student under the supervision of a faculty sponsor or faculty sponsors. Consult the Women's Studies Brochure for descriptions of current offerings. The brochure is available in the Women's Studies Office, Cluster Schools 32.

200. Introduction to Women's Studies (4)

Examines the situations, experiences, achievements and struggles of women in American society, noting differences in race, ethnicity and class. Surveys major issues important to women today, including personal and social change, the world of work, creativity, health care, education, law, motherhood, media images, feminism and special problems of women such as rape and domestic violence.

300. Survival as a Woman (4)

A variable focus course on coping techniques of special relevance for women including assertiveness training, re-entry skills, college survival and transitioning from education to employment.

301. Lecture Series (1-4)

A weekly lecture series or occasional workshops offering presentations and discussions of current women's issues. The lectures are open to the community. There is often a semester-long focus on a particular topic.

311. Special Problems of Women (4)

Seminars of intensive study of specific and special problems of women in society including rape, aging, job discrimination, domestic violence.

325. Our Bodies—Ourselves (4)

In depth analysis of the many roles women's distinctive physiology plays in shaping their lives (pre-puberty through aging). Includes basic anatomy, menstrual cycle, sexuality and optional self-help (a self-administered examination of the vaginal and genital area, using speculum and mirror, to aid the student in better understanding her anatomy and health). Also examines social implications of physicality (body-image, beauty industry, medical institutions).

395. Community Involvement Program (1-4)

The purpose of CIP is to encourage student projects in the community; our projects focus on women's needs.

399. Student Instructed Course (1-4)

A course designed by an advanced student, approved by the Program Coordinators and Women's Studies Planning Board and taught by the student under supervision of a faculty sponsor. Please consult the Women's Studies brochure for descriptions of offerings. The brochure is available in the Women's Studies office, Cluster Schools 32.

446. History of Women in U.S. (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

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domesticity, feminist movements, and modes of resistance to sexism/oppression. Analyzes lives and ideas of significant feminists and other women.

* Cross listed as History 446.

460. Women and Institutions (4)

As members of society, women are variously subjects, leaders, and victims of major institutions such as the family, education, law, government, politics, medicine and religion. Each section of this course will explore women's experiences and potentials within one or more of these institutions. See semester brochure for current focus.

470. Racism and Sexism in the U.S. (4) (Cross-listed with AMCS 420)

Historical overview of racism and sexism as they affect women. Parallels and differences in these forms of oppression and responses among women and peoples of color. Focus on issues where racism and sexism intersect, i.e. affirmative action, abortion, forced sterilization, violence against women, family, male/female relationships, counseling, religion.

475. Women's Movement (4)

A comparative analysis of the origins, forms, issues and constituencies of the 19th and 20th century women's movements. Special focus upon current issues and problems confronting the women's movement (e.g. racism and classism), the future of feminism as a social movement, diversities within feminism and implication of the women's movement for social change.

Prerequisite: Background in Women's Studies or in the Women's Movement.

485. Advanced Women's Studies Seminar (2-4)

Variable topic seminars which address emerging issues in the study of women and usually involve intensive student research projects.

Prerequisite: Background in Women's Studies or in the Women's Movement.

491. Teaching and Planning Women's Studies (4)

Seminar and workshop on educational methods, organizational and communications skills, required for all students instructing Women's Studies courses. Open to student teachers from other departments. Combines informal support group with examination of educational theories of relevance to the study of women toward the development of feminist pedagogy.

495. Special Studies (1-4)

ITDS MINORS

GERONTOLOGY

Program Coordinator—George Robertson

Advisor—Kathleen Charmaz (Sociology)

The Gerontology Minor is an interdisciplinary program designed to acquaint students with Aging as a normal part of the life cycle; to make them aware of the aging processes so that they may view it in others with understanding, and eventually in themselves with equanimity; and to consider gerontology either as a satisfying volunteering service or as a career. Those already working, either as volunteers or as staff persons in agencies or organizations serving the elderly will find the program valuable in up-dating their training.

MINOR IN GERONTOLOGY

22 units as follows:

Required courses	<i>Units</i>
Gerontology 203—Basic Gerontology	3
Biology 385—Contemporary Issues: Aging	3
Psychology 490—Psychology of Aging	4
Sociology 322—Aging and Society	4
In addition: under any appropriate department, Field Experience, Community Involvement Program, or Internship in Gerontology	2
	16

Electives:

6 units to be chosen from the following list.

A. Supporting Courses:

Biology 224—Human Physiology	3
Biology 380—Human Nutrition	4
Ames 433—Aging and Ethnic Minorities	4
*Psychology 422—Living and Dying	4
Psychology 490—The Mature Years	4
Politics 490—Health Care and Aging	3
Physical Education 497—Leading Physical Fitness Programs	2
Management 393—Managing Health Systems.....	4
*Sociology 343—Cultural Values of Death and Dying	4

B. Related Courses:

Biology 220—Human Anatomy	4
English 498—Literature of the Aging	3
*History 449—Death in Western Civilization	3
Mex-Amer 405—The Mexican-American Family.....	4
Psychology 434—Psychology of Disability.....	4

GERONTOLOGY COURSES

Gern. 203. Basic Gerontology: A Survey of Concepts, Issues and Services for the Elderly (3)

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.

HISTORIC PRESERVATION

Program Director: Peter Mellini (History)

Faculty Committee: Timothy Bell, Geography; David Fredrickson, Anthropology; Theodore Grivas, History; Dennis Harris, History; Daniel Markwyn, History; David Peri, Anthropology; Margaret Wheaton, Environmental Studies and Planning

The Historic Preservation minor program offers students from any major the opportunity to apply their knowledge and skills to the maintenance and improvement of their community. It is a practical and immediate application of a liberal education.

The student learns how to read the built environment—historically, architecturally, and socially; how to plan for preservation; and the rudiments of building restoration. The rest of the minor is then developed according to the student's interest and skills.

* Complete only one of these courses since each focuses essentially on Death and/or Dying.

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A wide range of opportunities includes use of the media in preservation, economics, historical research, and implementation of a variety of restoration or preservation projects in a community.

Students completing the minor in historic preservation will be prepared for graduate work, and for volunteer or avocational work in preserving their own communities. In addition, the interdisciplinary perspective and the research and organizational skills they will acquire, are readily transferable to other fields. A less tangible, but not less important, result is an increased sense of "rootedness" in their country and their community.

The minor is intended to prepare individuals to plan for historic preservation. A variety of skills and experience are necessary. Employment for graduates will usually require, in addition to the course work, a coherent set of field work. The Program Coordinator and faculty will develop suitable opportunities for internships and, in some cases, paid field work. The program is open to any student upon approval of the Program Coordinator. Students should inform their major advisor of their intention to add this minor to their course of studies. Do not embark on this minor without prior consultation with the Program Coordinator.

MINOR IN HISTORIC PRESERVATION

Twenty units as follows: Students must consult with the Coordinator of the Historic Preservation Minor Program for suitable related electives.

Required Courses:

	<i>Units</i>
ENSP 319—Planning for Historic Preservation.....	4
HIST 362—Society and Architecture	4
ANTH 328—Cultural Resources Management (Tentative)	4
	12

Electives—8 units

Students must consult with the Coordinator of the Historic Preservation program for suitable elective courses.

LINGUISTICS

Program Coordinator: Shirley Silver (Anthropology)

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. (Note: Courses may not be counted toward both the linguistics minor and another minor or major.)

	<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
Anthropology 494—Seminar in Anthropological Linguistics.....	4
English 341—Explorations in Language.....	3
English 379—Study of Language	3
English 489—Topics in English Linguistics	3
English 588—Graduate Seminar: Study of Language.....	3
German 425—Applied Linguistics	3
German 426—History of the German Language	3
Liberal Studies 320—Elective Seminar: Language, Meaning and Reality....	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—Applied Linguistics	3
Spanish 426—Seminar in Modern Varieties of Spanish	3

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.

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.

390. Introduction to Indoeuropean (3)

Examination of the linguistic and cultural prehistory of the Indoeuropean 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 Indoeuropean 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)

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.

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442. Teaching English as a Second Language (3)

Application of linguistic principles and methodology to teaching standard American English as a second language. Introduction to ESL teaching methods and techniques: ways in which listening, speaking, reading and writing can be taught; testing procedures. Students receive practice in the preparation and evaluation of a variety of teaching materials.

Prerequisite: Linguistics 310–311, or English 341 Explorations in Language: Structure of the English Language.

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

Note: It is possible to develop a special interdisciplinary major in Linguistics. Interested students should contact the Coordinator of Interdisciplinary Studies and the Coordinator of the Linguistics Program. For students wishing to develop a comparative and historical linguistics emphasis, one or more of the following language courses are particularly pertinent:

	<i>Units</i>
Greek 101—Beginning Homeric Greek	3
India Studies 302A–B—Sanskrit	3–3
Latin 101–102—Elementary Latin	3–3

CAREER MINORS

The Career Minors program allows students majoring in a variety of disciplines to pursue a coherent sequence of courses which will allow them to acquire insight into the ways the major may be applied in particular courses. 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 Organizations

This minor is intended to serve as an introduction to a Human Services career in health-related fields. The courses deal with the organization of health care, and further the understanding of current health-care issues, problems, possible solutions, and their relationship to the wider society. The minor allows for two alternative emphases: 1) organization and management of services, and 2) direct client involvement.

Adviser: Dr. Kathleen Charmaz
(Department of Sociology, 664-2569/664-2561)

Leisure and Recreation

This minor will allow for the study of two important aspects of leisure in today's society—recreation and tourism. These activities are viewed in terms of their social, economic, educational and cultural implications. Students will take a series of core courses ranging from management and economics to geography, sociology and history. The last two courses in the minor will, along with the internship, focus on a specific area of interest, such as Parks and Recreation, Recreation Management, Community Leisure and Recreation, or Peoples and Places.

Adviser: Dr. Joseph Frasca
(Department of Geography, 664-2558/664-2194)

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.

Adviser: Dr. Susan Garfin

(Department of Sociology, 664-2598/664-2561)

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 every 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.

Adviser: Dr. George Proctor

(Department of Philosophy, 664-2102)



L.S.S.S. 459. Social Scientific Inquiry (3) (Fall and Spring)

A study of the major foci and distinctive subject matter of the social sciences, drawing examples from anthropology, economics, ethnic studies, geography, history, political science and sociology. Social scientific paradigms are analyzed in terms of the theoretical and methodological issues they present and their contributions to the fields which produced them.

L.S. 400. Cross-Disciplinary Workshop (4) (Fall and Spring)

In consultation with the instructors each student will engage in an independent or collaborative project. Each project will be selected to complement the specific goals of the students and will require the integration of the conceptual frameworks of more than one discipline. This course may be repeated for credit.

Prerequisite: All four L.S. seminars must be taken prior to enrollment in L.S. 400.

BACHELOR OF ARTS IN INDIA STUDIES

Program Coordinator: Roshni Rustomji

Faculty: Barry Ben Zion, Economics; Eleanor Criswell, Psychology; Victor Daniels, Psychology; Nirmal Singh Dhesi, English; William Frazer, Geography; Susan Garfin, Sociology; Leland Gralapp, Art; Han Sheng Lin, History; Stanley McDaniel, Philosophy; Peter Mellini, History; William Poe, History; Thomas Rosin, Anthropology; E. Gardner Rust, Music; Roshni Rustomji, India Studies; Alan Sandy, English; Gordon Tappan, Psychology; Robert Tellander, Sociology; Laxmi Tewari, India Studies

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 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 and at least one course in the humanities, one in the social sciences and one in psychology.
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 301 must be included in these 18 units.

BASIC LIST OF COURSES

	<i>Units</i>
Anthropology 375—Cultures of South Asia	4
Art 417A—Oriental Art.....	3
History 439—History of Modern India Since 1512	4
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 301A—Indian Civil: The Sacred Tradition	4
India Studies 301B—Indian Civil: The Secular Tradition.....	4
India Studies 302A—Beginning Sanskrit	3
India Studies 302B—Intermediate Sanskrit	3
India Studies 305—Experimental Courses.....	1–4
India Studies 310A—Beginning Hindi	3
India Studies 310B—Intermediate Hindi.....	3
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—Introduction to Cultural Anthropology	4
Anthropology 343—Peasant Societies	4
Anthropology 493—Seminar in Cultural Anthropology I and II	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 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 438—Senior Seminar: Asian History	4
History 588—Graduate Seminar: Asian History	4
Music 451—Music of the Far East	3

Politics 480—Southeast Asia Seminar	3
Psychology 484—Seminar Psychology of China	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 330—Sociology of Religion	5
Sociology 331—Seminar in Religion	3
Sociology 337—Politics of Religion	4
Sociology 432—Social Organization of Western and Non-Western Societies	4
Sociology 440—Comparative Societies	3

Other courses may be taken in addition to the above courses to fulfill the India Studies requirements, with the approval of the advisor.

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.

302A. Beginning Sanskrit (3)

This course covers elementary Sanskrit grammar, the reading of Sanskrit in the Devanagari script, and translation of easy texts.

302B. Intermediate Sanskrit (3)

This course is a continuation of the study of Sanskrit grammar and consists of readings from various Sanskrit texts. *Grammar* and Lanman's *Sanskrit Reader* will be the required books.

305. Experimental Courses (1-4)

310A. Beginning Hindi (3)

Conversation and simple texts are used to introduce the student to Hindi. Language lab is available to supplement practice in spoken Hindi.

310B. Intermediate Hindi (3)

A continuation of 310A.

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

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) 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, consult with the ITDS Coordinator.
- 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 Coordinator of the Institute of Interdisciplinary Studies. 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 of the faculty members who are advisors for the major;
5. A list of the Core (minimum 24 units) courses and Supporting (minimum 24 units) courses which constitute the Special Major program of study.
 - a. 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.
 - b. 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.)
 - c. The unit total in the major should not exceed 48–50 units. No courses applied to General Education requirements or professional Education courses may be included in the Special Major.
 - 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 Special Major application. (For current deadlines, check with the ITDS Coordinator or with the ITDS secretary.) Filing an application with the Institute of Interdisciplinary Studies does not assure acceptance into the Special Major program. Each proposal must be approved by the ITDS Subcommittee on Special Majors.
- VIII. Upon approval of a Special Major by the ITDS Subcommittee, the major advisors are provided by the ITDS office with a copy of the approved program of study. In addition, a Special Major file is established for the student in the ITDS office. Any changes in the original approved curriculum must be approved by the appropriate advisors and filed with the Institute of Interdisciplinary Studies.
- IX. Special Major advisors are responsible for a recommendation for graduation "with distinction."
- X. The student should maintain close communication with his/her Special Major advisors.

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

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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. (Effective Fall 1978.)

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.
- 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 30 units of required coursework must be included in the application.
- 2b. Complete at least 15 units of the required 30 units *AFTER* approval of the program of study by the Graduate Studies Committee.
- 2c. 21 of the 30 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.
- 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 may be 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 proposed thesis topic must be attached to the application form.
4. Please attach a description of the course of studies planned for each Special Studies 495/595 and Internship course listed in your course list and the name of the supervising instructor for each of them.
5. It is *important* to confer with the ITDS/Special Major advisor *before* you submit your application. The ITDS advisor should also be consulted in the initial stages of planning the course proposal.

INTERNATIONAL STUDIES

The Division of Social Sciences offers an interdepartmental minor in International Studies designed to introduce the student to the methodologies of the social sciences appropriate to the study of international and intercultural affairs. It is especially recommended for students interested in international affairs, overseas employment and teaching.

After the student has been introduced to the concepts of the social sciences, he will utilize these methods for research in an interdisciplinary seminar designed to apply analyses of the various fields to a problem or area of international study.

In order to fulfill the requirements for the minor, the student will complete: (1) a series of approved courses, taken from at least four of six departments in the Division of Social Sciences, and (2) an interdisciplinary seminar. A student with a major in a department of the Social Sciences Division may credit the approved courses within that department to both his major and the International Studies minor.

Any student interested in the minor should get an application form from the Department of Politics and confer with the chairperson of the committee for the International Studies minor, or the advisor for the program.

MINOR IN INTERNATIONAL STUDIES

Requirements for the Minor

- 1) At least one course from each of four of the fields below:

Anthropology

Anthro. 342—Social Structure

Anthro. 343—Peasant Societies

Economics

Econ. 302—International Trade

Econ. 303—Development in the Third World

Geography

Geog. 343—Economic Geography

Geog. 345—Development in the Third World

History

Hist. 407—War and Peace in the 20th Century

Hist. 448—Military History

Management

Mgt. 493—Introduction to International Finance

Mgt. 498—Multinational Corporations and the Third World

Politics

Pols. 342—International Politics

Pols. 444—United States Foreign Policy

Sociology

Soc. 360—Social Organization of Western and Non-Western Societies

- 2) One interdisciplinary course (after completion of the series above):
 - a) Seminar in Area Studies (Geography 391,392, 420, 430, or 440) OR
 - b) Seminar in Model United Nations (Poli. 345)

Total units required for the International Studies Minor: 20.

MANAGEMENT STUDIES

Department Chair: Jeffrey T. Doult

Faculty: Michael Baldigo, Saul Eisen, Robert Girling, Wyman Hicks, George Johnson, Paul Juhl, Wingham Liddell, Wallace Lowry, William Reynolds, Delmar Valleau.

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 societal levels. As an applied social science, it emphasizes human resources. A process of working with and through people to define and accomplish goals, management is an intensely human and personal process. It stresses long-range dimensions and holistic perspectives, and provides an excellent basis for a liberal arts education.

The Management Studies major at Sonoma is designed as an alternative to traditional programs offered by schools of business which require every student to complete a structured list of courses. The Sonoma approach favors personalization over standardization. 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; Health Care Management; Human Resource Management; Industrial Relations; Marketing; Multinational Management; Organizational Behavior; and Systems Analysis.** Confer with department regarding these study plans.

BACHELOR OF ARTS IN MANAGEMENT

Major

Requirements in the Major are:

	<i>Units</i>
A. Mathematics	3
1. Mathematics 117	
OR	
2. Mathematics 417	
OR	
3. Three (3) units from the Mathematics 105 series (other than 105T)	
B. Economics 201	4
C. Management Studies courses	32
1. Up to eight (8) of these units can be taken in Economics courses (other than Economics 201)	
2. At least 16 units must be Upper Division	
D. Supporting courses	16
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

Total Requirements for the Bachelor of Arts Degree in Management are:

	<i>Units</i>
A. General Education	40
B. Management Major (see above)	55
C. Other electives	29
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.)

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 418–420.

Evening program

Evening course offerings provide students with widened flexibility for completing requirements for the major in Management Studies.

GRADUATE STUDY IN THE MANAGEMENT STUDIES DEPARTMENT

Graduate students may be admitted to the University and to the department in: Postbaccalaureate Standing, Unclassified; Graduate Standing, Conditionally Classified; or Graduate Standing, Classified. (For further information, refer to the section of the catalog concerning admission to the University.)

Postbaccalaureate standing, unclassified

Students in this category may take courses for professional growth or toward a second B.A. degree (See catalog section concerning degrees and credentials). A student seeking a second B.A. degree in Management must meet the mathematics and economics prerequisites (totaling 7 units) described for the undergraduate Management major, and 24 units of Management courses, as determined in consultation with an advisor in the department. A minimum of 30 units must be taken in residence at the University. Students interested in taking courses for professional development (such as in preparation for C.P.A. examinations) are welcome. Students wishing to transfer from this status to the M.A. program must present a petition and an application for the M.A. program in Management to the Graduate Coordinator.

MASTER OF ARTS IN MANAGEMENT

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 earlier sections of the catalog for admission and general requirements for all graduate students). Ordinarily, the Screening Committee will expect the applicant to present a grade point average of 3.00 for the last 60 semester units taken; and a minimum

score of 450 on the Graduate Management Admission Test (GMAT), or in the upper 50th percentile on the Graduate Record Examination aptitude test (GRE). Applicants with lower scores are encouraged to ask for consideration by the Screening Committee, and to present additional evidence to indicate the probability of their success in the program. Such evidence may include previous undergraduate or graduate work, papers written or published, thesis proposals, important life experiences, recommendations from faculty, and other appropriate material, including oral interviews. The department is aware that tests and GPA alone may not always be the best predictors.

The faculty is also concerned that the M.A. program in Management reflect a synthesis of liberal arts and sciences and career education, with support from a diversified and dedicated group of innovative, socially concerned, and socially responsible graduate students.

Because of very heavy demand, admissions may be subject to space available.

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, it is necessary that the student have upper division preparation (i.e. junior or senior level) in five core areas, namely:

1. *Economics of Management.* Economics, such as macro or micro.
2. *Sociology of Management.* Organization theory, preferably from a sociological, organization behavior, or management theory point of view. Other acceptable areas: Industrial Sociology; Sociology of Power; Personnel Management.
3. *Psychology of Management.* Organization behavior from a managerial psychology, or human resources point of view. Other acceptable areas: Social Psychology; Human Relations; and Interaction and Change.
4. *Quantitative Approaches to Management.* One course from the following is required, although additional preparation is desirable: Mathematics through calculus, or Quantitative Methods, Statistics, Intermediate Accounting, or Decision theory at junior or senior level.
5. *Ethnic Studies or Women's Studies.* Studies which are concerned with understanding a race or culture other than one's own; sex roles; studies of problems of disadvantaged groups; any course which contributes to an understanding of the need to improve the participation of disadvantaged groups in the managerial world.

One, three or four unit course in each of the five core areas is sufficient. Students intending to complete some or all of the core courses at Sonoma State University should consult their advisor for a list of acceptable courses prior to enrolling.

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

to *conditionally classified standing*. For admission to the program in conditionally classified standing, students are required to present acceptable transcripts and test scores, as specified above. Such students will be eligible for classified standing when the conditions specified at time of admission have been met. Students not meeting the above criteria will be recommended instead for unclassified postbaccalaureate standing, provided that their grade point average is 2.5 for the last 60 semester units taken. Postbaccalaureate, unclassified students are encouraged to take coursework in the department, and to petition to the Graduate Coordinator for admission to conditional or fully classified standing at an appropriate time.

3 Advancement to Classified Standing

Students are admitted to the M.A. program when the department form ("Application for Admission to M.A. Program in Management") has been approved and signed by the student's advisor and by the Graduate Coordinator. The student may then work with an advisor to complete and file forms G-1 and G-2 with the office of the Dean of Graduate Studies. These forms are the official record of advancement to candidacy. They identify: the Chair of the student's M.A. Committee; the members of the Committee; the 30 units of coursework required for the M.A. degree; and the final evaluation method agreed upon.

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) 24 units of class work, plus 6 units for a thesis;
- b) 24 units of class work plus 6 units for a creative or investigative project;
- c) 30 units of class work, plus a written comprehensive examination and an acceptable research paper, both in the field of the student's interest. The research paper (which may have been prepared for a graduate-level course in the department) must incorporate both empirical and theoretical aspects of the student's field of interest.
- d) 24 units of class work, plus 6 units for a joint investigative or creative project.

(Note: a minimum of 15 units of upper division or graduate courses must be taken *after* forms G-1 and G-2 have been filed.)

is 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: one 500-level course (4 units); one 400- or 500-level course (4 units); 599A (3 units); and 599B (3 units). The content of the 599A-B sequence includes the research and writing for the student's thesis.

Those students choosing the comprehensive examination/research paper option must substitute 6 units of coursework to replace the thesis course (599A-B) normally taken.

ing Requirements for thesis, projects, and examinations

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.

Quality of work accomplished is a major consideration in judging the acceptability of any thesis or project. 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 and every project. Mere description, cataloging, compilation, or other superficial procedures are not adequate.

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.

MANAGEMENT STUDIES COURSES

111A. Computer Orientation (1)

Students who know nothing about computers learn to use them for college work, research, etc. A set of self-taught computer tasks of increasing sophistication is supervised and evaluated by regular faculty. CR/NC grading only.

111B. Computer Orientation (1)

After Mgt 111A, training in use of machine-ready systems for use with the many data bases now available. A set of self-taught computer tasks supervised and evaluated by regular faculty. CR/NC grading only.

111C. Computer Orientation (1)

After 111B, training in use of machine-ready systems for manipulating text and numbers, preparing reports, table, graphs, etc. A set of self-taught computer tasks supervised and evaluated by regular faculty. CR/NC grading only.

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.

216. Introduction to FORTRAN (4)

A thorough treatment of the FORTRAN compiler language and its use in solving a variety of problems. Course work includes solving, then programming and processing, business oriented problems. Flowchart and decision table techniques, binary and hexadecimal arithmetic procedures.

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)

An introductory course designed to provide a basic understanding of the fundamentals of the accounting process as a foundation for study in many areas of management. Course work requires the recording of financial transactions, the classification into meaningful categories, and the summarization into useful financial statements, as well as the analysis 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 quantitative data in decision making without the detailed study of the rigorous discipline of accounting.

245. Life/Work Planning (3)

A course to empower individuals with a process that will help 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 117.

317. Frontiers of Computer Science (1-4)

Current issues in computer science. May be repeated once for credit.

318. Beginning Systems Analysis (4)

Use of Systems Analysis to understand and improve ordinary organizations ranging from communes to child care centers to businesses, etc.

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. A course for beginners. No prerequisite: some familiarity with organizations and systems is helpful.

328. Survey of Legal Rights and Remedies (4)

Analysis of cases and materials of the various torts that make up the body of the substantive law of torts. Procedural aspects of litigation will also be discussed. Particular aspects of actionable wrong will include negligence, conspiracy, willful misconduct and other intentional torts and defenses.

330A, 330B. Intermediate Accounting (4-4)

Current theory of accounting is emphasized in both courses. Prerequisite: Mgt 230

330A: includes the accounting process, income measurement, balance sheet preparation, cash flow, and the valuation of receivables, inventories, plant and equipment and intangible assets.

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330B: includes the accounting for liabilities, capital stock, retained earnings and dividends, analysis of financial statements and the preparation of statements from incomplete records.

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.

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. Private, social and the firm's returns. Technologic complementarities. Supply, demand and discrimination interruptions in value assessment.

342. Human Relations In Management (4)

Human relations as management's modern concern in a consumer democracy. Prevalent "theories" of motivation surveyed, applied by assignment to the student's own everyday life. Introductory course for non-majors as well as majors.

344. Managerial Psychology (1-4)

Theories of human relationships in various task orientations. Topics may vary semester to semester, according to respective instructor's interest. An introductory course. May be repeated once for credit.

345. Sex Roles In Management (4)

Roles, role stress, and what is "expected" of women and men at work. Class members share and examine experience and expectations concerning their own personal sex role 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 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.

348. Industrial Relations and Labor (4)

A study of the role of organized labor in the society of the United States and of the nature of the relations between organized labor and management. Lectures and assigned readings emphasize the economic and political aspects of industrial relations, in addition to sociological effects.

349. Personnel Management and Administration (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)

A study of the managerial functions of planning, organizing, directing, controlling and staffing. Applications of management principles.

351. Starting the Successful Small Business (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.

352. Managing the Small Business (4)

This course will focus on decision-making in functional areas of marketing, production and finance. Consulting to actual 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.

353. Seminar in Women Managing (4)

Career development through women's life cycles, especially training and educational experiences, in households and other institutions; compared across cultures and through history. Focus will be on managing the incorporation of women into jobs and promotion plans, compared to their householding careers. Library use will be required.

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.

365. Executive Decision Games (2)

Class will break into small groups 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. Credit/no credit only. No prerequisite.

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.

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.

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.

222 / Management Studies

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.

379. Managing Insurance Operations (4)

An advanced and detailed analysis of the marketing, underwriting and financial functions of the Property/Liability insurance industry. Includes emphasis on the underwriting and ratemaking procedures of selected Property/Liability Lines and an in-depth review of the financial structure, reserving requirements, and accounting procedures pertinent to the 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 for credit.

385. Current Topics in Management (2)

An ongoing series of lectures and special presentations concerning contemporary and emerging issues in the world of management. May be repeated for credit.

391. Theories of Business Behavior (4)

Variety of theoretical frameworks presented to explain the nature of the firm's behavior in a complex and changing world. Emphasis on economic theory and related tools made relevant to management settings.

392. Planet Management (4)

Managers of institutions, public and private, must consider the potential impact upon the environment of the actions they propose for their institutions. Will pollution, overcrowding, unseemingly ugliness, and the like result? Study of the social and economic costs and consequences of such consideration.

393. Managing 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.

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. 117 or equivalent.

418. Intermediate Systems Analysis (4)

Application of the "systems approach" to problems in work groups and other social structures. Students devise and test alternative solutions. Course is for "ordinary" students, not only specialists.

Prerequisite: Mgt 318 or an equivalent understanding of systems, with 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 and Human Behavior (4)

An analysis of the legal process emphasizing the nature and function of law, legal reasoning and the operation of law particularly as it pertains to business transactions, including 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)

Designed for the student who has completed introductory and intermediate studies. This course covers specialized areas of accounting such as fund accounting and consolidations. These subject areas should round out the accounting knowledge required by the beginning career accountant.

Prerequisite: Mgt 330A, 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; or consent of instructor.

434. Auditing (4)

Concepts and procedures for verification of financial records together with the ethical, legal, and other professional aspects of auditing.

Prerequisite: Mgt 330A, B, or 332, or consent of instructor.

435. Cost Accounting for Management (4)

To introduce practical applications for the accountant's role in the decision process. Contribution margin analysis, job order and process costing, standard costing, transfer pricing, profit planning, capital budgeting, inventory control, and others will be expanded.

Prerequisite: Mgt 230.

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.

441. Management of Industrial Relations (4)

An advanced study of the management of industrial relations with the specific objective of developing skills in labor relations by participation in simulation games involving

the collective bargaining process. Lectures and assigned readings provide additional knowledge of the economic, social, and psychological aspects of labor relations. Prerequisite: Mgt 347 or Mgt 348 or consent of instructor.

442. Behavioral Science in Management (4)

Study of meaning of "bureaucracy: its human impositions of orderliness, fair play, privacy, depersonalization, specialization, and inefficiency. Alienation in the work place in varieties of mechanized production processes and for varying socio-economic groups. Emphasis on viewpoint of those who coordinate work of other people.

444. Seminar in Human Relations (4)

Use of the small group as a basis for understanding and developing skill in effective communication and leadership in the organization.

450. Seminar in Advanced Management Theory (4)

An eclectic and interdisciplinary approach to the study of management theory and organization behavior. Topics studied include behavioral science, human relations, the process school, management philosophy and policy, direction and leadership, decision theory, organization theory, comparative management, and other current issues in the management sciences.

Prerequisite: Mgt 350, Econ. 201, Math. 117, or consent of instructor.

451. Organizational Behavior Practicum (4)

Organizational and group processes for effective management of the task group. Practice and theory of goal-setting, problem-solving, decision-making, planning, evaluation, and control. May be repeated once for credit.

452. Seminar in The Management of Change (4)

Criteria by which proposals for change are evaluated, and the institutional mechanisms for both resisting and supporting change.

May be repeated once for credit.

455. Management of the Planning Process (4)

The organizational planning process from the perspective of managers of public and private institutions. Systems analysis, psychological, philosophical considerations.

456. Management of Urban and Regional Planning (4)

Environmental and economic impact statements and reports. Plans and reports required by regulatory bodies. Implications for managers.

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, and 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, or consent of the instructor.

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. Alternative solutions to remedy abuses such as small claims court, homesteading, assertion of rights in default, repossession, foreclosure, deficiency, and garnishment, and governmental agencies' public enforcement.

462. Seminar in Marketing Research (4)

A review, with practical application, of the construction and analysis of marketing information to facilitate decision-making. Discussion of the use and abuse of proper research technique, including ethical considerations.

Prerequisite: Mgt 360, or consent of instructor.

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 between 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.

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.

476. International Finance (4)

Environment within which multi-national firms operate. The international monetary system, multi-national business and national sovereignty, external and internal sources of funds, import and export financing, taxation, the investment decision, cost of capital, uncertainty and risk in foreign exchange, and accounting and control.

Prerequisite: Econ. 201, Mgt 493, or consent of instructor.

478. Contemporary Problems of Insurance (3-4)

Selected topics of current interest in insurance; specialized topics in life insurance, corporate risk management, and social insurance.

482. Research in Management (1-4)

May be repeated for credit.

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. Simulation of the managerial process through computer decision models. Discussion of case studies. 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 contrasted and compared with reference 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. 201 or consent of instructor.

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. Enrollment by prior arrangement only: Consult Internship Coordinator for details. May be repeated for credit. CR/NC grade 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 Human Systems Development (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.

Prerequisites: Mgt 318, 444, or consent of instructor.

550. Seminar in Organization and Simulation Theory (4)

Study of theories and models of formal organizations, including models of management processes.

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)

How 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.

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.

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.

570. Seminar in International Finance (4)

Graduate study of institutions and interdependencies in world money markets.

581. Seminar in Thesis Design and Preparation (2-4)

The course is directed toward candidates for the degree of Master of Arts in Management. Topics will be: (1) what constitutes an acceptable topic or hypothesis, (2) the issue of methodology, and (3) the mechanical problems associated with form and style.

591. Seminar in Public Interest: Management and Economic Issues (4)

Graduate study of the US mixed economy; applications with specific management focus: automation, industrial democracy, worker control and corporate responsibility.

592. Seminar in Development of Management Theory (4)

An eclectic view of the history of management theories. Extensive 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.

Prerequisite: Econ 201 or consent of instructor.

599A-B. Master's Degree Directed Research (3-3)

Open only to fully classified graduate students. 599A and 599B ordinarily may not be taken concurrently.

MATHEMATICS

Department Chair: Charles Phillips

Faculty: William Barnier, Donald Duncan, Clement Falbo, Norman Feldman, R. H. Johnson, Frederick Luttmann, Thomas Nelson, Jean Stanek, Thomas Volk, Sommai Vongsuri.

Programs offered by the Mathematics Department are designed to equip students with an understanding of the art of symbol manipulation and the ability to reason in the context of symbols. They also stress the necessary interplay between the place mathematics has in everyday life and the development of mathematics as an art form of the highest kind. This dialectic has enabled the discipline to stand the test of time quite well. Mathematics is the oldest of the academic disciplines and continues to grow.

The basic curriculum is suitable for continuation of study toward advanced degrees in mathematics. The B.A. and M.A. programs provide preparation for mathematics teaching through the community college level; and the B.S. programs prepare students for many fields, including computer science, statistical work in government and industry, biostatistics, and actuarial work. Because a degree in mathematics indicates mastery of symbol manipulation, graduates are also sought after in many areas where mathematics may be of minimal importance but clarity of thinking is essential.

BACHELOR OF ARTS IN MATHEMATICS

Major

General Education	40
Major	43
Electives	41
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	3
231—Introduction to Linear Algebra and Differential Equations	3
261—Calculus III with Analytic Geometry	4
320—Modern Algebra	3
322—Linear Algebra	3
340—Real Analysis	3
Electives in Mathematics (15 of which must be upper division not including 300. Any lower division mathematics elective must be approved by the mathematics advisor.)	19
TOTAL	43

BACHELOR OF SCIENCE IN MATHEMATICS

OPTION IN APPLIED MATHEMATICS AND COMPUTER SCIENCE FOR THE B.S. DEGREE

Major

General Education	40
Major	45

Electives	39
	124

COURSE REQUIREMENTS

A. Applied Math Emphasis

120—Machine Programming

or

122—Intro. to Computer Programming.....	3
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	3
231—Intro. to Linear Algebra & Diff. Equations	3
261—Calculus III with Analytic Geometry	4
322—Linear Algebra.....	3
331—Applied Differential Equations	3
340—Real Analysis	3
460—Introduction to Complex Variables	3
Two electives selected from Math 345, 352, 430, 480.....	6
Upper Division electives in mathematics (excluding 300)	9

45

B. Computer Science Emphasis

122—Intro. to Computer Programming.....	3
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	3
231—Intro. to Linear Algebra & Diff. Equations.....	3
250—Assembly Lang. & Computer Organization.....	3
261—Calculus III with Analytic Geometry	4
320—Modern Algebra	3
322—Linear Algebra.....	3
340—Real Analysis	3
345—Probability Theory.....	3
354—Data Structures.....	3
406—Combinatorics	3
An elective selected from Math 450, 452, 454	3
Upper Division electives in Mathematics (excluding 300)	3

45

OPTION IN STATISTICS FOR THE B.S. DEGREE

Major

General Education	40
Major	43
Electives	41

124

COURSE REQUIREMENTS

120—Machine Programming

or

122—Intro. to Computer Programming.....	3
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	3
231—Introduction to Linear Algebra and Differential Equations.....	3

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261—Calculus III with Analytic Geometry	4
340—Real Analysis	3
345—Probability	3
360—Design of Experiments	3
365—Statistical Inference	3
Electives selected from a list of courses on file with the undergraduate advisor.	
That list includes Math 465, 466, 467, 515, 565, and others.....	13
	43

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).

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.

MATHEMATICS PROFICIENCY EXAM

The passing of the Mathematics Proficiency Exam or Math 105T or having an equivalent approved by the Mathematics Department is a prerequisite for Mathematics courses numbered 105A, 106, 107, 111, 115, 117, and 165. Please consult the class schedule for times and place of exam.

MATHEMATICS COURSES

ALGEBRA AND TRIGONOMETRY COURSES

Math 105 T, A, B, C, D, E are one unit modules of a *self-paced* sequence of algebra and trigonometry courses.

Students who get credit for either Math 105 C, D or E cannot also get credit for Math 107 or 108. Students who have taken Math 107 or 108 may not get credit for Math 105.

Students who have credit for Math 106 or 117 may not get credit for Math 105T or 105A.

Students who have received credit for Math 105A or 105B may not get credit for Math 106 or 117.

105T. Pre-Calculus Mathematics (1)

Decimals, fractions, percents, primes, polynomials, factoring, solving linear equations and quadratic equations which factor, ratio and proportion, story problems, graphing.

105A. Pre-Calculus Mathematics (1)

Factoring, equations and inequalities, radicals and fractional exponents, quadratic

equations, variation, applications. May be applied toward the General Education Requirement for Mathematics.

Prerequisite: Math 105T or passage of Mathematics Proficiency Exam, or consent of instructor.

105B. Pre-Calculus Mathematics (1)

Graphing relations and functions, symmetry and inverses, equation of a straight line, mid-point and distance formula, equations and inequalities involving absolute values, systems of linear equations. May be applied toward the General Education requirement for mathematics.

Prerequisite: Math 105A or consent of instructor.

105C. Pre-Calculus Mathematics (1)

Exponential and logarithmic functions, trigonometric functions and their graphs, algebraic and trigonometric manipulations. May be applied toward the General Education requirement for mathematics.

Prerequisite: Math 105B or consent of instructor.

105D. Pre-Calculus Mathematics (1)

Sum and half-angle formulas, identities, inverse trigonometric functions, trigonometric equations, solving right triangles, laws of sine and cosine. May be applied toward the General Education requirement for mathematics.

Prerequisite: Math 105C or consent of instructor.

105E. Pre-Calculus Mathematics (1)

Complex numbers, DeMoivre's Theorem, equations, polynomials second degree equations and their graphs. May be applied toward the General Education requirement for mathematics.

Prerequisite: Math 105D or consent of instructor.

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. Satisfies General Education requirement for mathematics; also prepares students with weak background in algebra for either Math 107 or 108.

Prerequisite: Math 105T or passage of Mathematics Proficiency Exam or consent of instructor.

107. Algebra and Trigonometry (4)

Topics include those listed under 105A, 105B, 105C and 105D above. This course is equivalent to 105A, 105B, 105C and 105D. Student cannot get credit for both Math 107 and Math 108. Satisfies General Education requirement for mathematics.

Prerequisite: Math 105T or passage of Mathematics Proficiency Exam, or consent of instructor.

108. Analytic Geometry and Trigonometry (3)

Analytic Geometry: distance formula, slope, circle, ellipse, parabola, tangent lines.

Trigonometry: right triangles, trigonometric functions, identities, applications.

This course assumes more background in algebra than Math 107 and is primarily designed as a precalculus course. Students may not get credit for both Math 107 and Math 108. Satisfies General Education requirement for mathematics.

Prerequisite: Math 106, 105B 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 105D or 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 of Physical Sciences. Math 117 or 105B or 106 or their equivalencies.

231. Introduction to Linear Algebra and Differential Equations (3)

Separable, exact and first order linear equations. Matrices, determinants, vector spaces and linear transformations. Linear differential equations and systems of differential equations.

Prerequisites: Math 211 or equivalent or consent of instructor.

COMPUTER SCIENCE COURSES

116. Introduction to COBOL (3)

A first course in programming in the business-oriented computer language, COBOL. The student will learn to analyze typical business problems and prepare programs for their solution on the computer.

Prerequisite: None

120. FORTRAN (3)

Special emphasis will be placed on programming style. The top-down and structured programming approaches will be used. Any student with credit in another computer science course must get the consent of the instructor before enrolling in Math 120.

Prerequisite: Math 105D or Math 107 or Math 108 or consent of instructor.

122. Introduction to PASCAL (3)

Study of the modern structured programming language, PASCAL. Students wishing to take subsequent computer science courses should begin with this course. Any student with credit in another computer science course must get the consent of the instructor before enrolling in Math 122.

Prerequisites: Math 105D or 107 or 108 or equivalent or consent of instructor.

250. Assembly Language Programming (3)

Study of assemblers. Computer organization and elementary data structures.

Prerequisites: Math 120 or 122 or Chem 381 or Physics 381 or consent of instructor.

255. Programming Languages (3)

Survey and comparison of programming languages with respect to syntax, data structures, binding times, storage allocation, control and implementation. The languages compared may be PASCAL, FORTRAN, SNOBOL, LISP, and SIMULA. Programs will be run covering cryptography, text analysis, and language translation.

Prerequisite: Math 122.

354. Data Structures (3)

Stacks, queues, dequeues, linked lists, binary trees. Computer oriented graph theory. Sorting and searching.

Prerequisites: Math 122 or consent of instructor.

450. Operating Systems (3)

Multiprogramming and timesharing systems. Scheduling policies. Storage management, Design of a sample operating system. Students will be required to program and test modules for the sample system.

Prerequisite: Math 250 and 354 or consent of instructor.

452. Theory of Language (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.

Prerequisites: Math 354 or consent of instructor.

454. Automata Theory and Recursive Function Theory (3)

Turing machines, recursive functions, halting problem, Post system, finite automata.

Prerequisite: Math 320.

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. Satisfies the General Education requirement for Mathematics.

Prerequisite: Math 105T or passage of Mathematics Proficiency Exam or consent of instructor.

115. Explorations in Mathematics (3)

A general education course designed to give cultural depth in the mathematics required for a liberal education.

Satisfies General Education requirement for Mathematics.

Prerequisite: Math 105T or passage of Mathematics Proficiency Exam or consent of instructor.

117. Mathematics for the Social Sciences A (3)

Applications to problems from management, sociology, psychology. Topics include sets, inequalities, sums, functions, introduction to linear programming, vectors, determinants, matrices, finite probabilities, conditional probabilities.

234 / Mathematics

Satisfies General Education requirement for Mathematics; also prepares students with weak background in algebra for either Math 107 or Math 108.

Prerequisite: Math 105T, consent of instructor, or passage of Mathematics Proficiency Exam.

118. Mathematics for the Social Sciences B (3)

A continuation of Mathematics 117. Topics include random variables, expected values, Bayes Theorem, Markov chains, some statistics, binomial and normal distributions, regression and correlation, Simplex method, introduction to game theory.

Satisfies General Education requirement for Mathematics.

Prerequisite: Math. 105A or equivalent, or consent of instructor.

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. The course is not to be repeated for credit toward Mathematics General Education requirements (Basic Subjects).

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 (3)

About the first three-fourths of 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. To illustrate a specific application of logic in some depth, the last part of the course will concentrate on the elementary concepts of cardinality and the natural numbers.

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. Systems of numeration, geometry, measurement, sets, logic.

Prerequisite: Three units of college mathematics and one of the following: Math 105T,

passage of Mathematics Proficiency Exam, 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. Isometries 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, Math 231 or consent of instructor.

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 261 and 320 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 220 and Math 261, or consent of instructor.

352. Numerical Analysis (3)

Selected numerical and iterative processes for solving equations. Topics may include: Finite difference and Lagrangian interpolation formulas.

Prerequisites: 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.

236 / Mathematics

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.

430. Partial Differential Equations (3)

Classification of second order equations, method of characteristics for quasi-linear first order equations, boundary value problems for elliptic and parabolic equations, difference methods. Fourier transforms.

Prerequisites: Math 261 and Math 231 or consent of instructor.

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.

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 331 or Math 340 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, and Biol 116 or 117.

480. Integral Transforms (3)

Laplace transforms and their inverses, applications to differential and integral equations, Fourier transforms. Other topics from current literature.

Prerequisites: Math 460 and Math 331 or consent of instructor.

495. Special Studies (1-4)

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.

Satisfies the General Education requirement for Math.

Prerequisite: 105T or passage of the Mathematics Proficiency Exam within four weeks of the beginning of the semester 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.

Prerequisites: Math 220 and Math 261, 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 354 or consent of instructor.

466. Applied Statistical Methods I

Principles of design of experiments, comparison of design, basic sampling models and methods.

Prerequisite: Math 165.

467. Applied Statistical Methods II

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.

MASTER OF ARTS IN MATHEMATICS

A. The requirements for acceptance in the Mathematics Department's M.A. degree program are:

- (1) A Bachelor's degree from an accredited institution and a grade point average of at least 2.5 for the last 60 units of college level work attempted.
- (2) A major in mathematics.
- (3) Completion of undergraduate courses which include topics found in Math 220 (Logic & Proof), Math 320 (Modern Algebra), Math 322 (Linear Algebra), Math 340 (Real Analysis).
- (4) A high standard of scholarship in undergraduate work and a grade point average of 3.0 in upper division work in mathematics.
- (5) Acceptance by the departmental graduate advisor with mutual agreement by the department and the advisor that the area of interest is compatible with facilities and interests of the department.

(6) Completion of the advanced Graduate Record Examination in Mathematics. Two copies of all transcripts of college level work (as requested by Admissions Office) and letters of recommendation from 3 people who can evaluate your intellectual abilities must be submitted.

- B. Students who would like to enter the M.A. degree program but do not meet all of the above requirements may enter as conditionally classified graduates. In this case the following are required:

- (1) A Bachelor's degree from an accredited institution and a grade point average of at least 2.5 in the last 60 units of college level work attempted.
- (2) Acceptance by the departmental graduate advisor with mutual agreement by the department and the advisor that the area of interest is compatible with facilities and interests of the department.

Please consult the graduate advisor of the Mathematics Department for further information.

- C. The following procedures are prescribed for the degree of Masters of Arts in Mathematics:

- (1) Conference with the departmental graduate advisor upon arrival. A graduate student is urged to meet with the departmental graduate advisor at his earliest convenience, before registration if possible, at which time he will be informed in detail about the graduate program, and the steps he must take in order to complete his M.A. degree requirement.
- (2) Selection of Study Program Option.

Completion of 30 units of approved graduate work at the "400" level and the "500" level courses with a minimum of 24 units in mathematics and a 3.0 G.P.A. or better in course work applied to the degree. The student must choose one of the following options:

A. Master's Thesis Option	Units
Mathematics courses at the "500" level	12
Math courses at the "400" level or the "500" level (or other approved non-mathematical electives not to exceed 6 units)	12
Master's Degree Thesis (Mathematics 599)	6
Thesis seminar presentation	0
TOTAL units required	30
B. Project Option	
Mathematics courses at the "500" level	12
Mathematics courses at the "400" level or the "500" level (or other approved non-mathematical electives not to exceed 6 units)	15
Mathematics Project (Mathematics 595)	3
Project Seminar Presentation	0
TOTAL units required	30
C. Examination Option	
Mathematics courses at the "500" level	15
Mathematics courses at the "400" level or the "500" level (or other approved non-mathematical electives not to exceed 6 units)	15
Examination (Oral or Written)	0
TOTAL units required	30

Graduate Courses

515. Advanced Probability Theory (3)

Order statistics, time series and spectral analysis.

Prerequisite: Math 345 or consent of instructor.

518. Algebraic Topology (3)

Two-dimensional manifolds, properties of compact, connected manifolds. The concept of the fundamental group of a topology. Covering spaces.

Prerequisites: Math 418 and Math 320 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.

535. Ordinary Differential Equations (3)

Linear systems, existence theorems regular and irregular singular points. Topics from regular and singular boundary value problems. Qualitative behavior of solutions. Perturbation methods, stability theory.

Prerequisites: Math 430 and Math 438 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.

550. Abstract Algebra—Group Theory (3)

The Jordan-Hölder-Schreier theorem. Galois theory, ideal theory, multilinear algebra.

Prerequisite: Math 320 or consent of instructor.

560. Operations Research (3)

Unconstrained and constrained optimization, linear programming, queues and inventories.

Prerequisite: Math 322, 345, or consent of instructor.

568. Special Topics in Topology (3)

Topics of current interest in topology.

Prerequisite: Math. 418 or equivalent or consent of instructor.

570. Real Variables (3)

A sophisticated approach to real analysis, includes rigorous treatment of real numbers, limits, integration, convergence, various special functions.

Prerequisite: Math 340 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)

599. Thesis (6)

Prerequisite: See Master's Degree requirements.

MEXICAN-AMERICAN STUDIES

Department Chair: Manuel J. Hidalgo

Faculty: Esteban Blanco, Carmen Cesena, Andrea Neves, Francisco J. Hernandez

Contributing and Part-time Faculty: Ned Averbuck, Herb Castillo, Carlos Cordero, Sally Hurtado, Roberto Ramirez, and Miguel Tirado.

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.

The Department of Mexican American Studies, in cooperation with the Departments of Education and Foreign Languages, also offers a graduate Teaching Credential in Bilingual/Cross-Cultural Education.

BACHELOR OF ARTS IN MEXICAN-AMERICAN STUDIES

Major	<i>Units</i>
General Education	40
Major	40
Core Courses	20
Area of Concentration	20
Electives or Supporting Courses.....	44
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—Elementary Barrio Language	
MAMS 303—Chicano Identity	
MAMS 325—Advanced Barrio Language	
MAMS 326—Bilingualism in the Chicano Community	

MAMS 354—Politics and 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 a student an opportunity to study in areas of their interest, they must select an area of concentration. The department has the following areas of concentration: Social Science, Humanities, Community Studies, Education.

TOTAL UNITS AREA OF CONCENTRATION	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 CREDENTIAL OPTIONS

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.

C. Bilingual/Cross-Cultural Specialist Teaching Credential

This program was developed to meet the requirements for credentialled teachers to obtain a specialist credential in bilingual education. The program will use both English and Spanish as languages of instruction, and a candidate must successfully complete a Language and Culture Assessment prior to official admission to the program.

MINIMUM COURSE REQUIREMENTS FOR THE BILINGUAL/CROSS-CULTURAL SPECIALIST CREDENTIAL

		<i>Units</i>
Phase I	MAMS 445 Chicano History	4
	MAMS 451 Chicano Humanities.....	4
	MAMS 456 Bilingual Education.....	4
	MAMS 326 Bilingualism in the Chicano Community	4
Phase II *	MAMS 426 Target Language Skills for Speakers of Spanish ..	3
	* MAMS 557 Methods & Materials in Bilingual Education	5
	* MAMS 558 Teaching Reading to the Bilingual Child	2
	* EDUC 531 Bilingual Field Practicum.....	4
	TOTAL	30

D. Language and Culture Assessment

All students who wish to obtain a bilingual credential must successfully complete a Language and Culture Assessment given by the Department of Mexican American Studies. Students who have to take the Language and Culture Assessment should contact the Department of Mexican American Studies for dates and times the Assessment will be given. This should be done at the time the student applies for admission to the credential program.

MEXICAN-AMERICAN STUDIES COURSES

102. College Survival for Non-Traditional Students (2)

A study skill development approach to student involvement with college. 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 complimentary Mexican American Studies subject matter course or with one of the University's required General Education courses.

105. Innovations in English (3)

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 complimentary Mexican American Studies subject matter course or with one of the University's required General Education courses.

201. Experimental Courses (1-5)**203. Seminar in Communication Skills (1-3)**

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 complimentary Mexican American Studies subject matter course or with one of the University's required General Education courses.

219. Introduction to Chicano Studies (4)

An overview of the historical, political, social and cultural antecedents of the Chicano experience. Using an interdisciplinary approach, the students will relate these factors

* Candidate must have passed the Spanish language assessment, completed Phase I, and be officially admitted to the program prior to taking Phase II courses.

to an analysis of the current status of Chicanos within the United States. (A general — education course)

225. Elementary Barrio Language (4)

Systematic survey of the fundamentals of barrio language as found within Chicano communities. Using language learning techniques, including lab work and field work trips, the students will develop proficiency in the language.

301. Experimental Courses (1–5)

303. Chicano Identity (4)

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)

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)

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.

320. Community Spanish for Medical Practitioners (2–3)

A survey of community and dialectal Spanish pertinent to public health agencies. Recommended for medical practitioners who plan to work with the Mexican American community.

325. Advanced Barrio Language (4)

A review of the fundamentals and an advanced study of language within the Chicano community, using language lab and field trips the student will study specialized dialects, including Calo, as a part of development proficiency in the language. Prerequisite: MAMS 225, or consent of 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.

328. Mini Corps/Teacher Corps Seminar (2)

An analysis of the problems that migrant and bilingual children encounter in the public schools. To include lecture/discussion, field trips, attending conferences and institutes and actual field experiences with migrant children, their families, and the Spanish speaking community. Prerequisite: Functional Spanish language skills and enrollment in either Mini-Corps or Bilingual Teacher Corps (2817) programs.

330. Chicano and the Law (4)

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)

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.

343. Pre-Columbian History of Mexico (4)

An analysis of the important indigenous civilizations in Meso-America, with particular emphasis on the Olmecs, Maya, Toltecs, and Aztecs, and how these groups relate to the cultural-historical make-up of the present day Mexican-American.

344. Chicano Perspectives on Mexican History (4)

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)

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)

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 descendents in the Americas.

354. Politics and the Chicano (4)

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)

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)

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)

A survey of traditional and contemporary music and dance of Mexican and Mexican-American society. The course will give 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)

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)

Selected topics in Chicano Studies with course content to be determined.

405. The Mexican-American Family (4)

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 migratory family, etc. Also, the relationship of Mexican-American family with other institutional factors in Anglo Society.

406. La Chicana (4)

A historical analysis of the role played by women in Mexican-American society from Pre-Columbian times to the present.

426. Target Language Skills for Speakers of Spanish (3)

This course is designed to improve oral and aural comprehension, reading and writing skills for persons who have a working knowledge of the Spanish language. Course will also emphasize dialectal language as well as the technical terminology necessary for subject matter instruction in Spanish.

Prerequisite: Consent of instructor or bilingual credential candidate.

432. Chicano Community Development (4)

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)

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)

Research seminar in local Chicano history, 19th and 20th 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)

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)

An analysis of the literature, philosophy, religion, art and the performing arts as they have developed in the Mexican American society. A general education course.

454. The Mexican-American in American Education (4)

An historical study of the Chicanos role in the U.S. public and private schools. To include an examination of Chicano education during the Spanish/Mexican period as well as Chicano alternative education since 1848.

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.

246 / Mexican–American Studies

459. Bilingual General Science (1–3)

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 (1–3)

A general math course taught bilingually (Spanish/English) and designed to give cultural depth in the mathematics required for a liberal education.

Prerequisite: Functional target language skills and completion of general education mathematics requirements.

477. Mexican American Art Workshop (1–4)

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)

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)

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)

501. Experimental Courses (1–4)

557. Methods & Materials in Bilingual Education (5)

This course is an application of current educational theory affecting bilingual students to curriculum design. It is a brief review of theories on language learning, culture and cognition and culture and teaching. Students will develop curriculum materials and curriculum outlines for bilingual students in all subject areas and for all levels. The students will also evaluate and adapt existing curriculum materials for use in the bilingual classroom. The course will be taught in Spanish. Prerequisite: Consent of instructor.

558. The Teaching of Reading for the Bilingual Child (2)

An examination of the techniques, methods, and theories which apply to teaching reading to bilingual children. Students will review past and present theories as well as analyze current methods and materials.

Prerequisite: Consent of instructor.

595. Special Studies (1–4)

MUSIC

Department Chair: William T. Johnson

Faculty: Ellen Amsterdam, Arthur Austin, Eleanor Biondi-Duste, Glenn Blair, Billy Browning, Anne Crowden, Margaret Donovan-Jeffry, Arthur Dougherty, Joann Feldman, James Frieman, Arthur Hills, Richard Kvistad, Carolyn Lewis, Beverly McChesney, Lucien Mitchell, Gordon Moore, Walter Oster, John Palacios, Phillip Rosheger, E. Gardner Rust, Earl Saxton, David Sloss, Larry Snyder, Thomas Stauffer, Laxmi Tewari, Marilyn Thompson, Augustus Vidal, Bruce Walford, Michael Whitwell, Bonnie Williams.

The discipline of music focuses one's hearing and perception through the practical and cognitive studies of theory, history, analysis, performance and composition.

The student majoring in music refines his musical sensitivity against the background of a liberal arts education. The Music Department offers a four-year program designed to give the student comprehensive preparation in theory, history and performance. Special options are available in performance and music education. 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 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 instruments and African and Chinese instruments as well as a growing collection of Medieval and Renaissance instruments. Facilities include a large library with modern listening stations, an electronic music studio, 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.

BACHELOR OF ARTS IN MUSIC

Major

	<i>Units</i>
General Education	40
Major	43-51
Electives.....	33-41
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.

Acceptance to the Music Major

All prospective music majors are accepted on probationary status during their first semester in residence. During this semester they must demonstrate motivation and proficiency appropriate to their prior experience as musicians and must also show satisfactory progress in music classes. Every student must consult his or her advisor before continuing as a music major beyond the probationary semester.

Proficiency Expectations

Entering students must either pass a challenge exam for Keyboard Skills Workshop (Music 306) or begin immediately to develop technique sufficient to pass it. Enrollment in an appropriate piano class is required for enrollment in theory classes. Students who have not developed any piano skills should expect to take five semesters of Basic Piano (Music 101, 102, 103, 104, and 306), beginning in the first semester of work as a music major.

An Aural Skills Test, checking the student's proficiency in sight singing and dictation, will be the final examination in Music 305. All students will be expected to pass this test before going on to specified portions of the upper division work in music.

Transfer Students

All students wishing to enter as music majors in the junior year will be required to take a challenge exam in Aural Skills Workshop (Music 305), equivalent to the Aural Skills Test, 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 four 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 core of the upper division program is a series of courses designed to integrate the traditional studies of music history with form and analysis. The upper division core requirement consists of Music 300 A and B, and two of the following three courses: Music 351; Music 352; Music 353.

Every music major will be expected 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. In any case, the Senior Project must include some practical demonstration of the student's musical understanding.

During the junior and senior years, each music major must take sufficient additional upper division units in music to total forty-three. These units may be chosen from courses such as those in specific periods, genres, or composers; conducting; composition; orchestration; jazz arranging; non-Western music; or studio instruction. Performing ensembles may not be included among these units.

The Performance Requirement

Music Department ensembles include Orchestra, Chorus, Chamber Singers, Chamber Music, Wind Ensemble (Concert Band), Jazz Improvisation, Experimental Music Group, Opera Workshop, Jazz Workshop, Concert 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. 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.

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.

SPECIAL EMPHASES 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 or Performance Option. 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 the specialization by means of a performance, composition, research paper, etc.

COURSE REQUIREMENTS		Units
Music 110	Musicianship II	3
Music 120	Musicianship II Lab	2
Music 111	Musicianship III	3
Music 121	Musicianship III Lab	2
Music 210	Musicianship IV	3
Music 220	Musicianship IV Lab	2
Music 310	Musicianship V	3
Music 320	Musicianship V Lab	2
Music 200AB	Listening Skills—Western Music	2, 2
Music 300AB	Listening Skills—Non-Western Music	2, 2
Music 305	Aural Skills Workshop	1
Music 306	Keyboard Skills Workshop	1
Two of the following three courses:.....		8
Music 351	History and Analysis—Early Western Music (4)	
Music 352	History and Analysis—Common Practice Period (4)	
Music 353	History and Analysis—Twentieth Century Music (4)	
Music 490	Senior Project	1-2
Additional Upper Division Music Courses		3-4
TOTAL		43

MUSIC EDUCATION OPTION: details of this option are available from the Music Department.

PERFORMANCE OPTION: details of this option are available from the Music Department.

MINOR IN MUSIC

To complete a minor in music, a student must take Music 250 (Introduction to Music Literature), Music 251 (Music of the World) and 14 additional units, 6 of them upper division, in consultation with a Music Department advisor. Students contemplating a minor in music should consult the Music Department at the earliest possible date for approval and advising.

An appropriate music minor program should include some study in music history and in music theory. At least six units in music must be taken at Sonoma State University. 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.

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. Musicianship I: Fundamentals (4) Hills

A basic course in reading notes, ear training, dictation, sight-singing, etc. This course is intended for students not yet qualified to begin Music 110 and Music 120 or Music 307. Prospective music majors must enroll concurrently in Music 101 unless they can demonstrate equivalent competency.

107. Piano Accompanying (1-2) Snyder, Donovan-Jeffry, Feldman, Johnson

Instruction in the skills of accompanying singers, instrumentalists and ensembles. Students will be expected to spend additional hours gaining practical experience accompanying ensembles and vocal classes. May be repeated for credit to a maximum of six units.

Prerequisite: Consent of instructor.

110. Musicianship II: Theory (3) Department Faculty

Diatonic harmony and contrapuntal techniques. Students must enroll concurrently in Music 102 and Music 120 or demonstrate equivalent competencies.

Prerequisite: Music 105 or equivalent, and placement test.

111. Musicianship III: Theory (3) Department Faculty

Continuation of Musicianship II. Students must enroll concurrently in Music 103 and Music 121 or demonstrate equivalent competencies.

Prerequisites: Music 110 and 120 or equivalents, and placement test.

113. Class Instruction in Guitar (1) Rosheger

Beginning and intermediate instruction in folk, classical and other guitar styles. May be repeated for credit. Also offered for upper division credit as Music 413.

Prerequisite: Consent of instructor.

114. Class Instruction in Recorder (1) Department Faculty

Beginning and intermediate instruction in recorder technique. May be repeated for credit. Also offered for upper division credit as Music 414.

Prerequisite: Consent of instructor.

115. Beginning Voice Technique (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. Also offered for upper division credit as Music 415.

Prerequisite: Consent of instructor.

120. Musicianship II Laboratory: Ear-Training (2) Department Faculty

Sight-singing, dictation and keyboard harmony. Must be taken concurrently with Music 110.

Prerequisite: Music 105 or equivalent, and placement test.

121. Musicianship III Laboratory: Ear-Training (2) Department Faculty

Continuation of Musicianship II Lab.

Prerequisites: Music 120 or equivalent and placement test.

122. Class Instruction in Strings (1) Sloss

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) Dougherty

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) Dougherty

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 Technique (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) Kvistad

Also offered for upper division credit as Music 429. May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

133. Studio Instruction—Strings (1–2) Crowden, Mitchell, Palacios, Stauffer

Private instruction on one instrument for advanced students. Also offered for upper division credit as Music 433. May be repeated for credit.

Prerequisite: Audition.

134. Studio Instruction—Woodwinds (1–2) Austin, Blair, Biondi-Duste, McChesney, Williams

Private instruction on one instrument for advanced students. Also offered for upper division credit as Music 433. May be repeated for credit.

Prerequisite: Audition.

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137. Studio Instruction—Brass (1–2) Moore, Saxton, Whitwell

Private instruction on one instrument for advanced students. Also offered for upper division credit as Music 437. May be repeated for credit.

Prerequisite: Audition.

138. Studio Instruction—Percussion (1–2) Kvistad

Private instruction on percussion instruments for advanced students. Also offered for upper division credit as Music 438. May be repeated for credit.

Prerequisite: Audition.

139. Studio Instruction—Keyboard (1–2) Thompson, Donovan-Jeffry, Snyder, Hills

Private instruction on keyboard for advanced students. Also offered for upper division credit as Music 439. May be repeated for credit.

Prerequisite: Audition.

141. Studio Instruction—Voice (1–2) Lewis, Rust

Private voice instruction for advanced students. Also offered for upper division credit as Music 441. May be repeated for credit.

Prerequisite: Audition.

143. Studio Instruction—Guitar (1–2) Rosheger

Private guitar instruction for advanced students. Also offered for upper division credit as Music 443. May be repeated for credit.

Prerequisite: Audition.

144. Studio Instruction—Non-Western Instruments (1–2) Tewari, Vidal

Private instruction on non-Western instruments for advanced students. Also offered for upper division credit as Music 444. May be repeated for credit. Prerequisite: Audition.

200AB. Listening Skills—Western Music (2,2) Department Faculty

Masterworks of Western music, with emphasis placed on listening and on the larger aspects of analysis.

Prerequisite: Music 110 and 120 or consent of instructor.

210. Musicianship IV: Theory (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. Musicianship IV Laboratory: Ear-Training (2) Department Faculty

Advanced sight-singing, dictation and keyboard harmony.

Prerequisites: Music 121 or equivalent, and placement test.

250. Introduction to Music Literature (3) Department Faculty

An introductory course with lectures and demonstrations dealing with the music of the Western Classical Tradition. Acceptable as three units of the General Education Humanities requirement; may not be used by Music Majors to meet the Humanities General Education requirement. Required for the Music Minor.

251. Music of the World (3) Rust, Tewari, Vidal

A survey of folk, court and religious music from cultures around the world. Not acceptable for credit toward the music major. Acceptable as three units of the General Education Humanities requirement. Required for the Music Minor.

255. Workshop In African Music and Musical Instruments (1) Vidal

A laboratory devoted to instruction in African xylophones, drumming, and songs. An opportunity to gain understanding of African music and musical instruments through participation. Also offered for upper division credit as Music 455.

Prerequisite: Consent of instructor.

256. African Music Concert Ensemble (1-3) Vidal

The study and presentation of various African music and dance repertoires in traditional African music idioms from a number of selected musical cultures. May be repeated for credit. Also offered for upper division credit as Music 456.

Prerequisite: Music 255 or audition.

261. Introduction to Electronic Music (1-3) Johnson

Survey of the literature, with some instruction in studio techniques.

295. Community Involvement Program (1-4) Department Faculty

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. Students taking C.I.P. through the Music Department must arrange for supervision by a Music Department advisor. Also offered for upper division credit as Music 395.

300AB. Listening Skills—Non-Western Music (2,2) Rust, Tewari, Vidal

Introduction to non-Western music, with emphasis placed on listening and on the larger aspects of analysis.

Prerequisite: Music 200 A & B.

305. Aural Skills Workshop (1) Department Faculty

Advanced sight-singing and dictation, intended to develop further the skills gained in Music 220. The final examination in this course is the Aural Skills Test.

Prerequisite: Music 220 or the equivalent, or consent of instructor.

306. Keyboard Skills Workshop (1) Department Faculty

The study of keyboard harmony, transposition, and sight-reading. The final examination for this course is the Piano Proficiency Test. Open to advanced pianists only.

307. Music Theory for Non-Majors I: Popular Music Theory (1-3) Johnson

Study of modes and chords appropriate to different popular styles. General principles of chord progression and application in various popular styles. Emphasis is on developing facility in using the above materials in original compositions. Open to any student. Does not count toward the music major.

Prerequisite: Music 105 or consent of instructor.

308. Music Theory for Non-Majors II: Popular Music Theory (1-3) Johnson

Continuation of Music 307. Use of chromatic harmony in popular styles. Advanced chord substitution.

Prerequisite: Music 307 or consent of instructor.

310. Musicianship V: Theory (3) Department Faculty

Continuation of Musicianship 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. Arranging for School Ensembles (3) Department Faculty

Techniques of instrumental and choral arranging for typical school instrumental and choral ensembles.

Prerequisite: Music 305 or consent of instructor.

316. Stage Band Composition and Orchestration (2) Oster

Study of the instruments of the stage band, with examples in writing for various instrumental groups and scoring for the band as a whole. Admission by audition. May be repeated for credit.

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319. Jazz in American Society (3) Browning

The history and development of Jazz from its origin as a blending of West African tribal and European folk music, through minstrelsy blues, spirituals, ragtime, swing, bebop and the modern era. Emphasis is placed on the "New Orleans Melting Pot," "Harlem Renaissance" and "Southwestern Renaissance."

320. Musicianship V Laboratory: Ear-Training (2) Department Faculty

Continuation of Musicianship IV Laboratory, with an emphasis on twentieth century music.

Prerequisites: Music 220 or Aural Skills Test.

321. Piano Repertoire (1-2) 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 (1-3) 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 (1-2) Snyder, Donovan-Jeffry, Feldman, Thompson

The study and performance of literature for piano ensembles. May be repeated for credit.

Prerequisite: Consent of instructor.

327. Wind Ensemble (1-2) Department Faculty

The study and presentation of wind ensemble music from all periods of musical literature. May be repeated for credit.

Prerequisite: Consent of instructor.

328. Chamber Orchestra (1-3) Sloss

Admission to the Chamber Orchestra is by audition. May be repeated for credit.

329. Chamber Music Workshop (1-2) Crowden, Williams

Instruction and coaching in the performance of chamber music. May be repeated for credit.

Prerequisite: Consent of instructor.

330. Opera Workshop (1-3) Donovan-Jeffry

A course devoted to the study and performance of the operatic literature. The workshop, designed for singers, accompanists, and others interested in the lyric theater, will place emphasis on total music theater artistry. Admission to the workshop is by audition. May be repeated for credit.

Prerequisite: Consent of instructor.

331. Songwriting (1) Johnson

An opportunity for songwriters and prospective songwriters to share musical insights and ideas. Songwriters of interest to the participants will be invited to perform and

discuss their work. Some experience in songwriting is desirable. May be repeated for credit.

332. Experimental Music Group (1-2) Kvistad

The study of new techniques of performance, especially improvisation, utilized in recent music. May be repeated for credit.

Prerequisite: Consent of instructor.

333. Repertory Orchestra (1) Sloss

Readings of a wide variety of instrumental and dramatic literature, affording opportunities to instrumentalists, singers and conductors. May be repeated for credit.

Prerequisite: Consent of instructor.

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. May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

343. Studies in Musical Genres (1-3) Department Faculty

Detailed examination of a particular type of music in various periods. 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 (1-3) Department Faculty

The development and practice of orchestral writing in relation to specific composers and historical periods. Prerequisite: Music 305 or consent of instructor.

351. History and Analysis of Early Western Music (4) 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 of Western Music in the Common Practice Period (4) Hills, Amsterdam, Rust

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 (4) 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.

377. Innovations in Music and Psychology (3) Hills

The course surveys current uses of music as a tool in fostering all types of human growth. Outside speakers, representing a wide range of viewpoints, provide the focus for class discussion and reactions.

380. Studies in American Music (1-3) Department Faculty

A survey of the history and development of American music.

Prerequisite: Consent of instructor.

389. Jazz Improvisation (1-2) Browning, Oster

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

390. Jazz Workshop (1-2) Browning, Oster

An instrumental program for the beginning jazz student dealing with the study of jazz improvisation and its various forms. Group playing designed to improve playing skills and build confidence in this field. "Feeder" course for Music 391. May be repeated for credit.

Prerequisite: Consent of instructor.

391. Concert Jazz Ensemble (1-3) Oster

Performance and rehearsal of literature in the contemporary jazz idiom. May be repeated for credit.

Prerequisite: Music 390 or consent of instructor.

392. Jazz Piano (1) Oster

A course designed to study chord playing and jazz improvisation.

Prerequisite: Consent of instructor.

395. Community Involvement Program (1-4) Department Faculty

See Music 295.

400. Theory of the Elementary School (Music) (3) Amsterdam, Dougherty

Philosophy, concepts and materials for music topics in the elementary schools. The structure, nature and function of music in young children's lives.

401. Ensemble Literature and Materials for Band and Orchestra (2) Dougherty

A comprehensive survey of teaching materials and literature for wind, string, and percussion instruments; repertory and program planning, organization and management of materials and equipment in the public school instrumental program; principles and techniques for building a comprehensive instrumental library. Open to upper division music majors and graduate students only.

402. Choral Literature and Methodology (2) Frieman

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.

413. Class Instruction in Guitar (1) Rosheger

See Music 113.

414. Class Instruction in Recorder (1) Department Faculty

See Music 114.

415. Beginning Voice Technique (1) Lewis, Rust

See Music 115.

422. Class Instruction in Strings (1) Sloss

See Music 122.

423. Class Instruction in Woodwinds (1) Dougherty

See Music 123.



455. Workshop in African Music and Musical Instruments (1) Vidal

A laboratory devoted to instruction in African drumming, songs, and xylophones. An opportunity to gain understanding of African music and musical instruments through participation. Must be taken concurrently with Music 457, or by consent of instructor.

456. African Music and Dance Concert Ensemble (1-3) Vidal

The study and presentation of various African music and dance repertoires in traditional African music and dance idioms from a number of selected musical cultures. May be repeated for credit.

Prerequisite: Music 455, consent of instructor, or audition.

457. African Music (3) Vidal

Examination of the history, organization, and function of music in various African societies. Study of melody, text, and African musical instruments; social, court, praise, ritual music, music for rites "de passage", and the mutual influences of contemporary African and western cultures will be examined. Suitable for anthropology, sociology, history, and expressive arts students.

459. Musical Cultures of the World (4) Rust, Tewaii, Vidal

A survey course of musical cultures outside the western classical music traditions, including the history, forms and functions of music in Asia, the Middle East, Africa, Indonesia, the Caribbean, South America and the United States.

Prerequisite: Music 300 or consent of instructor.

461. Electronic Music Composition (1-3) Johnson

Primarily a course in composition; discussion of techniques and examination of pieces will focus on helping the student to realize his own compositional interests. May be repeated for credit.

Prerequisite: Music 261 and some experience in composition.

480. Special Topics (1-4) Department Faculty

Topic 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. Studio Instruction—Senior Recital (1) 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

See Regulations and Procedures.

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 library resources in music 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

Program Coordinator: William V. Smith

Contributing and Part-time Faculty: James H. May, Joseph Myers, Otis Parrish, Mary Taylor, Daniel R. Bomberry, David W. Peri, Herminia Menez.

The Native American Studies Program is designed to provide opportunity for investigating three broad areas of contemporary and/or traditional culture. While offering classes dealing with the traditional 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 and literature, 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
 NAMS 352—Native American Legal & Political Systems—4 units

Cultural Studies

NAMS 331—Cultures of Eastern North America—4 units
 NAMS 332—Native American Cultures of the Plains—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 210 of this Catalog.

NATIVE AMERICAN STUDIES COURSES

200. Introduction to Native Americans (4)

A study of American-Indian tribes and nations from their origins until 1800.

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)

301. Native Californian History & Culture (4)

A survey of the cultures, and histories of Native California Indians.

320. The World Renewal System of Northwestern California (2)

Examines the World Renewal systems of the Karuk, Yoruk, and the Hupa. The course will study the symbolism and the spiritual functions of the annual and bi-annual ceremonies which comprise the World Renewal system the original inhabitants of Northwestern California.

330. Regional Historical Studies (4)

A comprehensive discussion of the cultural history of Native Americans in a particular regional or cultural area from the time of contact to the present.

331. Cultures of Eastern North America (4)

Native American cultures east of the Mississippi River; social and political responses to European culture and the destruction of native societies.

332. Native American Cultures of the Plains (4)

An in-depth focus on the indigenous cultures of the plains and their changes and disruptions.

335. Native American Cultures of the Great Basin and Plateau (4)

An examination of the pre-history and traditional cultures of the major tribes of the Great Basin and Plateau areas with particular emphasis on the current status of these tribes.

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 statuses 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 statuses 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.

NAMS 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 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.

352. Native American Legal and Political Systems (4)

Contrasting methods of legal and social control, leadership and decision-making, and the growth of the supertribal states.

354. Native American Literatures (4)

A discussion of traditional myths and songs as well as contemporary, literary works of Native Americans.

355. Analysis of North American Indian Myths (4)

Sample literary, psychological and anthropological studies of North American Indian myths and tales.

410. Seminar in an Individual Native American Culture (4)

An in-depth focus on the cultural experience of an individual Native American people.

420. Seminar in Contemporary Native American Studies (4)

Special attention to modern cultural and political movements, and urban and rural socio-economic problems

440. Seminar in Native American Linguistics (4)

A survey and analysis of the relationship between the languages and cultures of Native American people.

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)

NURSING

Department Chair: Laurel Freed

Faculty: Dorothy Blake, Patsy Bleeker, Darien Chandler, Barbara Curtin, Sandra DeBella-Baldigo, Romaine Farrell, Barbara Southworth-Fisher, Janice Hitchcock, Carol Landis, Leonide Martin, Virginia Meyer, Helen Monea, Rose Murray, Mary Searight, Sue Thomas.

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. Communication, decision-making, self-awareness, the process of change, and beginning teaching skills are emphasized throughout. 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. Family Nurse Practitioner preparation is available to a limited number of students in the senior year, and builds upon the junior year courses. Selection of students for the FNP preceptorship option is made from among candidates who have completed or are currently enrolled in the second semester of the junior year.*

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 in a progression 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

* Continued availability of FNP preceptorship is dependent upon grant funding.

sequence of courses in the major which allows for completion of the program in six to eight semesters.

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 and College general education requirements;
3. College credit in Chemistry with a grade of "C" or better;
4. College credit in Human Anatomy and Physiology with a grade of "C" or better;
5. Nine months of work experience as a registered nurse;
6. 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 CSUC English Equivalency Examination.

Eligible applicants who plan to enroll in the university prior to admission to the nursing major must apply to the Department of Nursing by petition during November to be considered for the following Fall.

Students in the nursing major must carry malpractice insurance and 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 harmony and 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 these are the desire for recognition of personal dignity and the right to self-determination.

Professional nursing is an interpersonal process directed toward providing care, cure, and coordination of health care in collaboration with other health professionals. We believe professional nursing is primarily concerned with the maintenance of humane, individualistic concern for people and their problems, with the goal of assisting people in their striving for health. 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.

Within this framework, the professional nurse provides, coordinates, and assists in continuous, uninterrupted care as individuals and families move on the health-illness continuum. 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 the related sciences in the practice of nursing; (2) assess each client situation in relation to its placement on the health-illness continuum; (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 accept the philosophy that the learner has the right to as much education as each is capable of pursuing. We believe there are many different approaches to the same goal and students may have traveled different routes, distances, and directions. Life experiences, motivation, and ability all affect one's timing and attainment of goals. We further believe that people learn in many different ways and it is the faculty's goal to work toward providing a flexible, individualized curriculum which will build upon previous knowledge and skills and enrich the student's life as a professional member of society.

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. Junior 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.

A separate progression has been developed for part time students, providing for completion of nursing course requirements in a minimum of six semesters, as follows:

Part time juniors, first year—Fall semester, 302, 315, 316; Spring semester, 310A, 367.

Part time juniors, second year—Fall semester, 310B, 311; Spring semester, 470, AMCS 432.

Part time seniors; Fall semester, 421AB, preceptorship study, required supporting course; Spring semester, 433, 467, preceptorship study.

Policy Statement on Changing the Sequence of Course Progression: Students who alter regular course progression in the nursing major must petition to the Department of Nursing to obtain faculty approval. Registration priority is given to students in regular progression.

BACHELOR OF SCIENCE IN NURSING

Major

	<i>Units</i>
Major Courses.....	61
General Education	40
Supporting Courses	8
Electives.....	15
	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.

COURSE REQUIREMENTS

	<i>Units</i>
Nursing 302—Microteaching for Nurses	1
Nursing 310AB—Concepts of Nursing in the Community	6
Nursing 311—Nursing Practicum in the Community	4
Nursing 315—Science Principles Applied to Human Phenomena	3
Nursing 316—Physical Assessment Lab	1
Nursing 367—Interaction and Change	2
Nursing 421AB—Preceptorship Seminar	2
Nursing 423AB—Preceptorship in Episodic Nursing	}
<i>or</i>	
Nursing 424AB—Preceptorship in Distributive Nursing.....	
<i>or</i>	
Nursing 425–426—Family Nurse Practitioner Preceptorship *	2
Nursing 433—Current Professional Problems.....	2
Nursing 467—Group Leadership and Change	2
Nursing 470—Introduction to the Research Process	2
	31

Supporting Course Requirements

American Multi-Cultural Studies 432—Health and Culture.....	4
Upper Division Non-Nursing Course Supportive of the Preceptorship	4
	8

The American Multi-Cultural Studies requirement may be met by other ethnic studies courses as approved by the curriculum committee of the Department of Nursing.

Students are encouraged to work closely with their major advisors in developing background for the preceptorship, and the selection of elective courses which support preceptorship study.

CURRICULUM

Junior Year

	<i>Units</i>
Nursing 302—Microteaching for Nurses	1
Nursing 310AB—Concepts of Nursing in the Community	6
Nursing 311—Nursing Practicum in the Community	4
Nursing 315—Science Principles Applied to Human Phenomena	3

* For specific Family Nurse Practitioner Preceptorship requirements, see Nursing Major Curriculum, Senior Year, Option II.

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Nursing 316—Physical Assessment Lab	1
Nursing 367—Interaction and Change	2
Nursing 470—Introduction to the Research Process	2
American Multi-Cultural Studies 432—Health and Culture	4
Electives.....	9
	32

Senior Year

OPTION I: PRECEPTORSHIP STUDY	<i>Units</i>
Nursing 421AB—Preceptorship Seminar	2
Nursing 423AB—Preceptorship in Episodic Nursing * or Nursing 424AB—Preceptorship in Distributive Nursing *)	6
Nursing 433—Current Professional Problems.....	2
Nursing 467—Group Leadership and Change	2
Upper Division Non-Nursing Course Supportive of the Preceptorship	4
Electives.....	16
	32
OPTION II: FAMILY NURSE PRACTITIONER PRECEPTORSHIP	<i>Units</i>
Nursing 421AB—Preceptorship Seminar	2
Nursing 425—FNP Clinical Practicum.....	5
Nursing 426—FNP Preceptorship	5
Nursing 433—Current Professional Problems.....	2
Nursing 467—Group Leadership and Change	2
Upper Division Non-Nursing Course Supportive of the Preceptorship.....	4
Electives **	12
	32

NURSING COURSES

MAJOR COURSES

302. Microteaching for Nurses (1) Department Faculty

Lecture, 1 hour; laboratory, 3 hours. (meets for ½ semester)

Theory which identifies the microelements of teaching, is discussed in lecture, and guided practice is provided in a simulated classroom setting. Enrollment is limited. Prerequisites: Consent of instructor.

310A. Concepts of Nursing in the Community (3) DeBella-Baldigo, Hitchcock, Meyer, Monea, 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.

* Students may enroll in Nursing 423AB or 424AB for a minimum of 3 units per semester and a maximum of 5 units per semester. Units in excess of the 6 units required to meet nursing major requirements may be counted as elective units.

** Students who wish to complete the FNP Preceptorship must be enrolled concurrently in, and complete, the following as elective units:

Nursing 430AB—FNP Seminar	4
Nursing 431AB—Concepts of Nursing Management in Primary Care	6

310B. Concepts of Nursing in the Community (3) DeBella-Baldigo, Hitchcock, Meyer, Monea, Thomas

Seminar, 3 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: 310A, concurrent enrollment in 311; consent of instructor.

311. Nursing Practicum in the Community (4) DeBella-Baldigo, Hitchcock, Meyer, Monea, 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, 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, or concurrent enrollment in 302, 310B, 315, 316, 367; consent of instructor.

315. Science Principles Applied to Human Phenomena (3) Landis

Lecture, 3 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: College chemistry, and college credit for human anatomy and physiology, with grades of "C" or above; consent of instructor.

316. Physical Assessment Laboratory (1) DeBella-Baldigo, Freed, Landis

Laboratory, 3 hours.

A self-paced learning lab that introduces the basic concepts and skills of human physical assessment. Instructional units cover problem-oriented records, head and neck, musculoskeletal system, peripheral cardiovascular system, and breast.

Prerequisites: Admission to the nursing major and/or consent of instructor.

367. Interaction and Change (2) Hitchcock, Murray

Seminar, 2 hours.

Small group, peer counseling, and journal keeping used to develop awareness of self as a physical, psychological, cultural being. Course serves as a laboratory experience in interpersonal communication and small group interaction. Focus on developing communication skills to promote constructive personal and professional relationships. Includes application to nurse/client interaction.

Prerequisites: Admission to the nursing major and/or consent of instructor.

421AB. Preceptorship Seminar (1-1) Department Faculty

Seminar, 1 hour.

Seminar on theory relating to change, leadership, organizations, socialization and management. Focuses on factors common to all students in preceptorship study and provides opportunity for exploration of individual student's interests and concerns.

Prerequisites: Nursing 302, 310AB, 311, 315, 316, 367, 470, AMCS 432; consent of instructor; concurrent enrollment in 423AB, 424AB, or 425-426.

423AB. Preceptorship in Episodic Nursing (3-5) (3-5) Department Faculty

Clinical hours determined by student's contractual study agreement.

Students must enroll for a minimum of 3 units each semester.

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: Nursing 302, 310AB, 311, 315, 316, 367, 470, AMCS 432; concurrent

enrollment in Nursing 421AB or 433; completion of or concurrent enrollment in upper division non-nursing course supportive of the preceptorship; or consent of instructor.

424AB. Preceptorship in Distributive Nursing (3–5) (3–5) Department Faculty

Clinical hours determined by student's contractual study agreement.

Students must enroll for a minimum of 3 units each semester.

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: Nursing 302, 310AB, 311, 315, 316, 367, 470, AMCS 432; concurrent enrollment in Nursing 421AB or 433; completion of or concurrent enrollment in upper division non-nursing course supportive of the preceptorship; or consent of instructor.

*** 425. Family Nurse Practitioner Clinical Practicum (5) Blake, Chandler, Curtin, Farrell, Martin**

Practicum, 15 hours (9 hours laboratory, 6 hours clinical preceptorship.)

Practicum experience and clinical practice of physical assessment, health maintenance, and illness management skills with faculty supervision. Self-paced laboratory, inpatient and outpatient facilities are utilized. Students obtain experience in and become familiar with the preceptorship setting.

Prerequisites: Admission to the FNP Preceptorship, concurrent enrollment in 421AB, 430A, 431A, and consent of instructor.

*** 426. Family Nurse Practitioner Preceptorship (5) Blake, Chandler, Curtin, Farrell, Martin**

Clinical Preceptorship, 15 hours.

Provides practice settings for FNP students under supervision of a preceptor to deliver primary health care for all family members. Previous nursing background is utilized, new knowledge and skills applied, with emphasis upon increasingly self-directed functioning in the broad spectrum of family care. Additional clinical experiences in various community agencies provide a broad range of opportunities for practice.

Prerequisites: Admission to the FNP Preceptorship, completion of 425, 421AB, 430A, 431A, concurrent enrollment in 433, 430B, 431B, completion of or concurrent enrollment in upper division non-nursing course supportive of the preceptorship and consent of instructor.

*** 430AB. Family Nurse Practitioner Seminar (2–2) Blake, Chandler, Curtin, Farrell**

Seminar, 2 hours.

Content focuses on health maintenance, early detection and disease prevention for all age groups; case discussions and student presentations illustrate clinical problems.

Prerequisites: Admission to the Family Nurse Practitioner Preceptorship; concurrent enrollment in Nursing 421AB or 433, 425–426, 431AB, and consent of instructor.

*** 431AB. Concepts of Nursing Management in Primary Care (3–3) Blake, Chandler, Curtin, Farrell, Martin**

Lecture/discussion, 3 hours.

Content covers FNP assessment process, diagnosis and management of patients with common acute and chronic illness, pregnancy and postpartum, well child care,

* Course availability is dependent upon grant funding.

family planning, role change and interprofessional relationships, legal and organizational aspects.

Prerequisites: Admission to the Family Nurse Practitioner Preceptorship; concurrent enrollment in Nursing 421AB or 433, 425–426, 430AB, and consent of instructor.

433. Current Professional Problems (2) Department Faculty

Lecture/discussion, 2 hours.

Focuses on contemporary issues central to the profession of nursing.

Prerequisites: Senior standing in the nursing major and completion of or concurrent enrollment in 467.

467. Group Leadership and Change (2) Hitchcock, Murray

Seminar, 2 hours.

Increases 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.

Prerequisite: Senior standing in the nursing major, and/or 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: 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 also evaluate their health practices and belief systems. Opportunities will be provided for practice and experience with selected healing techniques as demonstrated by local practitioners.

317. Physical Assessment Seminar and Lab (2) Department Faculty

Seminar, 1 hour; laboratory, 3 hours.

Seminar and self-paced instructional units for learning physical assessment of the internal eye, the integumentary, abdominal, cardio-pulmonary, and neurological systems.

Prerequisites: Admission to the nursing major and/or consent of instructor.

395. Community Involvement Program (1–4) Department Faculty

CIP involves students in community problems related to the promotion of health and the prevention of illness. Credit may be given for such activities as volunteer work in health agencies, planning and participating in community health projects. A total of 6 units may be applied toward a degree. May be taken by petition only.

Prerequisites: Admission to the nursing major and consent of CIP coordinator for the Department of Nursing and department chairman.

396. Selected Topics in Nursing (1–5) Department Faculty

A single topic or set of related topics not ordinarily covered by the nursing major curriculum. The course may be repeated for credit with a different topic, to a maximum of 12 units.

Prerequisites: Consent of instructor.

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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. It 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.

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. Equally, philosophy provides special skills in the analysis, description, evaluation and synthesis of ideas, skills which are essential in meeting broad-scale cultural dilemmas.

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.

This year, building upon fourteen years of careful experiment, the philosophy department at Sonoma introduces a new program. At the heart of this program 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 the course description booklet published by the Department each semester and available in the Philosophy Department office, Nichols Hall 362 (664-2163).

BACHELOR OF ARTS IN PHILOSOPHY

Major	Units
General Education	40
<i>Major</i>	42
Electives.....	42
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.

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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

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

Required Courses:	
(a) Six out of the following seven offerings:	
Phil 302 Ethics and Value Theory	
Phil 338 Pragmatism	
Phil 344 Phenomenology	
Phil 346 Studies in 19th Century Philosophy or Phil 348 Studies in 20th Century Philosophy	
Phil 352 Philosophy of Language	
Phil 354 Philosophy of Science	
Phil 356 Philosophy of Mind	(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.

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 Course Description Booklet for current information, available in the Department office, 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 human world of activity and interest. All of the basic "tricks" for persuading people to accept false premises and conclusions as true are systematically laid out and their detection practiced.

200. Introduction to Logic (3) Department Faculty

An introduction to the nature of contemporary, formal axiomatic systems and their application. Students will learn how to translate arguments in ordinary language into symbols, and to deduce conclusions and locate fallacies. Recommended for students of the sciences, computer programming, mathematics, and axiomatic systems in general.

204. Great Thinkers of the West: Thales to Aquinas (3) Mooney, Proctor, Alderman, Diamandopolis

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, Diamandopolis

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

A selected study of one or more 19th or 20th 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 (4) 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 promi-

nently 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 19th 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 20th Century Philosophy (3) Alderman, Mooney, Paul, Temko

A study of major themes and figures in 20th 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

The core course in Eastern philosophy (this course is also an important course in the curriculum of the India Studies Program). It 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.

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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 transthantric 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)

Advanced seminars are designed for advanced students who wish to do specialized intensive work in a particular area of study. Titles and contents of seminars vary from semester to semester; therefore Philosophy 400 may be repeated for credit. (See the class schedule for seminars offered each semester.)

450; 452. Senior Thesis (3-3)

Writing of a paper deemed acceptable by a faculty director and reader. Superior papers nominated for distinction will be defended before the philosophy faculty. Students wishing to be candidates for graduation with distinction are urged to write a thesis. 450 is a prerequisite for 452.

460. Teaching Assistant in Philosophy (1-6)

Open only to advanced students. Intended to give students experience in assisting the instructor in a philosophy course by doing research and tutoring students in the class. Consent of the instructor is required.

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)

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: C. Douglas Earl, Kenneth Flynn, Vivian Fritz, James Gale, Marcia Hart, Kathryn Klein, Mark Lundy, Robert Lynde, Dave Orr, G. Edward Rudloff ¹, Greg Smith, Robert Sorani, Ellen Trussell, Dick Walker, Martha Yates.

The discipline of Physical Education encompasses the study of human movement as an expression of an individual's aesthetic values, physical being, and/or competitive nature. As such, it is an integral part of a liberal education.

The Department offers programs for all students in intramural sports, general education activity classes, and intercollegiate athletics. In addition, 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 concentrations: teaching/coaching; elementary/adapted/developmental physical education; wilderness recreation; pre-therapy; or interdisciplinary physical education. Field experience in the student's area of concentration is an important part of all programs.

The major in Physical Education serves as a basis for a liberal education, as preparation for graduate study in Physical Education or related areas, as professional preparation for teaching, coaching and outdoor education, or as pre-professional training for physical therapy and related health fields.

BACHELOR OF ARTS IN PHYSICAL EDUCATION ²

Major

	<i>Units</i>
General Education	40
Major Requirements.....	40
Supporting Courses	12
Electives.....	32
TOTAL	124

SUPPORTING COURSES REQUIRED

Biology 220. Human Anatomy	4
Biology 224. Human Physiology	3
Biology 224L. Human Physiology Lab	2
PE 222. The Professions of Physical Education	2
PE 304. Descriptive Statistics	1
	12

Students wishing to major in Physical Education (teaching/coaching concentration) are required to demonstrate competencies in a variety of motor skills before graduation. Specific information may be obtained from Physical Education Department.

¹ On leave to California State Colleges External Degrees Program.

² Majors working toward a teaching credential must participate in the equivalent of one intercollegiate sport a year.

COURSE REQUIREMENTS**A. Core Course (All Majors)**

	<i>Units</i>
PE. 301. Philosophy of Physical Education.....	3
PE. 305. Motor Learning ³	4
PE. 315. Sociology of Sport ³	3
Hlth. 310. Kinesiology ³	4
Hlth. 315. Physiology of Exercise ³	4
	18

B. Areas of Concentration..... (22 units)

An additional 22 units are required to complete the major. Several areas of concentration are available to students who wish to advance toward a specific goal in the physical education major. In consultation with, and with the approval of an advisor in the Physical Education Department, a student can choose a pattern of courses to concentrate in the areas of teacher preparation, developmental-adaptive-elementary physical education, pre-therapy, wilderness recreation or interdisciplinary physical education. Guidelines for courses in these areas are available in the Physical Education Department.

Students should consult with their advisor as early as possible, and must obtain approval of their course programs from advisors *prior* to registration *each* semester.

MINOR IN PHYSICAL EDUCATION

Students must obtain departmental approval before enrolling as Physical Education minors. The minor consists of a minimum of 20 units of physical education courses (including work in Biology and Health).

An interdepartmental minor is available to the Physical Education minor who wishes to concentrate in dance. The minor includes 9 units offered in dance by the Division of Humanities.

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, and psychological implications of man as he performs in games, sports, and dance.

The Department of Health Sciences Education offers the MA in Physical Education via two options. The *thesis/project* option requires an original investigative thesis or equivalent project. The *examination* option requires demonstration, both written and verbal, of in-depth competencies in two appropriate areas and general knowledge of the field of physical education as a profession.

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

³ Note: Prerequisite(s) for this class.

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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 6 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 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. The Graduate Coordinator will serve as the advisor to EXAMINATION option students throughout the period of matriculation.

Classified Graduate Status

Classified Graduate students are those who have selected an advisory committee, accepted a program contract, (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 Record 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. Or, if opting for the examination track, the student must write a paper, based on library search, on a topic selected by the student's examination committee. 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 will 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 before the student begins any of the final 15 units (of the 30 units included on the study agreement).

REQUIREMENTS FOR COMPLETION OF THE MA DEGREE

Option I: Thesis/Creative Project

Each student must take the following three courses:

Required courses:

PE 500	Introduction to Research.....	3 units
PE 501	Graduate Seminar	3 units
PE 525	Thesis/Project	3 units

And each student must select at least two of the following courses (areas), one of which must be the course most related to the thesis.

PE 505	Adv Motor Learning.....	3 units
PE 510	Adv Kinesiology	3 units
PE 515	Adv Exercise Physiology	3 units

and one course in the social-historical area (PE 503 or PE 520)

Electives.....	15 units
Total	30 units

Option 2: Examination Project

Required course:

PE 500 Introduction to Research	3 units

And each unit must select at least two of the following courses (areas).

PE 505 Adv Motor Learning.....	3 units

PE 510 Adv Kinesiology	3 units

PE 515 Adv Exercise Physiology	3 units

and one course in the social-historical area (PE 503 or PE 520)

Electives	21 units

Total	30 units

OTHER REQUIREMENTS

Units

1. 500 level courses	15
2. Physical Education courses	18
3. Transfer or extension courses.....	0-9 (maximum)
4. Special Studies	0-6 (maximum)
5. Examinations or presentations of thesis	

HEALTH SCIENCES AND PHYSICAL EDUCATION COURSES

Health Science

302. Advanced First Aid (3) (Fall and 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 and Spring) 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, and completed, or concurrent enrollment in PE 304 (Descriptive 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, and completed, or concurrent enrollment in PE 304 (Descriptive Statistics)

420. Health Education for Teachers (2) (Fall and Spring) Department Faculty

An investigation of the various components of the health education curriculum in the

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public schools. Deals with contemporary issues in personal and community health. This course fulfills Health Education and Drug Abuse requirement of the Ryan Act Credential.

Prerequisite: Upper division standing.

495. Special Studies (1-4) Department Faculty

Includes completion of a project designed to meet a highly specialized advanced study need. Project to be selected in conference with the faculty advisor.

Prerequisite: Consent of instructor.

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: archery, badminton, basketball, cycling, fencing, frisbee, golf, gymnastics, ice skating, judo, karate, physical conditioning, weight training, swimming, tennis, folk and square dance, sailing, canoeing, outward bound, back packing, cross country skiing, rock climbing, tumbling and trampoline, one-wall racquetball, one-wall handball, jogging, power volleyball, orienteering, personal defense for women.

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.*

102. Mystique of Running (2) (Fall or Spring) Lynde

Historical and philosophical development of running. Includes practical application of running mechanics, physiological responses, and conditioning for running.

103. Advanced Life Saving (1) (Spring) Department Faculty

Emphasis is on review of holds, breaks and carries along with teaching procedure, sequence of instruction, methodology and evaluation of teaching performance. Successful completion of course can lead to certification.

107. Water Safety Instruction (2) (Fall or Spring) Department Faculty

Emphasis is on the progression and analysis of swimming skills necessary for a swimming instructor at all skill levels. Successful completion of course can lead to certification.

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.

222. The Professions of Physical Education (2) (Fall or Spring) Sorani

A survey course with emphases in the development of and various aspects within the allied professions of health, physical education, and recreation. Topics include historical developments, current professional opportunities, professional organizations, the joy of play, aesthetics of movement, laws, concepts about physical activity and health, personal assessment of essential competencies.

* P.E. 101 Canoeing course requires a \$10 fee.

300. Analysis of Motor Performance (1) (Fall and Spring) Department Faculty

Lecture/Laboratory

This course is designed to provide the students with an understanding of the mechanics of the neuromuscular skills and the functional application of the activities presented within the course.

301. Philosophy of Physical Education (3) (Fall and Spring) Lynde

The philosophic process applied to physical education. Exploration of contemporary values and critical issues in physical education.

Prerequisite: Junior or Senior standing.

302. Sports Officiating (2) (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.

303. Sports Officiating Lab (1) (Fall and Spring) Fritz, Earl

Organized and supervised officiating experiences in actual competitive situations.

Prerequisite: Concurrent enrollment in, or completed PE 302. May be repeated for credit.

304. Descriptive Statistics (1) (Fall or Spring) Yates

A self-paced course covering graphing, measures of central tendency, variability, scale scores, and correlation with application to the psychomotor and cognitive areas.

305. Motor Learning (4) (Fall and Spring) Klein

Lecture, laboratory

Perception, learning, motivations and emotion in relation to motor performance. The psychology of competition and personal adjustment and social behavior as observed in play.

Prerequisite: Completed or concurrent enrollment in PE 304 (Descriptive Statistics).

306. Preparation for Wilderness Travel (2) (Fall or Spring) Trussell

An introductory course stressing low cost and do-it-yourself approaches to equipment and skills necessary to live comfortably with minimum impact on the wilderness. Includes: light-weight foods, clothing and footwear, packs, shelters, maps, sanitation, safety and first aid.

307. Theory of Wilderness Recreation (1) Earl

Concentrated studies in a single field of wilderness recreation. Major students electing the wilderness recreation track must take studies in each of the following areas: boating, climbing, winter travel, and backpacking.

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 Recreation (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) I and II Department Faculty

Selected upper division courses that are taught on a one-time basis.

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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.

Prerequisite: Physical Education 301, or Phil 200 or Soc 201.

320. Practicum (2) (Fall and Spring) Fritz

A semester of supervised observation and teaching experience in physical education activity programs. May be repeated for credit.

325. Adaptive Physical Education (3) (Fall or Spring) Sorani

Lecture, laboratory

A survey of activity programs for the handicapped, examining common injuries and deviations from normal patterns of growth, development, and efficient body function. Emphasis is on program planning, identifying the types of physical activities which would benefit the total person.

Prerequisite: Consent of instructor.

326. Adaptive Physical Education II (3) (Spring) Sorani

Seminar-field study.

This course is designed to provide supervised field experiences in planning and conducting developmental fitness and leisure time recreation programs for the handicapped.

Prerequisite: P.E. 325 or consent of instructor.

336. Community Recreation (3) (Fall and Spring) Flynn

A course designed to orient students with 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.

360. Dimensions of Play (2) (Fall or Spring) Lynde

An investigation of classical and contemporary theories of play. Issues dealing with crosscultural analyses and origin of various play structures will be explored. The class includes physical participation in a variety of play, sports, and game activities.

379. Extramural Sports (2) (Fall or 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.

390. Advanced Sports Theory (2) (Fall and Spring) Department Faculty

A combination of group and individual study of the techniques, theories, strategies and training principles in selected sports.

May be repeated once with a different sport (May not be repeated with same sport).

395. Community Involvement Program (1-3) (Fall and Spring) Department Faculty

Physical education and recreation oriented community service projects developed by the students after consultation with a member of the physical education faculty and approved by the department. May be taken for 1-3 units as determined by the departmental faculty sponsor. Applies only as general elective credit towards graduation.

400. Elementary School Physical Education (3) (Fall and Spring) Lynde

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.

430. Field Experience (1-3) (Fall and Spring) Department Faculty

Emphasis is on advanced study in the public school and in specified areas of public health. May be repeated for credit.

431. Pre-Professional Experience (1) Department Faculty

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.

440. Evaluation in Physical Education (1) (Fall and Spring) Flynn, Yates

Emphasis in developing a broad concept of evaluation and its place in the total educational scheme; familiarize the student with techniques of evaluation, as applied to objectives, program and student achievement; study of principles of test selection, construction, administration and interpretation.

Prerequisite: Concurrent enrollment in ED. 442—C & I, or consent of instructor.

450. Leading Adult Fitness Programs (2) (Fall) 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.

495. Special Studies (1-4) Department Faculty

Includes completion of a project designed to meet a highly specialized advanced study need. Project to be selected in conference with the faculty advisor.

Prerequisite: Consent of advisor.

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.

Prerequisite: Consent of instructor.

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.

Prerequisite: Consent of instructor.

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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 304.

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) (Fall—even years) 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.

503. Current Issues in Physical Education (3) (Spring—even years) Flynn, Sorani, Earl

A seminar course designed to define and explore in depth current issues in physical education and athletics. The issues selected for study may include topics of current sociological, ethnic, sexist, cultural, curricular or extracurricular import. Presentations of speakers and panelists representing various viewpoints and philosophies will be included in the course format.

505. Advanced Motor Learning Seminar (3) (Fall—even years) Klein

The course is designed so that the graduate in physical education becomes knowledgeable in the specifics of motor learning. Included in these specifics are factors of neuroanatomy concerning motor performance, theories of learning (both physiological and psychological) and transfer of learning. Independent projects concerning these specifics will afford students the necessity for use of laboratory facilities.

Prerequisite: Undergraduate course in Motor Learning.

506. Psychology of Coaching (3) (Fall—odd years) Earl, Gale

Study of competitive athletics, and, the qualities of character and personality of both coach and athlete and the coach's techniques in communicating with others which lead to more effective development of both the athlete and the coach as person and performer.

510. Advanced Kinesiology (3) Trussell

Consideration of anatomical and mechanical principle 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) (Spring—even years) Gale

A course which includes the evaluation of human work capacity, the effects of exercise on cardiorespiratory function and metabolism, and the physiology of muscular contraction. A special emphasis on current literature will be pursued.

Prerequisite: Undergraduate course in physiology of exercise.

520. History of PE and Sports (3) (Spring—odd years) Klein, Sorani

Advanced research, the development of papers and intragroup discussions based upon an analysis of ancient, medieval and early modern cultures, their sports, games and dance programs with emphasis on causes and effects.

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.

530. Principles of Coaching (3) (Spring—even years) Gale

A physiological understanding of the characteristics of athletes and training methods for sports competition. This course will especially emphasize appropriate and current information which is applicable to sport.

535. Administration of Physical Education Programs (3) (Spring—odd years) Flynn, Earl

Emphasis on school law and its interpretation, accounting and budgeting, site development and facilities planning, selection of faculty, accountability and philosophies of administration and organization.

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: Richard H. Karas

Faculty: Isaac L. Bass, John R. Dunning, Jr., Samuel L. Greene, George L. Johnston, Duncan E. Poland, Gordon G. Spear, Joseph S. Tenn

Those engaged in the discipline of physics have as their goal the discovery and elucidation of the laws that govern the interactions of matter throughout the physical universe. In its most abstract form, physics is a search for the source of the presently known fundamental forces of gravitation, electricity and magnetism, the weak and strong nuclear interactions, and the elementary particles from which all matter is formed.

In addition, physicists apply fundamental principles to the study of more concrete problems such as the workings of solid state electronic devices, lasers, other optical systems, nuclear physics and environmental physics. Topics studied by physicists overlap with a wide range of other disciplines, and physics will play a key part in the development of such diverse fields as astronomy, biology, and geology in coming decades.

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 offer an unusually rich laboratory experience. 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.

A substantial program in undergraduate astronomy includes many courses, listed in this catalog under Astronomy, which may be included in the two degree programs.

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	31
Electives	18
	124

MAJOR COURSE REQUIREMENTS FOR THE B.S. DEGREE

114, 214, 314—Introduction to Physics	12
116, 216, 316—Introductory Laboratory	3
311—Electronics and Physical Measurements	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	2
Physics Elective	6
	50

Supporting Courses

A. Mathematics	Units
161, 211, 261, 231	15
B. Chemistry	
115AB or 125AB	10
	25

THE B.S. IN PHYSICS WITH AN EMPHASIS IN ENVIRONMENTAL PHYSICS

Students desiring to prepare for professional careers in environmental science may earn the B.S. with an emphasis in environmental physics.

	Units
Physics 301—The Relation of Physics to Society	3
Physics 354—Problems in Environmental Physics	3
Physics 355—Environmental Physics Laboratory.....	1
Physics 481—Applied Nuclear Chemistry and Physics.....	2
Physics 482—Applied Nuclear Chem. and Phys. Laboratory	2
	11

As 8 of these units meet the upper division elective and laboratory requirement for the B.S., this emphasis requires 3 units more than the minimum B.S.

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 or no mathematics. Frequently chosen as part of a double major, it is intended for those who wish to study physics and astronomy but who do not intend to become scientists. Its graduates may be found in many fields, including science writing, public service, scientific sales, library work, or in seminary, business or law school. This advisory plan may also be appropriate for those who wish to combine the study of physics with music, art history, environmental design, management, economics, philosophy, psychology, or physical education.

Lower Division requirements:	Units
Astronomy 100—Descriptive Astronomy	3
Physics 100—Descriptive Physics	3
One of the following laboratory courses:	
Astronomy 231—Intro. Observational Astronomy	2
Physics 211—People's Electronics	3
Physics 102—Lab Physics for the People	2
	8 or 9

* To be chosen from two different upper division laboratory courses in physics and/or astronomy other than Physics 311 and 411. At least one of these two courses must be 400 level.

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:	
Math 120, Phys 381, or other	2–3
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:	
Math 120, Phys 381, or other	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:	<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:	
Physics 314—Introduction to Physics III	4
One course in optics: Physics 340 or 342	3
One course in computer programming:	
Math 120, Physics 381 or other	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.:

	<i>Units</i>
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 310AB 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	<i>Units</i>
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
<i>Remainder of General Education</i>	28

Major:	<i>Units</i>
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
<i>Education Courses</i>	26
	127–137

MINOR IN PHYSICS

Completion of a minimum of 20 units in physics courses 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) Dunning, King, Johnston, Bass**

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.

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102. Laboratory Physics for the People (1) Department Faculty

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) Johnston, Tenn

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) Bass, Spear

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) Karas, Spear

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) Karas, Bass

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. People's Electronics (3) Poland

Lecture, 2 hours; laboratory, 3 hours.

A survey of the electronic principles and practices involved in the appliances of contemporary society. Application of basic concepts and construction techniques to electronic devices such as radios, sound systems, toasters, music synthesizers, and auto ignitions. Laboratory construction and repair of devices personally useful to the student is encouraged.

214. Introduction to Physics II (4) (Fall and Spring) Dunning, Johnston

The continuation of Physics 114. Electrostatics, quasistatic fields and currents, magnetostatics; electromagnetic induction; physical and geometric optics; special relativity.

Prerequisite: Physics 114; completion of, or concurrent enrollment in Mathematics 211.

216. Introductory Laboratory (1) (Fall and Spring) Dunning

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.

234. Physics of Outdoor Phenomena (2) Greene

Physics of mountain building and river formation. Continental drift and geotectonics; physics of moving fluids. Physical principles of mountaineering techniques. Such other topics as lightning, auroras, weather, etc. will be discussed as time permits. Field trips will be taken to the Sierra Nevada and elsewhere, including a river trip if boats are available.

Prerequisite: A previous college level course in physics.

300. Physics of Music (3) (Fall) Department Faculty

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.

301. The Relation of Physics to Society (3) Johnston

An investigation of the consequences to society of particular physical discoveries and their associated technologies; technical considerations determining their effects on various aspects of social organization and public policy. Satisfies part of the general education requirement in natural science.

Prerequisite: Physics 100 or Astronomy 100 or consent of instructor.

311. Elements of Electronics (4) 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, basic digital circuits.

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

312. Elements of Digital Electronics (4) Karas

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.

Prerequisites: Phys 311 or equivalent or consent of instructor.

314. Introduction to Physics III (4) Tenn, Bass

The continuation of Physics 214. 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) Bass

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) Tenn, Karas

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) Johnston

Electrostatics; magnetostatics; electric currents, electromagnetic inductions; 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 (I) (Spring) Department Faculty

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) Greene, Bass

The quantum theory of light; coherence, interference, diffraction and polarization; masers, lasers; geometrical optics; spectroscopy.

Prerequisites: Physics 314, Physics 330A.

342. Popular Optics (3) Bass, Greene

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) Greene

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 and astronomy.

354. Problems in Environmental Physics (3) (Fall) Karas

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.

355. Environmental Physics Laboratory (1) (Fall) Dunning

Laboratory, 3 hours.

Techniques for studying problems of environmental interest. Includes mass spectrometric and nuclear methods for investigating trace pollutants.

Prerequisite: Chemistry 115A or 125A, Physics 210B or 214, concurrent enrollment in Physics 354 or consent of instructor.

381. Programming for Scientists (2) (Fall and Spring) Spear, Tenn

Same as Chemistry 381. FORTRAN and BASIC programming with emphasis on applications.

Prerequisite: Physics 114 and Mathematics 211.

395. Community Involvement Program (1-2) Department Faculty

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) Department Faculty

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) Karas

Same as Chemistry 400 and Geology 400.

Prerequisite: Major in the physical sciences or consent of the instructor.

405. Physics of Experimental Structures and Devices (2) Greene

The physical principles of geodesic domes, home power plants, waste disposal systems, windmills, house foundations, water systems, and other structures and devices. Emphasis is placed on the mutual interaction of structures and devices in the form of a human habitat.

Prerequisite: A course in physical science or consent of instructor.

411. Laboratory Instruction Practicum (1) Department Faculty

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: Advanced junior standing in Physics and consent of instructor.

425. Introduction to Mathematical Physics (3) Tenn, Johnston

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.

431. Advanced Electronic Methods Laboratory (2) (Spring) Karas, Poland

Laboratory, 6 hours.

Analysis and construction of electronic instrument circuits, pulse and CW techniques, time and frequency domain analysis, precision standards, operational amplifiers, integrated circuit devices, phase-sensitive detection, and special projects in thermal, optical, and nuclear measurements.

Prerequisite: Physics 311.

450. Statistical Physics (3) (Spring) Greene, Tenn

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.

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460AB. Quantum Physics (3-3) Greene, Tenn

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) Poland

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.

472. States of Matter Laboratory (2) (Fall) Bass

Lecture, 1 hour; laboratory, 3 hours.

Selected experiments investigating physical properties of matter in its four states: solid, liquid, gas, and plasma. Applications of instrumentation and techniques to geological, biological, medical, chemical, and environmental problems.

Prerequisites: Physics 214 and 216, or Physics 210B, 209B, and Mathematics 161; Chemistry 115B; or consent of instructor.

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

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* Chemistry 310 or 375A; *or* consent of instructor. Mathematics 161 is recommended.

482. Applied Nuclear Chemistry and Physics Laboratory (2) (Spring) Dunning

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 481 or Chemistry 481 (concurrent enrollment suggested).

494. Physics Seminar (1) Tenn

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) Department Faculty

The Physics and Astronomy department encourages independent study and considers it to be an educational undertaking. Students wishing to enroll for Special Studies are requested 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) Department Faculty

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.

POLITICS

Department Chair: David Ziblatt

Faculty: Donald Dixon, John Kramer, Kenneth Marcus, Cheryl Petersen,
Robert Smith, Michael Tirado, William Young

The B.A. in Politics 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 state and local government and public administration. The Department's well-developed Government Internship Program places some 15 students a semester in local government agencies; many of these jobs are paid positions.

A program of data analysis and data processing skills is a second strong job-related option in Politics. The Department conducts many studies for state and local governmental agencies, using students, wherever possible, as paid assistants in these studies. Many students have later used these skills in government-related jobs or in their graduate studies.

Politics is an excellent major for those students interested in law school. Courses in Constitutional Law, Bill of Rights, and Administrative Law introduce students to legal reasoning while the Department's emphasis on the development of writing skills provides excellent preparation for law school programs.

Students are expected to complete the outline of courses listed below. The foundation of the major rests on Politics 201, 202, and 302, and these should be completed as soon as possible. Other core courses can be selected from appropriate offerings presented each semester. Students are encouraged to discuss their specific interests and goals with their advisors so that the most relevant courses can be selected.

BACHELOR OF ARTS IN POLITICAL SCIENCE

Major

	<i>Units</i>
General Education	40
Major	40
Electives	44
Total	124

COURSE REQUIREMENTS

	<i>Units</i>
Core Courses:	
Politics 201 Ideas and Institutions	4
Politics 202 Basic Issues in 20th Century American Politics	4
Politics 302 Approaches to Political Analysis	4
(or substitute approved by Department Chairman)	
Political Theory course	4
International Relations course	4
Comparative Politics course	4
American Government course (upper division)	4
Electives in Politics (upper division)	8
Economics 201 (or approved substitute)	4
	40

MINOR IN POLITICS

	<i>Units</i>
Politics 201	4
Politics 200 or 202	3–4
Upper Division courses	12–13
Total	20

TEACHING CREDENTIAL

Students seeking a teaching credential may elect Politics 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 321 for Ryan Single Subject Social Science Program requirements.

CODE REQUIREMENTS

Politics 200 (The American Political System) or Politics 202 (20th 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

Graduate study in the Department of Politics is designed to provide a flexible combination of theory and application, with an emphasis in Public Administration. Students interested in public administration or policy analysis may design a course of study with the assistance of a graduate adviser to meet their objectives.

The Department of Politics is committed to a cross-disciplinary point of view and requires graduate students to include in their programs course offerings from other social sciences. In consultation with his or her graduate adviser, the Master's candidate will develop a program of study in the field of Politics and related social science disciplines that totals at least thirty units. The Department will accept this program as meeting the requirements for the awarding of the degree. If at any time during the course of study, however, 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.

The emphasis on Public Administration is particularly valuable for practitioners in the fields of politics or public administration who wish to: (1) broaden their perspective through graduate study; and (2) acquire skills that will help them to evaluate the relative effectiveness of different policy alternatives in achieving their objectives. Certain core courses or approved substitutes will be required of all students in the Public Administration field. For the benefit of public administrators and elected officials who cannot schedule classes during the day, the program is designed to cycle specific courses over a two-year period in order to permit a student to complete all requirements for the degree during that time, taking eight units per semester (two classes) at night or on Saturday.

As evidence of scholarly achievement, all students must submit for review by a Graduate Faculty Committee either a Master's Thesis or three graduate seminar research papers. In addition to approval by the Graduate Faculty Committee, the M.A. thesis must meet all other requirements set forth by the University and the Graduate Dean. One copy of the thesis or one copy of each research paper will be retained by the Department for its permanent files.

Up to nine units of graduate course work completed at other institutions may be transferred into this program.

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 Introduction to Economics course.
- 4. A beginning accounting course (Management) is recommended.

If a candidate is deficient in the above courses she/he can still be admitted to the program but must make-up such deficiencies during the first year of graduate study. Such courses taken will not count toward the 30 unit M.A. major.

- C. Completion of the Department Application Form including three (3) letters of recommendation.
- D. Recommendation of the Department Graduate Coordinator or Graduate Committee.

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 submission to and acceptance by a Graduate Committee of three (3) seminar research papers as evidence of scholarly achievement.

C. PUBLIC ADMINISTRATION

Required Courses:

	<i>Units</i>
Politics 430 Introduction to Public Administration.....	4
Politics 587 Research Methods for Public Managers	4
One upper division Economics course.....	4
One course in Personnel-Human Relations field (may be taken in the Management Department)	4
(Substitutions may be made for the above courses if the M.A. candidate can demonstrate completion of appropriate substitute courses or expertise.)	

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1. Master's Thesis Option

	<i>Units</i>
Courses at the "500" level	8
Courses at the "400" or "500" level	2
M.A. Thesis—Politics 591	4
Required courses	16

30

2. Seminar Research Paper Option

	<i>Units</i>
Courses at the "500" level	8
Courses at the "400" or "500" level	6
Required courses	16

30

300 / Politics

At least 20 units must be taken in the Department of Politics.

No more than 5 units of Politics 539 or 4 units of Politics 595 may be counted toward the 30-unit M.A. program.

NORTH COAST DATA ARCHIVE

The Department of Politics 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.

THE INSTITUTE FOR APPLIED POLICY RESEARCH

The Institute for Applied Policy Research has been providing social research and evaluation studies and computer-based management control systems for local, state, and regional governmental bodies since 1974. Its technical and professional staff includes fifteen affiliated University faculty from several disciplines and a large number of student assistants, many of whom have had training in social research methodology both at Sonoma State University and at the inter-University Consortium for Political and Social Research at the University of Michigan.

POLITICS 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 Politics 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 Politics 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. Politics majors are expected to take this core course 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 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

An examination of the theoretical and practical relationships between the economic and the political system in industrial countries. Several models of the welfare state will be considered. What conditions favor or impede movement toward the ideals of democracy?

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

302. Approaches to Political Analysis (4) Dixon

How do we bridge the gap between causal connections in the social world and the reality "out there"? Can we avoid being misled by the biases of ourselves and others? An introduction to the logic of the study of political systems and behavior through a directed research project. A lab fee of \$5 is required for this course.

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 area 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 (3-4) 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 introductory study to the field of public administration with emphasis upon bureaucratic life, leadership, and decision-making.

438. Regional Planning Resource Management (4) Reiss

Utilizing advanced man-computer simulation models in conjunction with traditional teaching modes, the course investigates the planning process in an urban/regional setting. Focusing on the interactions among the political, economic and social subsystems, particular attention is given the policy areas of air and water pollution and human and land resource management.

438L. Simulation of Regional Planning and Resource Management (2) Reiss

Offered concurrently with Politics 438, this course is intended as 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 not a substantive discussion of the dynamics of resource management.

439. Government Intern Seminar (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 lead and follower behavior in organizations and communities from a psychological point of view. A study of the influence of personality, situational and cultural factors on the individual reaction to and use of authority.

467. Public Opinion and Political Participation (4) Ziblatt, Kramer

An extensive examination of the place of public opinion and political participation in democratic theory serves as a background to a discussion of the data gathered about both opinion and participation in the United States over the past three decades.

475. Urban Politics & Policy (4) Tirado, Dixon

Examination of the structure and process of urban and regional governments within the context of state sovereignty. Such aspects of local government as planning, conservation of open space, fire and policy administration, public health, and political decision-making will be discussed in depth.

Prerequisite: Politics 320 or consent of the instructor.

477. Poverty and Environment (3-4) Tirado

Examination of the phenomena of poverty and ecological problems with attention to the conflicting interests aroused in society from efforts to solve problems in each area

of concern. Special attention is given to the problems of housing and employment as areas of tradeoff between these two competing currents in American politics.

490. 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. Health care, education, consumer problems, regulatory agencies, defense policies, and other themes, including proposals by students, will be offered. Different professors may handle their themes 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.

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 of the class 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.

447. Third World and Communist Foreign Policies (4) Smith

An examination of the objectives, strategies and tactics of Communist and 3rd World Countries with emphasis on the influence of domestic, economic and political factors on their foreign policies. Unofficial determination of their foreign policies will be studied: foreign aid, intelligence operations, OPEC. Communist and non-communist strategies and national capabilities will be compared.

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) Tirado, Smith

A comparative analysis of politics and political development of Third World countries. International and domestic obstacles to modernization will be studied. The general analysis will be supplemented by an intensive scrutiny of selected countries and regions.

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453. Latin American Politics (4) Tirado

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 placed 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

303. Research Applications in Public Policy (4) Dixon, Kramer

Professional-oriented social science research experience helping to prepare for graduate study or career. Students will be involved in one or more research projects—typically those sponsored by a local governmental agency or community group. The projects will confront the student with actual problems of research analysis and report writing. A lab fee of \$5 is required for this course.

363A. Computer Aided Statistical Analysis (2) Reiss

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) Reiss

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.

363E. Economic Applications of Data Processing (4) Reiss

The course provides an introduction to the Statistical Package for the Social Sciences, the general topic of data processing and computers, as well as providing insight into contemporary applications of computers in the discipline of economics.

Prerequisite: Economics 201.

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.

Graduate Courses

Upper Division students may enroll in graduate courses with the permission of the instructor.

532. Seminar in Bureaucrats, Technocrats, and Public Policy (4) Marcus

An examination of the recruitment, training, and professionalization of public employees with emphasis on the role of the bureaucrat in society and the problem of the democratic control of the bureaucracy.

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. Management Information Systems (4) Reiss

An investigation of contemporary developments in the area of information systems, the course views MIS 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 examination of the theory of organizational structure, dynamics, operation and societal impact. Relevant Sociological, Psychological and related literature will be examined, with particular emphasis on the determinates of political decision-making and public policy output.

537. Seminar in Administrative Law (4) Marcus

Study of the judicialization of the administrative process with special emphasis on consequences for public administrators. Open only to graduate students.

539. Graduate Internship (3-5) Marcus

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) Tirado

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.

585. Public Policy Analysis (4) Ziblatt

A conceptual approach to understanding and evaluating public policy. Emphasis on public choice models, decision-making, power, values and their role in shaping and evaluating policy alternatives. Such themes as organizational intelligence and professional responsibility will be considered from time to time.

587. Research Methods for Public Managers (4) Kramer, Dixon

Emphasis on the design of field-controlled experiments. Application of cost-effectiveness method.

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 handle their themes 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

595. 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. This course may be repeated for credit.

PSYCHOLOGY

Department Chair: Arthur Warmoth

Faculty: Carlos Cordero, Eleanor Criswell, Victor Daniels, Stashu Geurtsen, Barry Godolphin, Robert Greenway, Laurence Horowitz, George Jackson, Bernd Jager, Bill Kwong, Norma Lyman, George McCabe, Edith Menrath, Charles Merrill, Len Eli-ezer Pearson, Gerald Redwine, Robert Rueping, Frank Siroky, Robert Slagle, Gordon Tappan, David Van Nuys, Donald Wilkinson.

The Department of Psychology at Sonoma State College 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 understandings 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 design, 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 418–420.

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," or Psy 303—"Advanced General 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. 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. No area of knowledge can stand alone. The Department specifically 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 in departments other than Psychology with a minimum grade of C or Credit. 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. The advisor may elect to approve up to 7 units of supporting work completed prior to entering the major at Sonoma.
5. In order to be effective, 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 special 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 one or a two day 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.

SAMPLE CURRICULAR PATTERNS

A program specific to the educational needs of each student should be prepared by the student in consultation with his/her general and personal academic advisors. This plan should be updated periodically. *It is the responsibility of the student to initiate this process!* As a preliminary guide to some of the patterns possible within the major, ask department secretary for following detailed plans:

Preparation for graduate work in psychology
Studies in Theoretical Psychology
Personal Awareness and Growth
Developmental Psychology
Preparation for Paraprofessional Work in Psychology
Community Psychology

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 college'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 an element of 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

The Master of Arts program in psychology provides students with the opportunity to pursue advanced, in-depth studies of man as he lives and experiences his world. Several areas of emphasis are available: archetypal psychology, psychology of the Chicano, community psychology, psychological ecology, gestalt psychology, 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.

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- 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.

<i>Course pattern</i>	<i>Units</i>
Psychology 590AB Master's Thesis and Directed Reading	6
Support courses	24
	30

PSYCHOLOGY COURSES

The designation of "core" after a course title indicates that the course will be taught at least once a year and that the department will attempt, within its resources, to provide enough sections to satisfy student demand. Courses not designated in this manner will be taught at least once every two years and may have only a single section offered. 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.

200. Human Behavior (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.

* Also see general college requirements.

250. Introduction to Psychology (4) CORE

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 group, 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) CORE

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.

303. Advanced General Psychology (8) CORE Fall Semester Only

An intensive comprehensive review of the "common body of knowledge in psychology" specifically designed for students who are preparing to do graduate work. This course is strongly recommended for all students who wish a thorough background in traditional areas of psychological inquiry. A \$10 fee is required for this course.

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) CORE

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) CORE

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. Psychological Writing (4) CORE

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 based on a sample of writing.

318. Seminar in Interpersonal Behavior (4) BLOCK

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.

319. Group Process (1-4) CORE[†]

The use of the small group as a basis for understanding the individual, his/her

[†] Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

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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: permission of the instructor.

320. 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 time schedule will list the particular topic in parentheses.

321. Psychology of Yoga (2-4) CORE †

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.

324. Personal Awareness Through Sports (4) CORE

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.

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.

335. Psychology of Zen (4) CORE

An introduction to knowing and experiencing in the manner of Zen through the practice of Za-Zen, sitting meditation. This class is normally conducted at the Genjo-Ji Zen Center on Sonoma Mountain. Two sections are offered, one for Psychology majors, one for other majors.

337. 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.

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.

Experimental Psychology

Courses in this group provide an understanding of psychological concepts and processes that have been developed and explored through experimental studies. Many of these courses provide training in scientific methodologies used in the study of behavior. Some of them also deal with direct practical applications of experimental results.

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.

† Course unit may vary. Consult class schedule.

343. Introduction to Psychological Research (4) CORE (Spring semester only)

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: Math 165 or equivalent.

350. 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 CSUC batch system.

Prerequisite; Elementary Statistics.

360. Psychology of Learning (4-6) CORE, Spring semester only †

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.

362. Behavior Modification (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.

367. Perception and Cognition (4) CORE

Explores 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. Students plan and conduct individual studies.

Prerequisite: Psych. 343 or consent of instructor.

371. Physiological Psychology (4) CORE

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.

371L. Physiological Psychology Laboratory (2)

Demonstrations and exercises which exemplify the methods and subject matter of physiological psychology.

Prerequisite or corequisite: Psy 371.

373. 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.

375. 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.

† Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

377. 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.

380. Human Psychology and Biology (4) Spring Semester

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.

Developmental Psychology

These courses deal with the process of human development. They are typically of special interest to parents, educators, and child care workers.

408. Behavior Problems of Children (4)

Study and observation of children with problems, and examination of the environments in which problem events occur.

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.

410. Child Development (4) CORE

The growth and development of the child from birth to adolescence.

412. Adolescent Psychology (4) CORE

An attempt to understand the world of adolescence through theory, research and personal interaction with adolescents.

416. Topics in Educational Psychology (1-4) †

Selected topics on learning theory, child development, group and community dynamics, etc., as related to the formal and informal teaching-learning process.

418. The Psychology of Family (4) CORE

A study of the family as a social-psychological group. Traditional nuclear families, one-parent families, and larger living groups based on voluntary association may all be considered.

419. Advanced Psychology of the Family (4)

Prerequisite: Psych. 418 or consent of instructor.

422. Living and Dying (4) CORE

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.

Human Services

Courses in this group provide information, technical knowledge, and skills that are likely to prove useful to the person who wishes to work in the profession of psychology.

427. Advanced Group Processes (4)

Advanced topics related to social dynamics and individual behavior in a group context. Limited to 15.

Prerequisite: Psych. 319.

† Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

429. The Gestalt Process (1–4) CORE[†]

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. Abnormal Behavior (2–4) CORE[†]

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 are offered.

432. Theories of Psychotherapy (4)

This course provides a basis for study and exploration of various theoretical approaches to the therapeutic process.

434. Psychology of Disability (2–4)[†]

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.

436. Introduction to Counseling (2–4) CORE[†]

An examination of the counseling process. Various approaches are considered and methods for the development of component skills presented.

Prerequisite: Consent of instructor.

437. Seminar in Psychological Testing (4)

An introduction to current, widely used objective group and individual tests, particularly those related to counseling.

Prerequisite: Elementary Statistics.

Social Psychology

445. Social Psychology (4) CORE

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.

448. 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.

451. Indigenous Psychology (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.

452. Psychology of the Chicano (4) CORE, Spring Semester only.

The experience of being a Chicano in North American Culture, and its impact on personality and behavior.

454. Environmental Psychology of the SSU Service Area (1–4)[†]

Problems currently facing the college environs and the six county service area. Social and psychological impacts of change processes. Topic to be studied will be listed in

[†] Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

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parentheses in the class schedule. Students may have to provide transportation to the study area. May be repeated once for credit.

457. 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.

Studies of Theory and Process

Courses in this group examine a wide variety of phenomena and theoretical positions. The process utilized in these courses tends to be some variety of dialogue, with the development of a thorough cognitive understanding of the theories or phenomena under study as its aim.

459. Dreams and Poetics (1–4) †

A workshop approach to studying and working with the archetypal matrix in which both dream and poetry processes are rooted. Includes relating dreams and poetics to past and current work in cognitive psychology.

461. Personality (4) CORE

Varied viewpoints are brought to bear in an attempt to conceptualize and become aware of the process and functioning of human personality.

462. Seminar in Humanistic Psychology (4) CORE

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 it 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.

463. Seminar in Existential Psychology (4) BLOCK

The existential tradition in philosophy and psychology. Meanings of such ideas as freedom, responsibility, action, and commitment in relation to an individual life.

464. History and Theoretical Foundations of Psychology (4) CORE

An examination of the historical roots of modern day psychology, a study of the major theoretical foundations underlying psychology, and an examination of key topics from a historical-theoretical view.

Prerequisite: completion of the Department's Comprehensive Examination in Psychology.

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. Prerequisite: Psych. 464 or consent of instructor.

470. Phenomenology of Boundary (4)

Looks into the connective and differentiating processes disclosed in the betweennesses, transitions, and changes of experience. Considers the multifaceted nature of boundary as threshold, posture, place, kairos, meeting, healing, bridging, interface, limit and possibility.

† Course unit value may vary from semester to semester. Consult class schedule for current unit offering.

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) will be explored from a Hillmanian perspective.

473. Psychology of Time (4) BLOCK

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.

476. Psychology of Language (4) BLOCK

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.

477. Seminar in Phenomenology (1-4) CORE Fall Semester only ¹

The phenomenological approach to understanding human experience. Draws on both philosophical and psychological sources of information.

480. Parapsychology (4)

A comprehensive survey of method and theory in the field of parapsychology. Prerequisite or corequisite: Psych. 343 or consent of instructor.

481. Seminar in Parapsychology (4)

Each semester a particular theoretical and/or experimental problem will be studied. Differing viewpoints will be brought to bear in an attempt to understand the phenomenon in question. May be repeated for credit. Prerequisite: Psych. 480 or consent of instructor.

483. Psychology of Metaphor (4) CORE

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.

485AB. Nature, Man and Woman (4)

A two-semester course exploring 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.

Prerequisite or corequisite: Psych. 485 or consent of instructor.

Course unit may vary from semester to semester. Consult class schedule for current unit offering.

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487. Interdisciplinary Seminar (1-4) †

Exploration of basic human problems as reflected in the Arts, Humanities, Social Sciences or Natural Sciences, etc. 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) CORE

595. Special Study (1-4) CORE

The Psychology Department encourages independent study as preparation and practice for life-long self directed learning. Students should formulate plans for a project and present them to a faculty member for possible sponsorship. Special forms for this purpose are available in the department office. These should be completed and filed before the end of the add and drop period. Twelve units of Special Study may be credited towards graduation.

496. Psychology Tutorial (1-16)

Individualized instruction, emphasizing dialogue with faculty and other students, designed to integrate and expand the student's knowledge of psychological issues and problems. Individual consultations between faculty and students as well as seminars and other dialogic experiences.

Field Work

395. Community Involvement Project (1-4) CORE

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.

† Course unit may vary from semester to semester. Consult class schedule for current unit offering.

499. Internship (1-8) CORE

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: Psy 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

Fall Semester:

Psych. 318 Interpersonal Behavior (4)

Psych. 360 Psychology of Learning (4)

Psych. 476 Psychology of Language (4)

Spring Semester:

Psych. 461 Personality (4)

Psych. 463 Existential Psychology (4)

Psych. 473 Psychology of Time (4)

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 (4) CR/NC only

Advanced instruction in the analysis, organization, style and content of psychological writing.

Prerequisite or corequisite: Psy. 590.

520AB. Tools for Self-Discovery (2-4) [†]

An intensive introduction to 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.

535AB. Archetypal Psychology (1-4) [†]

An advanced seminar based upon the work of Jung, Kerényi, 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.

[†] Course unit may vary from semester to semester. Consult class schedule for current unit offering.

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545. Interdisciplinary Study of Human Experience (2-4) †

Exploration of 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. 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 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.

580AB. Seminar in Teaching College Psychology (1-4) †

Discussions in methods and materials of teaching psychology in junior colleges and four-year colleges. Limited to M.A. candidates.

Prerequisite: Consent of Instructor.

582AB. Practicum: Teaching College Psychology (1-4) †

Practical experience of supervised teaching in a college Psychology classroom.

Prerequisite: Consent of Instructor.

590AB. Master's Thesis and Directed Reading (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.

† Course unit may vary from semester to semester. Consult class schedule for current unit offering.

SOCIAL SCIENCE PROGRAM

Coordinator: Robert A. Karlsrud

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 201—Introduction to Economics.....	4
Geography 302 or 303—Physical Geography or 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	

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 completing Phase III of the Professional Education Program:

Social Science 400—Concepts and Methodologies of the Social Sciences 4 units

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, Politics and Sociology as part of the academic preparation of those students contemplating a career in secondary social science education. (Harris)

SOCIOLOGY

Department Chair: Homero E. Yearwood

Faculty: David Arnold, Kathleen Charmaz, James Driscoll, Susan Garfin, Daniel Haytin, Carl Jensen, Richard Rizzo, Harvey Segal, Clarice Stasz, John Steiner, Robert Tellander, Kay Trimberger.

Sociology is the scientific study of society with an emphasis on human relationships within groups and interconnections among social institutions. It is a discipline that explores human social behavior in an effort to describe it, explain it, and predict it. The study of sociology is relevant and fundamental to a liberal arts education. It prepares students for the informed exercise of social responsibilities in a complex society because it provides new tools of inquiry which extend beyond personal experience.

A sociology background is excellent training for vocations involving human services and planned change, such as the various helping professions, law, government careers, community organization and development, and support work in the arts. It encourages the development of research skills, such as survey research or data retrieval, that are increasingly called for by business and other employers in a complex world. Sociology provides many useful skills and resources for any citizen concerned with social action.

The curriculum requires all students to develop a grounding in the basics of sociological theory and research. Students must then select courses from at least three of the five major subdisciplines of sociology. Social behavior examines the principles of human interaction with an emphasis upon the individual as a social actor. Sociology of culture describes the social organization of religion, knowledge, the arts, media and language. Social institutions addresses the major building blocks of modern society: the family, education, law, criminal justice, the economy, politics, and social class. Comparative Social Groups introduces approaches for the systematic study of different groups, with special emphasis upon social change and planning. The fifth group examines sociological theory and methods.

The Sociology Department is highly diversified, which permits an unusually flexible major as well as one well-grounded in basic principles. It is the intent of the department that each student work closely with an advisor to design the program most suited to his or her needs. Students who intend to go to graduate school are encouraged to include advanced courses in sociological theory and research as well as one statistics course. Students with other interests are also urged to explore the opportunities of the Community Involvement Program and Internships, which provide a practical experience for the application of course work.

All majors considering a career in secondary social science education should see page 321 for Ryan Single Subject Social Science Program requirements.

BACHELOR OF ARTS IN SOCIOLOGY

Major	Units
General Education	40
Sociology Courses	36
Supporting Subjects	8
Foreign Language and/or Electives	40
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
Fields of Sociology.....	12

A minimum of 12 units must be selected from three of five fields of sociology listed below. These units are in addition to the required courses listed above and may not include seminar units.

- 1) Social Behavior (courses numbered 315–329 and 415–429);
- 2) Sociology of Culture (courses numbered 330–344 and 430–444);
- 3) Institutions (courses numbered 345–359 and 445–459);
- 4) Comparative Sociology (Courses numbered 360–374 and 460–474);
- 5) Sociological Theory and Method (Courses numbered 301–314; 376–389; 400–414 and 475–489);

Seminars	8
Other approved sociology courses.....	4

Supporting Subjects

	<i>Units</i>
Upper division supporting subjects must be chosen in consultation with, and have the approval of, the major advisor	8

MINOR IN SOCIOLOGY

Sociology 201—Introduction to Sociology	4
Sociology 300—Sociological Analysis	4
Sociology 375—Survey of Sociological Theory	4
Fields of Sociology.....	12

A minimum of 12 units must be selected from three of five fields of sociology listed below. These units are in addition to the required courses listed above and may not include seminar units.

- 1) Social Behavior (courses numbered 315–329 and 415–429);
- 2) Sociology of Culture (courses numbered 330–344 and 430–444);
- 3) Institutions (courses numbered 345–359 and 445–459);
- 4) Comparative Sociology (courses numbered 360–374 and 460–474);
- 5) Sociological Theory and Method (Courses numbered 301–314; 376–389; 400–414; and 475–489);

NOTE: Major and minor students wishing to take upper division sociology courses without having completed Sociology 201 (or its equivalent) and Sociology 300 must obtain permission from the instructor.

LOWER DIVISION**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. Major Social Issues (4)

An introduction to the sociological analysis of major social issues. While the substance of the class will change each semester, fields from which issues will be drawn include race relations, aging, criminology, deviance, and industrial conflict.

203. American (U.S.A.) Society (4)

The study of American society, its values, institutions, and social organization. The familial, technological, and social bases of American society. The social sources of change and stability in American society.

204. Social Work and Community Organization (4)

Community problems will be analyzed. Strategies for their resolution will be outlined and evaluated.

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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.

INTERMEDIATE SOCIOLOGY

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.

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

313. Classical Studies in Sociology (4)

A critical analysis of one of the classics in Sociology. Consult the class schedule for current selection.

UPPER DIVISION COURSES

Social Behavior

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.

317. Interaction in Small Groups (4)

Analysis of human encounters in small or intimate relations; comparative analysis of behavior in selected settings. Special attention to be paid to the theoretical and empirical works of Simmel, Goffman, Garfinkel, and Schutz.

318. Sociology of Mental Illness (4)

Analysis of the institutions which define and manage mental illness. A discussion of the social development of behavior categorized as mental illness. Comparisons between psychological and sociological approaches to mental illness.

319. Aging and Society (4)

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.

415. Deviant Behavior (4)

The social bases of insanity, alcoholism, delinquency, embarrassment, and other deviant behaviors. 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.

417. Seminar: Social Behavior in Everyday Life (4)

A consideration of the social organization of commonplace behavior among small numbers of persons: rituals, self-presentations, non-verbal behavior, speech, power displays, the patterns of entering, maintaining, and terminating social contacts, role-playing and role distance.

418. Seminar: The 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, 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, and application of power in human interaction, social organizations and institutions. Special stress will be given to the problems of ensuring individuality and freedom, in light of the need for social order.

Sociology of Culture

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. Sociology of Mass Communications (4)

Sociological analysis of the nature and functions of mass communications. Overview of the history, structure, function, and influence of mass media in society. Primary objective is to develop a medi-conscious perspective that will contribute to a better understanding of the changing "reality" of society and our role in it.

332. Death and American (U.S.A.) Culture (4)

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. Futurology (4)

A survey and critique of major theories and predictive schemes concerning the future development of society. Exploration of the role of technology, innovation, and new ideologies as forces of social change.

430. Sociology of Knowledge (4)

An investigation of the interrelations between types of knowledge and social structure, between ways of thinking and feeling, ways of looking at ourselves and our world

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and the social and cultural settings of these activities. Classical and contemporary theories will be explored and researched.

431. Sociology of Religion (4)

A multi-faceted examination of a universal social institution. The course will examine existing sociological models and involve students in developing their own theories of religious development, change, and social function. A variety of the world's religions will be investigated comparatively. Students will be extensive field research on topics of their choice. This course satisfies the general education requirement for Comparative Perspectives in Humanities.

432. Seminar: Sociology of the Arts (4)

Survey of the role of various arts in society, including theories of the social bases for art production, the relation of art to other social institutions, and social change in artistic tastes.

433. Seminar: Sociology of Literature (4)

An examination of a growing subfield in sociology with important cross-disciplinary ties. The course looks at social factors affecting literary production, examines literature as sociological data, and raises issues regarding literary taste and interpretation. In a given semester the course can center on the works of one author, period, or problem area; or it can be comparative in focus.

434. Seminar: Cinema and Society (4)

Consideration of the role of film in society. Includes theories concerning the audience, the social bases for the production of art, film as propaganda, the cultural mythologies in film, the relation of cinema to other institutions, the role of films in the development of mass society.

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.

437. Seminar: Sociolinguistics (4)

Investigation of speech, conversation, and variations in language usage as related to social class, sex, ethnic, and other subcultures. Evaluation of theories concerning the role of speech in social behavior. Techniques for collecting sociolinguistic data.

Sociology of Institutions

345. Kinship and 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.

346. Political Sociology (4)

Traces the effects of political systems on social life. Topics include the structure of modern political campaigns, the interrelationship of the United States government with the economy, the political organization of universities and corporations, the role of voters, and theories of political monopoly.

347. Social Class Structure (4)

An overview of stratification. 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, privilege, prestige, opportunity, culture, and consciousness, as well as the interaction of ethnicity, gender, and class.

348. Formal Organizations (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.

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.

448. Punishments and Corrections (4)

Systematic analysis of the relationship between 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.

449. Sociology of Law (4)

Surveys the social and cultural factors that underly the development, maintenance, and change of laws, the court system, and other legal structures. Analyzes the major theories of jurisprudence.

450. Seminar: Social Stratification (4)

Examination of basic stratification processes, including the bases for individual achievement and success in capitalist society, the formation of classes and class consciousness in various types of societies, and the development of mass society. Evaluation of democratic, elitist, and Marxist analyses of social inequalities.

451. Seminar: 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. Seminar: Medical Sociology (4)

An examination of the social organization of medical care: current ideologies of treatment, the role of professional authority, the role of government and industry in delivery systems, medical bureaucracies, the effects of health care on patient self-concept.

Comparative Sociology

360. Western and Non-Western Societies (4)

A systematic comparative analysis of social institutions in China, Japan, Southeast Asia, and India. The course will familiarize students with the Asian societies studied. It will also use material covered in class and student research as the basis for developing and analyzing cross-national theoretical frameworks and examining problems unique to comparative research.

Prerequisite: Soc. 300 or consent of instructor

361. Social Change (4)

Comparative analysis of past social change, with special emphasis upon such cases as Third World revolution, youth movements, racial minority actions, and technological innovations. Survey and evaluation of theoretical explanations for these changes.

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. Minorities and Inter-Ethnic Contacts (4)

The history and prevalence of minorities. 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.

460. Social Planning (4)

How planning affects daily life, and some ways of realistically effecting this planning. The relation between social planning, social action, and social change will be emphasized. Plans to be studied include those for higher education, urban renewal, and other housing programs, transportation, criminal justice, welfare, etc.

461. Social Welfare and Society (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 institution are studied in relation to various impoverished and trouble segments of the society.

462. Seminar: Comparative Sociology (4)

Consideration of theory and methods applied to cross-national research. Students will be required to complete a large-scale comparative research project through the use of available national data archives.

Theory and Methods

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.

400. Seminar: Survey Research (4)

Topics such as questionnaire construction, sampling, interviewing, coding, etc., will be covered in lectures, discussions, readings, and short exercises.

401-A. Seminar: Field Research (4)

A practicum in field work and participant observation. Topics include access to informants, data recording techniques, issues of validity and reliability of data, and the preparation of research reports. Each student is expected to study one social setting intensively.

401-B. Seminar: Advanced Field Work (4)

A continuation of Sociology 401-A. Same description as 401-A only it will be additional work on field observation and greater analysis of qualitative data.

402. Seminar: Visual Sociology (4)

Exploration of the use of cameras as tools in exploratory, experimental survey, and field research. Examination of the potential of photographs for theory development and testing. Survey and evaluation of the work and theories of documentary photographers, filmmakers, and visual sociologists.

Advanced Theory and Methods

475. Seminar: Sociological Theory (4)

An advanced seminar giving students the opportunity to study critically the theoretical writings of leading sociologists (usually one theorist per semester such as Marx, Weber, Goffman). Designed to be a small class in which students read extensively and participate actively, this course will offer advanced theoretical training in preparation for graduate study.

Research and Special Studies

395. 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.

495. Special Studies (1-4)

498. Senior Seminar: (4)

The purpose of this seminar is to bring together, synthesize, and examine the theoretical and empirical findings of other upper division courses in sociology.

499. Internships (1-4)

THEATRE ARTS

Chair: Judy Navas

Faculty: Christopher Beck, Fred Curchack, Carla Guggenheim, Nancy Lyons, Linda Magarian, Wendy Rogers, William Sherman, Ann Woodhead

Theatre is process and product, art and communication, and is a means of personal growth and 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.

BACHELOR OF ARTS IN THEATRE ARTS

Major

	<i>Units</i>
General Education	40
Theatre Arts	45
Electives.....	39
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 200, 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

	<i>Units</i>
STAGE I—REQUIRED	15
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.....	2
145	Voice for the Actor.....	2
200	Theatre In Action: Performance and Criticism	2
STAGE II—REQUIRED		20
302A,302B	Drama Ensemble Workshop (2 semesters)	6
320	Intermediate Acting	2
350	Directing Workshop	2
370A	History of Theatre	3
380	Research	3
390AB	The Theatre Artist in Contemporary Life, Living and Working in Theatre (2 semesters)	1
400	Senior Projects	3
STAGE II—ELECTIVES		
132	Beginning Design and Practice: Lighting.....	2
133	Beginning Design and Practice: Makeup.....	2
170	Mime.....	1
330	Advanced Design	2
360	Musical Theatre	2
420	Advanced Acting	2
460	Drama for Children.....	2
Any 3.0 unit class in dramatic literature (e.g., Black Drama, Multi-Cultural Studies; or English).		
At least 6.0 units from the above list plus at least 4.0 units from other Theatre Arts Department offerings.		
TOTAL FOR DRAMA EMPHASIS: STAGE I—REQUIRED		15
STAGE II—REQUIRED		20
STAGE II—ELECTIVES		10
		45

DANCE EMPHASIS

		<i>Units</i>
STAGE I—REQUIRED		15
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.....	2
140	Rhythm Analysis	2
200	Theatre In Action: Performance and Criticism	2
STAGE II—REQUIRED		20
301A, 301B	Dance Ensemble Workshop (2 semesters)	6
310	Intermediate Modern Dance	2
340	Choreography I	2
370B	History of Dance	3
380	Research	3
390AB	The Theatre Artist in Contemporary Life, Living and Working in Theatre (2 semesters)	1
400	Senior Projects	3

STAGE II—ELECTIVES

115 Dance Styles	1
160A, 160B Beginning Ballet A or Beginning Ballet B	1
210 Effort/shape	2
260 Intermediate Ballet	1
315 Experiential Dance Therapy	2
360 Musical Theatre	2
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 6.0 units from the above list plus at least 4.0 units from other Theatre Arts Department offerings.	
TOTAL FOR DANCE EMPHASIS: STAGE I—REQUIRED	15
STAGE II—REQUIRED	20
STAGE II—ELECTIVES	10
	45

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. A crew assignment is a required part of this class.

131. Beginning Design and Practice: Costume (2) Magarian

An introductory course in the fundamentals of costume design and construction. Students will be taught to use sewing machines, irons, and other basic construction tools for the making of costumes. Course will include beginning drawing and the fundamentals of design. A crew assignment is a required part of the class.

132. Beginning Design and Practice: Lighting (2) Graham

Basic lighting design, including the drawing of lighting plots and the techniques of rigging and operating lighting systems. The students will serve on the lighting crew for at least one production.

133. Beginning Design and Practice: Makeup (2) Magarian

A beginning course in the fundamentals of design and application of makeup for the stage. A variety of periods and styles of makeups and designs will be covered. Students will be required to work makeup crew for at least one production. Enrollment by consent of instructor.

135. Stagecrafts (2) Sherman, Graham, Magarian

Practical experience in theatre crafts including scenery and/or lighting, or costume and/or makeup execution. Skills are developed in the use of tools and equipment necessary for these processes. Students will work in the stage or costume shops and will work as production crew for at least one production. May be repeated for credit.

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 200.

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, 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 Instructed Course (1-3)

200. Theatre in Action: Performance and Criticism (2) Department Faculty

An exploration of techniques and processes necessary to develop theatre perform-

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ance. Using practical exercises in dance and drama, the work leads to understanding form, content and technique in aspects of theatre production. Students are required to see on and off campus dance and drama performances which are analyzed and discussed critically. The course is a bridge between the basic courses and the advanced applied courses in theatre arts.

Prerequisite: Four units of Stage I or consent of instructor. Required of all Theatre Arts majors.

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

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 200 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 200 or consent of instructor.

305. Experiments in New Theatre (3) Curchack

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 200 or consent of instructor. May be repeated for credit.

315. Experiential Dance Therapy (2) Beck

An experimental course in creative body movement for personal insights and growth. Includes experiences in active imagery and movement which increase self-awareness, individually and in relation to others. Not a training course for dance therapy. 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 200 or consent of instructor.

330. Advanced Design (2) Sherman, Magarian

Students will be supervised in advanced work in their areas of design concentration:

Scenery, lighting, costume or makeup. Emphasis will be on developing design portfolios. Projects in the class will cover several styles and periods. Students will be encouraged to develop their own styles of design rendering.

Prerequisite: THAR 130, or THAR 131, or THAR 132, or THAR 133, or consent of instructor.

335. Advanced Stagecraft (2) Sherman, Magarian

Further practical experience in theatre crafts with increased responsibility. Student may serve as crew head for makeup or costume, as stage manager, or in some other major technical capacity.

Prerequisite: THAR 135 or consent of instructor. May be repeated for credit.

340. Choreography I (2) Lyons, Woodhead

Fundamentals of choreography through a problem solving approach. Studies deal with aspects of time, space, dynamics and movement with an emphasis on extending the communication skills of the body. Class meets for two hours with an additional two-hour lab session.

Prerequisite: THAR 110B and THAR 200 or consent of instructor. May be repeated for credit.

350. Directing Workshop (2) 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.

Prerequisite: THAR 120A, THAR 120B, THAR 200 or consent of instructor and a beginning design class (lighting recommended). May be repeated for credit.

360. Musical Theatre (2) Department Faculty

An exploration of the various styles and techniques of American musical theatre through the preparation of songs and scenes. Practice in basic voice, dance, and acting with classroom performances in solo and group arrangements. Prerequisite: Consent of instructor.

370A. History of Theatre (3) 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) 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.

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 200 or consent of instructor.

390A. The Theatre Artist in Contemporary Life (1) Department Faculty

A seminar dealing with the relevance and realities of life of a theatre artist in contemporary society. Included in the seminar will be guest speakers, self-evaluation, counseling with faculty, and group discussions. Should be taken in the junior year. Credit/No Credit. For Majors Only. Credit awarded on completion of 390A and B.

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390B. Living and Working in Theatre (1) Department Faculty

A seminar dealing with practical aspects of personal survival and growth in theatre after graduation. Graduate study, approaches to community and professional theatre, funding, and other economic educational issues will be investigated. Should be taken in the senior year. Credit/No Credit. 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 200 or consent of instructor.

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.

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 preparation 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 and under faculty supervision. May be repeated for credit.

495. Special Studies (1-4) Department Faculty

Special Programs

Community Involvement Program

Internships

Pre-Law Preparations

Engineering

Health Professions

National Student Exchange

SPECIAL PROGRAMS

COMMUNITY INVOLVEMENT PROGRAM

The Community Involvement Program is a student volunteer program designed to facilitate experiential learning and service to the community. Students work an average of 6 to 8 hours each week in a variety of placements including schools, hospitals, recreation programs, day care centers, and various social service agencies. The C.I.P. 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 21 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. 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.

PRE-LAW PREPARATION

Although there are no courses specifically required for admission to law school, and thus no prescribed pre-law curriculum or list of recommended majors, certain skills and academic experiences are essential for success in preparing to enter the field: effective use of written and spoken language; an understanding of human institutions and values; competency in the critical analysis and communication of ideas. Sonoma State University alumni who are practicing attorneys had 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, Politics, 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 Advising 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.

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.

HEALTH PROFESSIONS

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

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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 Division of Natural Sciences Health Professions Advisory Committee has been established to offer assistance to students interested in careers in the health professions. The main functions of the committee are to:

- (1) Advise students on how to best prepare for admission to health professional schools. Since the Sonoma State University campus is small, the Health Professions Advisory Committee has the opportunity to communicate with students on a personal basis. Individual departments may also have health professions advisors.
- (2) Maintain career information related to health professions, including catalogs from various schools and registration materials for examinations and centralized application services required for admission to certain programs such as medicine, podiatry and dentistry.
- (3) Evaluate candidates and write letters supporting their admission to health professional schools.
- (4) Provide practice admissions interview for candidates applying to health professional schools.

Students interested in a health professions career are strongly encouraged to meet with a Health Professions Advisor upon enrolling at Sonoma State University. Appointments can be made through the Natural Sciences Division Office.

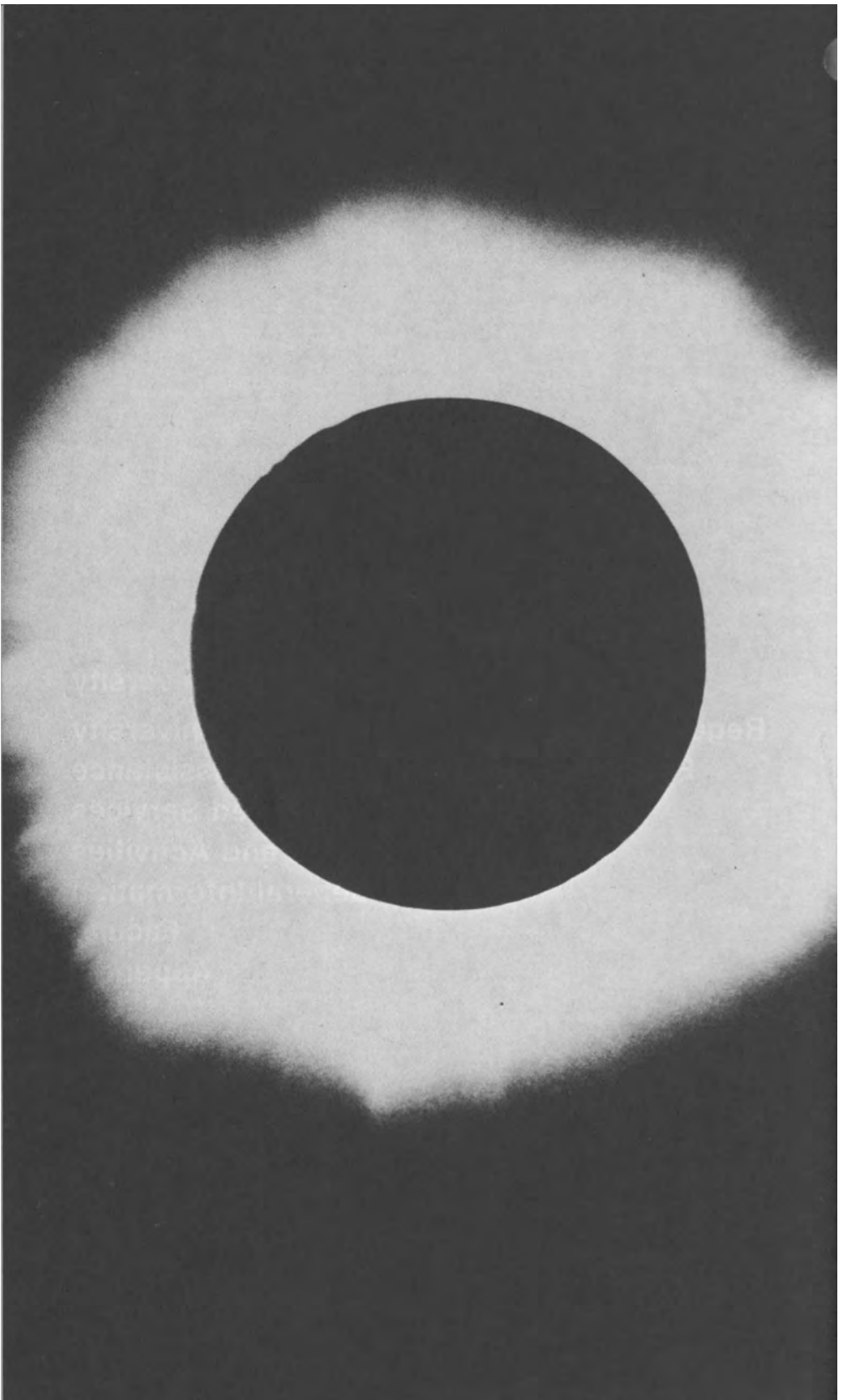
NATIONAL STUDENT EXCHANGE

Under this program Sonoma State University has become part of a 'national' university network which enables our undergraduate students to study for one academic year at any of fifty 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 matched 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 Academic Advising, Village 102, Phone: 707/664-2442.

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Admission to the University

Undergraduate

Graduate

Postbaccalaureate

Students from Other Countries

Readmission

General Information on Admission

Credit by Examination

Total Solar Eclipse
photo from Kenya, Africa by
Norm Whyte and Laurel Allen, SSU

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 and Colleges 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, exclusive of physical education and military science; and the ACT composite, or the SAT total score. The full table of grade point averages, with corresponding test scores and the equation by which the index is computed, is reproduced as Appendix B.

Freshman applicants who are graduates of a California high school or legal residents for tuition purposes must have an eligibility index which places them among the upper one third of California high school graduates. The minimum index is 741 (ACT) or 3072 (SAT).

The admission requirements for non-resident applicants are higher than those for California residents. Applicants who are neither residents for tuition purposes nor graduates of a California high school must have an eligibility index which places them in the upper one-sixth of California high school graduates. The minimum index for such students is 826 (ACT) or 3402 (SAT).

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

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

Undergraduate Transfer Applicants

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. Applicants in good standing at the last college attended may be admitted as undergraduate transfers if they meet either of the following requirements:

1. Eligible for admission in freshman standing (see freshman requirements) with 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; non-residents must have a GPA of 2.4 or better.

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.

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 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 or College with postbaccalaureate unclassified standing does not constitute admission to graduate degree curricula.

Postbaccalaureate Standing, Classified (Credential/Certificate)

Students who are eligible for admission to a California State University or College in unclassified standing may be admitted to classified postbaccalaureate standing for the purpose of enrolling in a particular postbaccalaureate credential or certificate program, provided that 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

Students eligible for admission to a California State University or College under unclassified postbaccalaureate standard above, but who have deficiencies in prerequisite preparation which in the opinion of the appropriate campus authority can be met by specified additional preparation, including qualifying examinations, may be admitted to an authorized graduate degree curriculum with conditionally classified graduate standing.

Graduate Standing, Classified

Students who are eligible for admission to a California State University or College in unclassified or conditionally classified standing may be admitted to an authorized graduate degree curriculum of the campus as classified graduate students if they satisfactorily meet 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 authorized by

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the U.S. Department of State. Permanent resident applicants possessing an Alien Registration Card must use the regular California State University and Colleges 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. 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. 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	\$2,160.00
Fees.....	194.00
Room and Board.....	2,500.00
Books.....	250.00
Health Insurance.....	100.00
Incidentals.....	1,200.00

Total annual estimated cost \$6,404.00

Educational Materials/Admissions Materials

Undergraduate and graduate applicants must furnish original certified copies of 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. Applicants must achieve a score of 500 or more before they can be accepted for admission. 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.

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. A new health record form must be filed with the Student Health Center.

Former Students Who Were on Probation

Students who were on probation 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.

Readmission After Disqualification

Disqualified students, after one regular semester has elapsed, may be considered for readmission. Petitions to the Office of Admissions and Records must be accompanied by evidence that would justify readmission, such as satisfactory academic work elsewhere. A disqualified student who is readmitted will remain on a probationary basis until he or she has removed all grade point deficiencies or is again disqualified.

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

ACT	SAT
American College Testing Program, Inc. Registration Unit, P.O. Box 168 Iowa City, Iowa 52240	College Entrance Examination Board Box 592 Princeton, New Jersey 08540

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 \$25 nonrefundable application fee should be in the form of a check or money order payable to The California State University and Colleges and may not be transferred or used to apply to another term. Undergraduate 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 and Colleges 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.

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. Second baccalaureate degree candidates should apply as undergraduate degree applicants. A complete application for postbaccalaureate status includes all of the materials required for undergraduate applicants. Postbaccalaureate applicants who have completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$25 nonrefundable application fee. Since applicants for postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternative campuses or later changes of campus choice will be minimal. 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 fee) to each. Applications may be obtained from the Graduate Studies Office of any California State University or College campus in addition to the sources noted for undergraduate applicants.

Locally and Systemwide 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. Students must make application for an impacted program during the first month of the filing period and may file more than one application and fee. Nonresidents, foreign or domestic, usually 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. Effective with the Fall 1980 filing period 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. Freshman applicants intending to apply to an impacted program should take the ACT or SAT test at the earliest date. Test scores (received by the campus no later than the end of the first month of the filing period) and grades earned in the final three years of high school will be used to compute the eligibility index. The supplementary admission criteria used by the individual campuses to screen applicants appear periodically in the 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

Applicants who would be faced with extreme hardship if they cannot be considered for admission to an oversubscribed program should communicate the details of their hardship in writing to the Office of Admissions and Records and request hardship admission consideration.

GENERAL INFORMATION CONCERNING APPLICATIONS AND ADMISSION

Application Filing Periods

<i>Terms in 1980-81</i>	<i>Applications First Accepted</i>	<i>Filing Period Duration</i>	<i>Student Notification Begins</i>
Fall Sem. 1980	Nov 1, 1979	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. 1979
Spring Sem. 1981	Aug 1, 1980		Sep. 1980

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

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Administrative Code, Section 41201. The social security number will be 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 CSUC 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 Accounting. Further details regarding residency is contained in the Appendix on page 424 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 CSUC 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 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.

English Placement Test

All lower division students (those who enter with fewer than 56 transferable semester units) are required to take the CSUC English Placement Test (EPT) so that information can be available to help in the selection of appropriate course work in writing skills. Failure to take the English Placement Test at the earliest opportunity after admission may lead to administrative probation which according to Section 41300.1 of Title 5, California Administrative Code, and CSUC Executive Order 186, may lead to disqualification from further attendance. The results of the EPT will not affect in admissions eligibility.

Information bulletins and registration materials for the EPT will be mailed to all students subject to these requirements. Alternatively, the materials may be obtained from the Office of Admissions and Records. Information on currently available ways to meet the EPT requirement may be obtained from Director of Testing Services.

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 of candidates.

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

Credits earned in accredited colleges will be evaluated and advanced standing allowed on the basis of the evaluation. 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.

CREDIT BY EXAMINATION

Advanced Placement

Sonoma State University grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Entrance Examination Board. Students who present scores of three or better will be granted six semester units of university credit with the following provisions:

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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.

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 page 418 for course equivalencies.

CSUC Equivalency Tests

In addition to units gained through the College Level Examination Program, students may earn credit toward the baccalaureate degree by passing Equivalency Tests sponsored by The California State University and Colleges. Tests in the following subjects are offered during the Spring Semester each year:

- English Equivalency Examination (EEE)—6 units
- Science and Math Equivalency Tests (SMET)—3 units each
 - General Biology
 - General Chemistry
 - Mathematics
 - Algebra-Trigonometry

Inquire at the University Testing Office for registration fees and deadlines. During the Spring Semester, registration materials are available in California high schools.

**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 in the University and who are eligible to do so, may register during the regular registration period. All eligible continuing students and all admitted applicants will be sent a Permit-ID card approximately two weeks prior to the scheduled registration. The Permit-ID card indicates the scheduled registration time which is the appointment time for each potential registrant. Registrants may register at that appointment time or any time thereafter during the scheduled registration hours.

Registrants may obtain information on class scheduling, current fees and other pertinent enrollment information by purchasing a Schedule of Classes from the Campus Bookstore. Registration by mail is not permitted.

Program of Study

The final step of the registration process is the filing of a student's Program of Study. The filing of the Program of Study by the student and its acceptance by the University is evidence of the student's obligation to perform the required work in the designated courses. A student will not receive credit in any course in which (s) he is not officially enrolled. Undergraduate students who need to be registered full time should note that the minimum program of study considered full time is 12 units.

Academic Load

The normal maximum academic load recommended by the University is 16 units. However, students may register for up to 19 units without special approval.

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 registration 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 later register during the first four weeks of instruction. Students who are eligible and who wish to late register 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 \$5 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 take 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. 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 two semesters following disqualification. Disqualified students absent for two or more semesters must reapply for admission.

Concurrent Enrollment

At another California State Universities and Colleges (Intrasystem Concurrent Enrollment): SSU students may register concurrently at SSU and other campuses of the California State Universities and Colleges. 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 studies in regular classes does not constitute

admission to the university; neither does it entitle extension students 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 CSUC 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 CSUC 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 the basis of grading 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.

Changing. Changing the basis of grading to Audit or conversely may be accomplished 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. Under some circumstances additional clearances may be required from the PE Equipment Room, Financial Aid Office, the Accounting Office, the Veterans Office, the Library 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: C/NC and ABC/NC-CR, indicating “passed with credit,” is given for work equivalent to C or better for undergraduate students and for work equivalent to B or better for post-baccalaureate and graduate students. NC, indicating “no credit,” is given for work equivalent to D or F for undergraduate students and for work equivalent to C, D, or F for post-baccalaureate and graduate students.

Further information concerning the non-traditional grading option is given under non-traditional grading in the Categories of Enrollment section.

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. A final grade is assigned when the work agreed upon has been completed and evaluated.

An "I" must normally be made up within 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 (or an NC if applicable) for grade point average under the following conditions:

—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 and progress point computation this symbol is equivalent to an "F".

Satisfactory Progress (SP). The symbol "SP" is used in connection with thesis, project and similar courses where assigned work frequently extends beyond a single academic term. It indicates that work is in progress and has been evaluated and found to be satisfactory to date, but that assignment of a precise grade must await completion of additional work. Enrollment for more units of credit than the total number of units which can be applied to the fulfillment of the student's educational objective is expressly prohibited. Work is to be completed within a stipulated time period. This may not exceed one year except for graduate degree theses for which the time may be up to two years, but may not exceed the overall time limit for completion of all master's degree requirements. Any extension of time limit must receive prior authorization by the Dean of Graduate Studies.

Withdrawal (W). The symbol "W" indicates that the student was permitted to drop the course after the fourth week of instruction with the approval of the instructor and appropriate campus officials. It carries no connotation of quality of student performance and is not used in calculating grade point average or progress points. (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) is assigned for work equivalent to A, B, or C for undergraduate students; to A or B for post-baccalaureate and graduate students. CR grades are not included in the calculation of grade point average.

No Credit (NC) is assigned for work equivalent to a D or F for undergraduate students' to C, D, or F for post-baccalaureate and graduate students. NC grades are not included in the calculation of grade point average.

Transcripts of SSU Courses

A student may obtain transcripts of his/her Sonoma State University record from the Office of Admissions and Records only upon written request and with the payment of a two dollar fee for each transcript requested.

Transcripts of work taken at other institutions will not be issued.

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 over 18 years old, 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

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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.

ADDITIONAL REGULATIONS

Non Penalty Calculation of a Previous Grade

Students may repeat a course one time and have only the higher grade count in calculating the grade point average. In the case where the course to be repeated is other than the exact class, prior approval of the appropriate department is required. Students must notify the Office of Admissions and Records after the course has been repeated for this policy to be enacted and the grade point average recalculated. Unit credit for graduation will be granted one time only except as permitted by the University and indicated in the catalog.

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

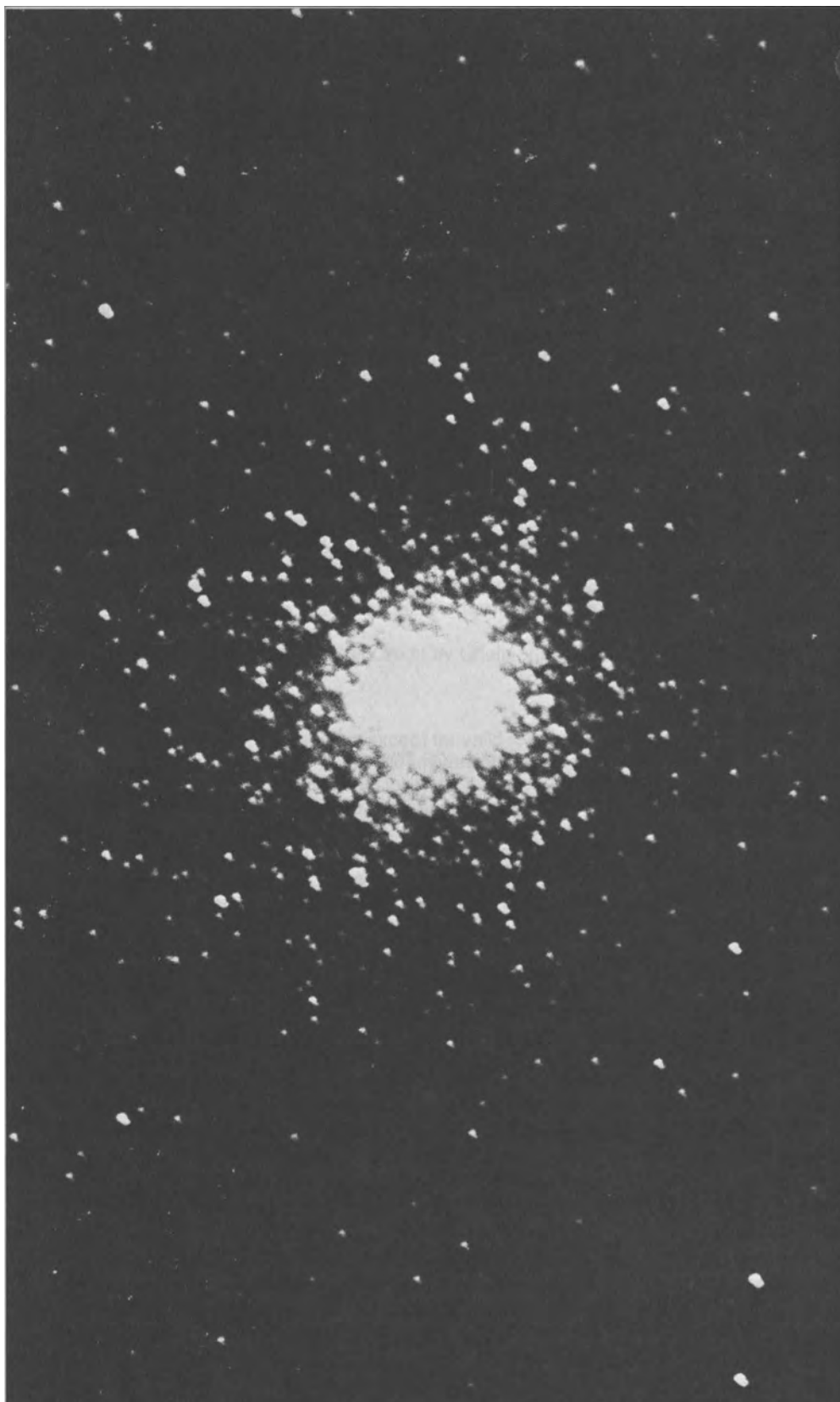
An undergraduate student remaining in continuous attendance and continuing in the same major at SSU, at any other California state university or college, or in any California community college, or any combination of California community and state colleges and state universities may elect to meet the 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 includes periods during which a student is not in attendance in regular sessions but is on approved leave.

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.

Student Responsibility for Catalog Information

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



Fees, Expenses and Financial Assistance

Financial Assistance Information

Fees

Financial Aid

The Globular Cluster in Hercules
photo by Paul Avellar, SSU

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 assistance is made; the requirement for accurately preparing such applications; and the review standards employed to make awards for student financial assistance.

The rights and responsibilities of students receiving financial assistance. For more detailed information regarding financial assistance, see page 368.

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.

Fees

Estimated costs of books and supplies.

Estimates of typical student room and board costs or typical community costs.

Any additional costs of the program in which the student is enrolled or expresses a specific interest.

Refunds. Information concerning the refund policy of Sonoma State University for the return of unearned fees or other refundable portions of costs is available from the Office of Financial Management (Accounting), Stevenson Hall 1001, Telephone: (707) 664-2451.

Legal residents of California are not charged tuition. Non-resident and foreign visa students are required to pay tuition in addition to fees charged to all students. The following schedule reflects fees and expenses for one semester. Checks should be made payable to Sonoma State University in the exact amount due. Fees are subject to change without advance notice by the Trustees of The California State University and Colleges.

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

	<i>0 to 6.0 units</i>	<i>6.1 or more units</i>
Student Services Fee	\$63.00	\$78.00
Student Union Fee	17.00	17.00
Facilities Fee	3.00	3.00
Instructionally Related Activities Fee	5.00	5.00
Total per Semester	\$88.00	\$103.00

NONRESIDENTS (U.S. and Foreign)

Nonresident Tuition	
15 units or more.....	\$1,080.00
Less than 15 units, per unit	72.00
(A service charge is levied for installment payment of nonresident tuition)	

SUMMER SESSION

Fee per unit.....	\$42.00
Student Union Fee (per unit)	.65

EXTENSION PROGRAM

Fee per unit.....	\$42.00

OTHER FEES OR CHARGES

Application Fee (for admission or re-admission, non-refundable)	\$25.00
Late Registration	5.00
Campus Services (I.D.) Card	2.00
Transcript of Record	2.00
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	5.00

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 credit cards may be used for payment of student fees.

STUDENT SERVICES FEE

A Student Services Fee was established by the Board of Trustees of The California State University and Colleges in January 1975. Previously, this fee was known as the Materials and Service 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.
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.....	\$54.00
Automobiles, non-reserved, per semester	18.00
Motorcycles, motorbikes, Mopeds, motorized bicycles, etc.	4.50
Daily Park UR Self non-reserved space—per admission.....	.50
Replacement of Decal.....	2.00

LIBRARY FEES

Photocopy expense, each	.05
2 week material per day	.15
1 week material per day	.25
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.

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 or College, 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 a refund 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 loans, employment, grants and scholarships.

1. *National Direct Student Loans (NDSL)*. These are long-term loans, interest free while in school. Maximums are \$2,500, total during the first 2 academic years, \$5,000 total during undergraduate years, and \$10,000, total maximum including graduate studies. Repayment period and interest (3%) begin 9 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. There are loan cancellations for teaching in a low income area, (As determined by the Office of Education) for teaching the handicapped, for teaching in a Head Start Program, and for serving as a member of the U.S. Armed Forces in areas of hostility. Deferments of payment are available while a half-time student or up to 3 years while in the military service, Peace Corps or Vista.
2. *Federal Insured Student Loans (FISL), Guaranteed Student Loans (GSL)*. These are long-term loans made by participating lending institutions. The maximum is \$2,500 per year (many lenders loan only \$1,000 to \$1,500 per year). Repayment period and interest (7%) begin 9 to 12 months after completion of studies at the discretion of the lender. Minimum repayment is \$30 per month, with a maximum of 10 years to repay. There are no loan cancellation provisions. Deferments of up to 3 years are available for service in the Armed Forces, Peace Corps, or Vista. Application process begins at the university. The decision to loan is made by the bank, savings and loan association, or credit union. Some banks impose additional requirements.
3. *Federal Nursing Loans and Scholarships*. Loans and scholarships up to \$2,000 or more, depending on availability of funds, are available to students in the Nursing program. There are no loan cancellation provisions.
4. *Law Enforcement Education Program (LEEP)*. These are loans and grants for part-time and full-time students, which are limited to in-service law enforcement personnel, and are not based on financial need. They pay for fees only. There is one additional need-based loan program available to in-service employees on academic leave. Inquire at the Criminal Justice Administration.
5. *College Work Study (CWS)*. This is a program of part-time employment with average earnings of \$800–\$1,000 per year. Employment may be either on-campus or in various community non-profit organizations. The Financial Aid Office assists students in finding appropriate Work Study jobs.
6. *Basic Educational Opportunity Grant (BEOG)*. Grants range from \$200 to \$1800. Applications are included in the "Student Aid Application for California".
7. *Supplemental Educational Opportunity Grants (SEOG)*. These are grants of \$200–\$1,500 with a maximum of \$4,000 over 4 years. They are granted only to undergraduates from low income families. SEOG grants must be matched dollar for dollar with a "package" of loans, scholarships, or work study to meet the financial need of the student.
8. *California Educational Opportunity Program Grants (EOP)*. These are available to qualified participants in the Educational Opportunity Program at Sonoma. Grants range from \$200–\$1,000.
9. *Bureau of Indian Affairs Grants (BIA)*. These 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

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supplement other grant aid to meet the financial need of the student.

10. *University Scholarships.* Awards are generally based on academic achievement and/or need. SSU scholarships are quite limited and average less than \$200. Investigate other scholarship opportunities in your own community, also.
11. *California Student Aid Commission.* Cal Grant A awards are for fees only—\$194. Cal Grant B awards are for \$500—\$1,100 plus fees of \$194, for (renewal winners,) and are available to students from low income families, generally, though not exclusively, from an ethnic minority background. Application forms are available in the Financial Aid Office for first time applicants.
12. *Work Opportunities.* Student employment is scarce 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 obtaining long-range and short-term jobs.
13. *Short Term loans.* Small loans, as funds are available, are made, generally up to \$50, interest free for periods of 30 days to those registered for 6 or more units.

Application Procedure.

All applicants, new and continuing, are required to file the "Student Aid Application for California." 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 after January 1 and should be filed with the College Scholarship Service prior to April 1 each year for aid in the coming school year.

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 student's 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, 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 over a work-study assignment. 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 beginning usually in April.

When a student has a subsequent change in status, (gets married, has a child) the Financial Aid Office should 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, for loans up to \$50 repayable without interest in one month, 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

Instructional Resource Center

INSTRUCTIONALLY RELATED SERVICES

Ruben Salazar Library

Ruth Hafter, Library Director; James H. May, Associate Library Director; Richard Bellamy, Barbara Biebush, Patricia Chapman, Jean Day, Johanna Fritsche, Timothy Huston, Marie Luethe, Antoinette Maleady, 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 300,000 volumes, with 16,000 volumes added each year. The periodicals collection consists of 35,000 bound volumes, with 1850 current subscriptions. Some 44,000 items are contained in the documents section. The Library maintains a collection of elementary and secondary textbooks, juvenile literature, and an extensive collection of curriculum materials on microfiche.

The first floor of the Library houses the bibliography area, reference department, archives complex, special collections, and a separate reserve bookroom. In addition, the reference collection, including periodical indexes is housed on the first floor. Administrative offices and technical services departments are also located on the first floor. Services provided by the reference department include individual assistance to students and interlibrary loan arrangements facilitated by a fast delivery system, and a telefacsimile machine. Access to on-line bibliographic data bases via a computer terminal is currently available to both students and faculty.

The book stacks on the second floor contain the circulating collection. The expanded library media center on the second floor contains over 12,000 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 450,000.

Group study rooms, a typing room, and copying facilities are provided for students on the second floor of the Library.

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 four separate computing facilities:

1. An NCR 200 computer
 2. The State University Data Center Computers in Los Angeles (CDC 3300 and 3171)
 3. Campus PDP 11/45 Timesharing system
 4. Statewide Timesharing system consisting of a CDC Cyber 174 computing system.
- 1 and 2 above will be upgraded during the 1980/81 academic year.

NCR 200 Computer

This system is divided into several partitions. One partition is used for administrative and computing center staff jobs, functions as a remote job entry terminal to the State University Data Center which processes student projects, and the others are used for the OPSCAN and miscellaneous jobs.

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 the CDC 3000 computing systems. These systems are used to process some instructional student projects and large

systemwide administrative programs.

Timesharing

Timesharing 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 timesharing are quick response and the ability to create programs in a step by step fashion.

There are two Timesharing facilities available at Sonoma State University. These are the campus PDP 11/45 and the statewide CYBER 174.

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

The Computing Center is open continuously from 8:00 AM Monday to 12:00 PM Friday, from 10:00 AM to 6:00 PM Saturday and Sunday. There are student consultants available during the day to assist student programmers.

INSTRUCTIONAL RESOURCES CENTER

The Instructional Resources Center 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 IRC Media Library. Services to the faculty include instructional design, photographic and graphic preparation of instructional materials, audio and video production, and instructional television. Students may preview materials in the Center and utilize the Student Media Production Lab for work with sound, film, or slides.



Campus Services and Activities

Dumbbell Nebula
photo by Teresa Bippert, SSU

STUDENT 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 invited to participate in a variety of orientation activities that introduce them to the many facets of campus and community life. Orientation Day is supplemented by: 1. *Summer Advising*, an on-campus residential weekend experience in July where prospective students (and their parents) explore Sonoma's philosophy and environs with continuing students, staff and faculty; 2. *Weekend in the Woods*, first weekend of the Fall Semester exploring university life with a small community of students and faculty; 3. *The Activities Faire*, in early Fall, where student clubs are showcased; and 4. *Peer Advising Workshops and Classes*.

ACADEMIC ADVISING

To insure that students of Sonoma State University master the requisite skills and meet the curricular and legal requirements for a degree, the Academic Advising Program at the university integrates advising into the Academic Program.

As part of the instructional process, students are advised about their educational plans and programs by departmental faculty advisors. One is available for each student. The student must assume greater responsibility for planning his/her own intellectual, social, physical and emotional development. By making a prospective set of goals which integrates these four dimensions of growth, the student can then benefit from the professional services available. Perceiving the university as a fixed set of opportunities which complements and supports the achievement of his/her personal goals, the student best fulfills these ends by regular and thorough advising.

To assist both the student and the faculty to achieve this type of advising, the university provides an ADVISING CENTER at Villages 102. The Advising Center will assist students to plan their academic curriculum and to enable them to achieve their goals and subsequently to command their own futures.

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 a cluster of student services with the Counseling Center and the Office of Testing Services.

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 extremely competitive labor market in Sonoma County, the Student Employment Office makes over 6,000 job referrals annually and more than two-thirds of Sonoma State students work during the academic year.

Field Experience

The Community Involvement Program and various departmental Internship programs provide students with a broad range of field experience opportunities. As a result of these field experiences, students gain a better understanding of their subject matter, gain career-related work experience, provide service to their community, and explore potential vocations. In order to assist students with the integration of credit-generating, off-campus learning experiences into their academic programs, the Center maintains hundreds of community service volunteer and internship requests.

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 in conjunction with various 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. 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.

In addition to assisting students with life/work planning, Career Planning and Placement prepares and sends a newsletter to registrants on request, schedules interviews with prospective employers, and processes 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 Newsletter.

II 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.

First Time Freshmen and Lower Division Transfer Student Requirements

Admission Tests	SAT or ACT
Placement Test	CSUC English Placement Test (EPT)
Proficiency Tests	Math Proficiency Test (MPT)
	English as a Second Language (ESL) International Students only.

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Upper Division Students (Baccalaureate Degree Requirement):

Written English Proficiency Test (WEPT)

Credential Candidates:

All Educational Credential Candidates must take the WEPT. In addition, Credential Candidates with majors *unapproved* by the Commission for Teacher Preparation and Licensing will be required to take an additional examination as follows:

Multiple Subject	National Teacher Examination (NTE) Common Exam
Single Subject	Area Subject Exam as designated by Commission

Credit by Examination Candidates:

College Level Examination Program (CLEP)
CSUC English Equivalency Examination (EEE)

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 and GRE Advanced Biology Tests
Counseling	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	GRE Aptitude or 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

Professional School Candidates:

Law School	Law School Admission Test (LSAT)
Medical School	Medical College Admission Test (MCAT)

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 college 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. In addition, the Counseling Center functions as part of an integrated cluster of student services with the Career Development Center and the Office of Testing Services.

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.

The Counseling Center also offers workshops and courses on a variety of themes such as: career planning through self-exploration, assertiveness training, stress reduction, overcoming test anxiety, and time management.

Located in Village 405, the Center is open on weekdays from 8:00 a.m. to 4:30 p.m.

and on Tuesday, Wednesday and Thursday evenings until 7:00 p.m. Appointments can be made by calling (707) 664-2153. The Center is closed for counseling of students during the semester break and during the summer vacation.

HOUSING SERVICES

On Campus: Accommodations for 406 students are available in the cluster-style Residence Halls. A significant feature of the residential community is the extensive participation of students in management of the Halls, which are designed to provide a pleasant environment for single adult living. The Residence Halls Food Service provides three meals per day, Monday through Friday, and two meals on Saturday and Sunday. Specific costs are furnished at the time accommodations are assigned. However, rates for an academic year contract for room and board vary from approximately \$2,100–\$2,200. Interested students should contact the Residence Halls (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. 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.

REENTRY PROGRAM

Sonoma State University is for everyone . . . more and more people are entering and re-entering college after a break from formal education. About two-thirds of our present student body at Sonoma is of "nontraditional college age." Described as "reentry students" these people enrich the whole 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 monthly late afternoon "Conversations" are featured activities in Village 102 A (664-2443/2442). The Reentry calendar is in Village 102.

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. in the student Union, ground floor.

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 beyond the scope of that which the Health Center can deliver 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 six years, may be cared for at one time in the center.

The Children's School receives its principal operating funds from the California State Department of Education and provides a comprehensive program that emphasizes socialization and healthy emotional development in a child-centered environment.

Admission priority is given to single-parent families 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.

INTERNATIONAL EDUCATION SERVICES

Information and assistance is available in this office for students interested in the California State University and Colleges International Programs in direct admission to foreign universities in programs affiliated with other institutions and in independent study abroad. Contact office in Village 102.

The Coordinator of International Education Services also serves as International Student Advisor, assisting international students with various problems as a supplement to assistance provided by their regular academic advisors, and acting as a liaison to the U.S. Department of Immigration and Naturalization Service.

The Coordinator also acts as the Fulbright-Hays Advisor for both students and faculty, and as Marshall Advisor.

EDUCATIONAL OPPORTUNITY PROGRAM

Educational Opportunity Program (EOP) provides access to the University for students demonstrating the potentiality 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 education.

STUDENT AFFIRMATIVE ACTION

Student Affirmative Action is a project designed to provide access to qualified students of under-represented groups (ethnic minorities, handicapped, women and economically disadvantaged) through outreach efforts, admission and orientation/registration assistance. SAA provides a full range of retention services to assist the student to succeed in higher education.

Students who wish to enroll in the University under either program (EOP or SAA) should check the EOP response on the State University application for admission.

MULTI-CULTURAL SERVICES PROGRAM

Multi-Cultural Services is a Federally funded program designed to provide academic support for disadvantaged students. Multi-Cultural Services offer a wide range of credit and non-credit courses to assist students to achieve the maximum advancement from their education. Central to the theme of all courses offered by MCS is personalized academic counseling for each student enrolled. MCS office is located within the Tutorial Learning Center in the Library.

TUTORIAL LEARNING CENTER

The Learning Center seeks to clarify, reinforce, and facilitate the understanding of classroom instruction in most subjects by individual and group tutoring study and skills development, and assisting students who wish to form study and discussion groups. Tutoring is provided by staff and trained student tutors approved by the Academic Department for a subject area. Students needing tutorial assistance and those who wish to be tutors are encouraged to visit the center on the first floor of the library.

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, counseling, 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.

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. Special assistance with VA procedures and regulations is provided by a federally employed Veterans Benefits Counselor in the Veterans Affairs Office.

STUDENT RESOURCE CENTER

The Student Resource Center is the hub for curricular planning and student leadership development at the University. The Center's primary goal is to establish a network of understanding, responsibility and trust between the students and the institution in order to broaden the student's educational experience and enrich the quality of student life. The Center implements and interprets many campus policies affecting vendors, speakers, concerts, rallies, food sales, and special events.

The Student Resource Center believes the student should take an active role in their educational pursuits. At the Center, students can find out how to charter a club, sponsor a symposium, post a banner, initiate a grievance, serve on campuswide committees, try out for cheerleader/pep band, plan Sonoma State University's Open House, help direct new student orientation, and much more. The Center encourages student-initiated planning of program events and performance. The staff serves as facilitators, resource persons, and help-mates to insure that all services and facilities of the institution are available to the organization. The Community Services

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Center is located in the Student Resource Center; it links students to community help services including: Consumer Protection, Food Stamps, AFDC, legal referral, and crisis centers. Housed in the Student Union, the Student Resource Center welcomes drop-in visits by students.

STUDENT UNION

The Sonoma Student Union is the campus' center for cultural, social and educational activities at Sonoma. Students are encouraged to actively participate in all phases of the planning and development of the Union through participation on the Sonoma Student Union Board and its committees. Many programs are housed in the Sonoma Student Union including: the Campus Information Center, the Union Cafe (which includes evening food service), lounge areas, saunas, photographic developing and printing facilities, low-cost duplication service, a travel service, a meditation room, and an art gallery. 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. Also a part of the Union structure, and harbored in its own new facility near the Residence Halls, the Children's School serves to provide for the Child Care needs for the campus community.

INTERCOLLEGIATE AND INTRAMURAL SPORTS

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, fencing, football, gymnastics, soccer, tennis, and track and field. The "Cossacks" have rejoined the NCAA and membership in the Far Western Conference is scheduled for the Fall of 1981.

The Women's Intercollegiate Athletics Program offers competition in the following sports through membership in the Golden State Conference: basketball, cross country, gymnastics, softball, tennis, volleyball, and track and field.

Co-educational intercollegiate programs include cross country, fencing, and sailing. A vigorous Intramural Athletic Program involves students in approximately ten sports for both men and women: tennis, softball, basketball volleyball, flag football, badminton, racquetball and jogging.

General Information

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Affirmative Action Policy

Academic Foundation

President's Associates

Alumni Association

Extended Education

International Programs

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 while 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 and Colleges, Sonoma offers a strong undergraduate liberal arts and sciences curriculum, eleven 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, and the National League for Nursing.

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 shall there be a difference in the treatment of persons because of race, creed, color, religious preference, handicap, national origin, age, sex, marital status, Vietnam era veteran or any other classification which would deprive such persons of consideration as individuals; and that equal opportunity and access to facilities shall be available to all. This principle is expected to be observed in the administration, housing and education of students; in policies governing programs or extra-curricular life and activities; and in the employment of faculty, staff and student personnel. The University shall work cooperatively with the community in furthering this principle of equal opportunity.

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 and Colleges, as defined in Section 24054.5 of the Education 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, 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.

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

The Office of Extended Education is responsible for all program and course offerings not supported by State appropriations, including Summer Sessions, Extension and External Degree Programs.

SUMMER AND SPECIAL SESSIONS.

Courses are offered both on and off campus for resident credit. Included in this program are regular courses for students completing requirements for a degree or credential, and courses, workshops and institutes designed to provide opportunities for professional growth and continued learning.

EXTENSION PROGRAM.

Offering both credit and non-credit courses, workshops, seminars and travel study programs during the academic year, the Extension Program allows the University to extend its resources into the community. Subject to approval by the relevant academic department, extension courses may count toward college degrees and/or credentials with no more than twenty-four units of extension credit normally counted toward the baccalaureate degree, and no more than nine units toward the master's degree. Degree candidates must file with the University Admissions Office.

Those programs offered at off-campus locations are usually presented in conjunction with a cooperating agency expressing a need for the program and assisting in its administration. Information about establishing extension courses and about current offerings can be obtained from the Office of Extended Education.

EXTERNAL DEGREE PROGRAM.

External degree programs provide educational opportunities for individuals who cannot pursue a degree program in the regular session. Present offerings include a baccalaureate degree program in Liberal Arts and a Master's degree program in Psychology.

OPEN UNIVERSITY

Extended Education students may enroll in most on-campus resident classes on a space available basis, provided that the consent of the instructor has been obtained prior to registration. Regular extension fees are charged for such enrollments, and grades are entered on transcripts as extension credit.

For information about any Extended Education offerings call 707/664-2394.

INTERNATIONAL PROGRAMS

The California State University and Colleges (CSUC) offers opportunities for students to pursue their studies at a distinguished foreign university or a special program center. Under the auspices of the CSUC Office of International Programs, participants in this program are concurrently enrolled at their home campus, where they earn academic credit and maintain campus residency, and at an overseas institution of higher education.

Cooperating universities abroad include the University of Provence, France; the Universities of Heidelberg and Tiibingen, Germany; the Hebrew University of Jerusalem in Israel; the University of Florence, Italy; the Universidad Ibero-Americana, Mexico; the Universidad Católica, Peru; the Universities of Granada and Madrid, Spain; the University of Uppsala, Sweden; Lincoln University College of Agriculture and Massey University, New Zealand and Waseda University, Japan. In addition, CSUC students may attend a special program in Taiwan, Republic of China, or an architectural or international business program in Copenhagen, Denmark.

Eligibility for application is limited to those students who will have upper division or graduate standing by September 1981 at a CSUC campus; who have demonstrated the ability to adapt to a new cultural environment; and who, in the cases of France, Germany, Mexico, Peru and Spain, will have completed at least two years of college-level study in the language of instruction at the host university, or possess equivalent knowledge of the language. At the time of application, students must have a minimum cumulative grade point average (GPA) for all college-level work of 2.75, except for the programs in Israel, New Zealand and Peru where a minimum GPA of 3.0 is required. Selection is competitive and is based on home campus recommendations and the applicant's academic record. Final selection decisions are made by a statewide committee of faculty members, except for the programs in New Zealand where final selections are made by the respective host universities.

The International Program supports all tuition and other academic 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 costs for pre-departure orientation, insurance, transportation, housing and meals. Home campus registration and other fees and personal incidental expenses or vacation travel costs while abroad are also paid by the student. Non-resident students are subject to non-resident fees. The Office of International Programs collects and administers funds for those items which the program must arrange or can negotiate more effectively, such as home campus fees, orientation costs, insurance, outbound transportation, and, in some centers, housing. International Programs participants may apply for any financial aid available at their home campuses, except for campus work-study.

Applications for the 1981–82 academic year must be submitted before February 9, 1981, except for New Zealand. Applications for the New Zealand program must be submitted by November 1, 1981, for participation during calendar year 1981. (The academic year in New Zealand begins in February and ends in October.)

Detailed information and application materials may be obtained from the office of International Education Services (Village 102); further information may also be obtained by writing to The California University and Colleges International Programs, 400 Golden Shore, Suite 300, Long Beach, California 90802.

The following course designations are used in cases where there is no exact correspondence between the course in the foreign university and a course listed in the Sonoma State University catalog:

Foreign Language 101 i.s. (1–8)

A maximum of 8 units may be earned in elementary courses of a foreign language.

Foreign Language 201 i.s. (1–6)

A maximum of 6 units may be earned in intermediate courses of a foreign language.

International Programs 300 (1–3)

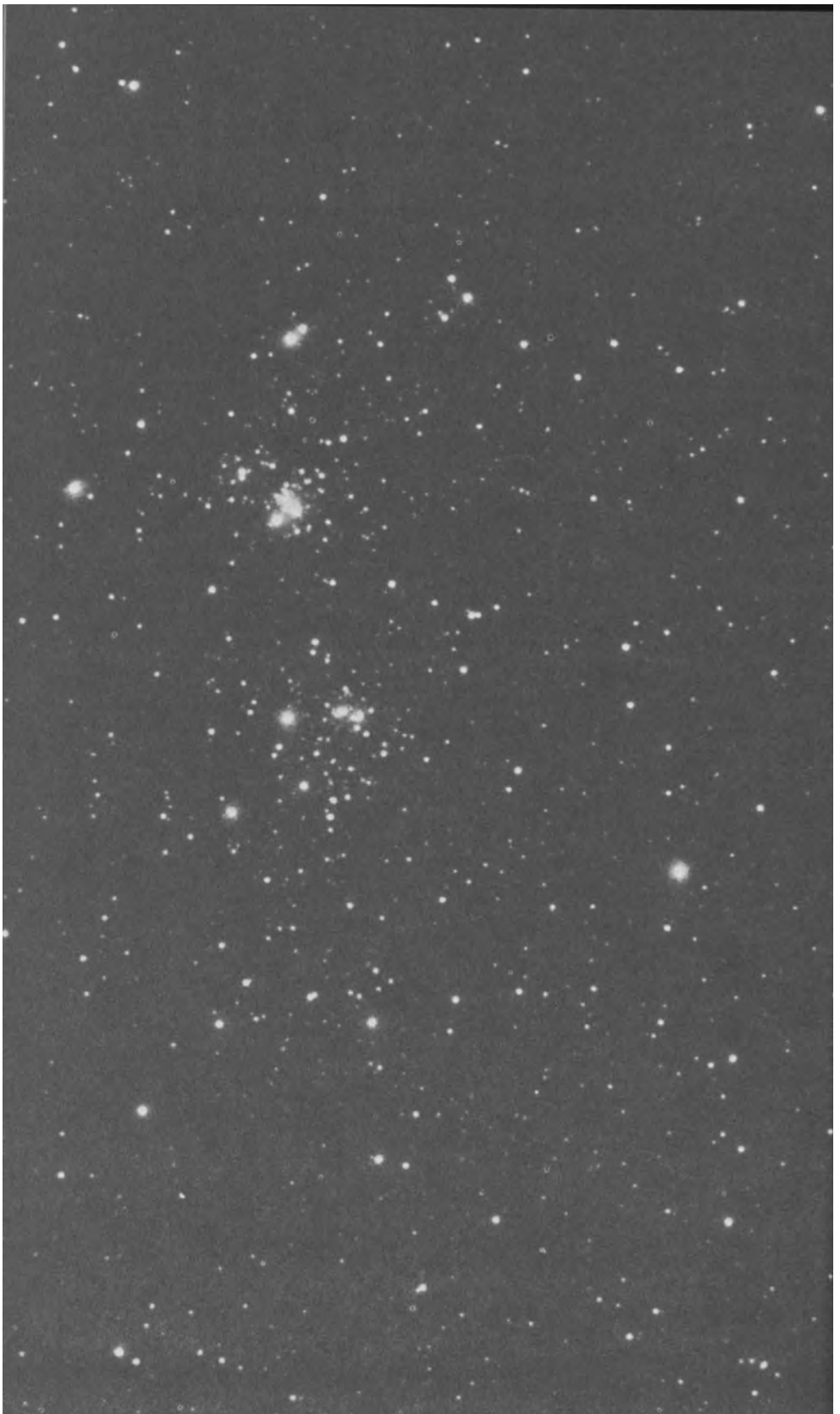
May be repeated and/or multiple registrations may be made concurrently.

International Programs 400 (1–3)

May be repeated and/or multiple registrations may be made concurrently.

International Programs 500 (1–3)

May be repeated and/or multiple registrations may be made concurrently.



The Faculty

Double Cluster in Perseus
photo by Miriam Carolin, SSU

INSTRUCTIONAL FACULTY

- Les K. Adler (1970) Associate 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., 1968, Tulane University.
- Ellen I. Amsterdam (1969) Professor of Music
B.A., 1957; M.A., 1959, Smith College; Ph.D. 1968, University of California, Berkeley
- Thomas B. Anderson (1968) Professor of Geology
B.S., 1961, Yale University; M.S., 1965; Ph.D., 1969, University of Colorado.
- Kathryn Armstrong (1966) Professor of Art
B.F.A., 1955, University of Colorado; M.F.A., 1958, California College of Arts and Crafts; M.A., 1965, University of California, Berkeley.
- David 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.
- Ronald A. Baker (1970) Associate Professor of Biology
B.A., 1961; M.A., 1963, San Francisco State College; Ph.D., 1967, Purdue University.
- Michael E. Baldigo (1975) Assistant Professor of Management
M.B.A., 1966, University of Chicago; M.B.A., 1971, Indiana University at Bloomington; Ph.D., 1977, California Western University; CPA, 1973.
- ⁶ 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.
- ² Isaac L. Bass (1970) Professor of Physics
B.A., 1960, University of California, Berkeley; Ph.D., 1965, Columbia University.
- ¹ Philip H. Beard (1969) Professor of German
B.A., 1965; M.A., 1966; Ph.D., 1971, Stanford University.
- ⁵ Timothy A. Bell (1968) Professor of Geography
B.A., 1958, Stanford University; M.A., 1964, University of Oregon; 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.

¹ On leave, Fall semester 1979

² On leave, Spring semester 1980

⁵ On leave, Spring semester 1981

⁶ On leave, 1980-81

- ³ Barry Ben-Zion (1969) Professor of Economics
B.A., 1965, Sonoma State College; M.A., 1968; Ph.D., 1973, University of Oregon.
- Aaron Berman (1969) Assistant Professor of Foreign Languages
B.Ed., 1961, University of Miami; M.A., 1964, University of Michigan.
- Richard J. Bettiga (1979) Lecturer in Chemistry
B.A., 1970; B.S., 1972, Sonoma State College; Ph.D., 1978, University of Oregon.
- Dorothy M. Blake (1973) Associate Professor of Nursing
B.S., 1956; M.Ed., 1958, University of Minnesota.
- ¹ Ronnie A. Blakeney (1970) Associate Professor of Afro-American Studies
B.A., 1968, University of California, Berkeley; M.S., 1975, University of California, Davis.
- 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.
- Patsy D. Bleeker (1979) Lecturer in Nursing
B.S.N., 1977, Sonoma State University; M.S.N., 1979, University of California, San Francisco.
- ³ Ruth R. Blitz (1965) Professor of Biology
B.A., 1957, Brandeis University; M.A., 1959; Ph.D., 1965, University of California, Berkeley.
- David M. Bromige (1970) Associate Professor of English
B.A., 1962, University of British Columbia; M.A., 1964, University of California, Berkeley.
- ² 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.
- Libby R. Byers (1970) Associate Professor of Education
B.A., 1943, Hunter College; M.A., 1968, San Francisco State College; Ph.D., 1973, University of California, Berkeley.
- Ernest L. Caillat (1971) Associate Professor of Psychology
School of Expressive Arts
B.A., 1959, San Francisco State College; M.A., 1973, Sonoma State College; D.A., 1979, Paideia.
- Darien M. Chandler (1976) Visiting Lecturer in Nursing
B.S., 1969, California State University, Chico; M.H.S., 1975, University of California, Davis.

¹ On leave, Fall semester 1979

² On leave, Spring semester 1980

³ On leave, 1979-80

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Kathleen C. Charmaz (1973) Associate Professor of Sociology
B.S., 1962, University of Kansas; M.A., 1967, San Francisco State College; Ph.D., 1973, University of California, San Francisco.

⁵ Robert B. Clayton (1963) Professor of English
B.A., 1948, Stanford University; M.A., 1956; Ph.D., 1960, University of California, Berkeley.

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.

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.

Carlos Cordero (1971) Assistant Professor of Psychology
B.A., 1969; M.A., 1974, Sonoma State College.

Earl F. Couey (1972) Assistant Professor of French
B.A., 1968, Sonoma State College; M.A., 1974, Dominican College.

Eleanor C. Criswell (1969) Professor of Psychology
B.A., 1961; M.A., 1962, University of Kentucky; Ed.D., 1968, University of Florida.

William K. Crowley (1969) Professor of Geography
B.A., 1964, University of California, Riverside; M.A., 1966, University of Cincinnati; Ph.D., 1972, University of Oregon.

Barbara A. Curtin (1977) Visiting Lecturer in Nursing
B.S., 1975, Sonoma State College; M.H.S., 1977, University of California, Davis.

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) Assistant Professor of Nursing
B.S., 1968, University of San Francisco; M.S., 1973, California State University, San Jose.

⁶ 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) Acting Academic Vice President and Professor of English
B.A., 1950; M.A., 1953, Punjab University, India; Ph.D., 1968, Michigan State University.

Peter Diamandopoulos (1977) President of the College and
Professor of Philosophy
B.A., 1952; M.A., 1956; Ph.D., 1957, Harvard University.

⁵ On leave, Spring semester 1981

⁶ On leave, 1980-81

- Mildred Dickemann (1968) Professor of Anthropology
B.A., 1950, University of Michigan; Ph.D., 1958, University of California, Berkeley.
- ² Donald A. Dixon (1972) Associate Professor of Political Science
B.A., 1966, Sonoma State College; Ph.D., 1975, University of California, Santa Barbara
- ⁴ Margaret A. Donovan-Jeffry (1964) Professor of Music
B.A., 1955; M.A., 1959, University of California; D.M.A., 1964, Stanford University.
- Jeffrey T. Doult (1973) Associate Professor of Management
B.S., 1968; M.S., 1970; Ph.D., 1976, University of California, Berkeley.
- James P. Driscoll (1971) Associate Professor of Sociology
B.S., 1948, Rutgers University; M.A., 1968, San Francisco State College; Ph.D., 1977, University of California, Santa Barbara.
- Virginia B. Dumler (1977) Lecturer in Education
B.S., 1969, Kansas State Teachers College; M.A., 1975, University of Colorado.
- Donald G. Duncan (1963) Professor of Mathematics
B.A., 1942; M.A., 1944, University of British Columbia; Ph.D., 1951, University of Michigan.
- ⁴ John R. Dunning, Jr. (1969) Professor of Physics
B.S., 1960; M.S., 1961, Yale University; Ph.D., 1965, Harvard University.
- ⁵ 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.
- ³ 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. (Econ.), 1952, University of London; D. en Droit, 1957, University of Lyons, France.
- Saul Eisen (1977) Assistant Professor in Management
B.S., 1962; M.B.A., 1963, University of California, Los Angeles; Ph.D., 1969, Case-Western Reserve University.
- ² 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.
- ³ Sally L. Ewen (1964) Professor of English
B.A., M.A., 1963, San Francisco State College.
- 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;

² On leave, Spring Semester 1980

³ On leave, 1979–80

⁴ On leave, Fall Semester 1980

⁵ On leave, Spring semester 1981

⁶ On leave, 1980–81.

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- Ph.D., 1957, University of California, Los Angeles.
- Romayne F. Farrell (1977) Visiting Lecturer in Nursing
B.S., 1972, Florida State University; M.S. 1974, University of Tennessee.
- Joann E. Feldman (1966) Professor of Music
B.A., 1963, Queens College; M.A., 1966, University of California, Berkeley.
- Norman Feldman (1957) Associate Professor of Mathematics
B.Sc., 1959; M.Sc., 1961, McGill University, Canada.
- Barbara J. Fisher (1978) Lecturer in Nursing
B.S.N., 1973, State University of New York; M.S., 1975, Boston University.
- 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) Assistant Professor of Geography
A.B., 1967; A.M., 1968, St. Louis University; Ph.D., 1979, University of Oklahoma.
- ² 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
- ⁴ Adele C. Friedman (1970) Professor of French
B.A., 1960, Barnard College; Ph.D., 1969, Yale University.
- Vivian A. Fritz (1972) Associate Professor of Physical Education
B.A., 1963, Southwest Texas State University; M.A., 1964, Ball State University.
- ⁴ 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) Associate 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.
- Evangeline A. Geiger (1968) Professor of Education
B.S.E., 1936, Lowell Teachers' College; M.A., 1954, San Francisco State College; Ed.D., 1967, University of California, Berkeley.

² On leave, Spring Semester 1980.

⁴ On leave, 1980-81

- Robert K. Girling (1976) Assistant Professor in Management
B.A., 1967, University of California, Berkeley; M.A., 1968, University of Essex,
England; Ph.D., 1974, Stanford University.
- Johanna Gladieux (1978) Assistant Professor in Counseling
B.A., 1967; M.A., 1970; Ph.D., 1975, University of California, Berkeley.
- ⁵ Barry W. Godolphin (1969) Associate Professor of Psychology
B.A., 1960; M.A., 1966, Ph.D., 1974, University of California, Los Angeles.
- ⁶ 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.
- ³ Judith W. Gottlieb (1973) Associate Professor of English
B.A., 1965, DePauw University; M.A., 1967; Ph.D., 1973, Indiana University.
- 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) Assistant Professor of Afro-American 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.
- ³ 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.
- ³ Robert K. Gronendyke (1968) Associate Professor of Art
B.A., 1955; M.A., 1956, California State College, Long Beach.
- William H. Guynn (1968) Associate Professor of French
B.A., 1963, University of California, Berkeley; M.A., 1964, Middlebury College.
- Betty W. Halpern (1968) Professor of Education
B.A., 1949; M.A., 1960; Ed.D., 1968, University of California, Berkeley.
- David F. Hanes (1969) Professor of Biology
B.A., 1959, Wittenberg University; M.S., 1961, University of Michigan; Ph.D., 1971,
Oregon State University.
- Dennis E. Harris (1965) Professor of History
B.A., 1960; M.A., 1962; Ph.D., 1969, University of California, Santa Barbara.
- Marcia K. Hart (1972) Associate Professor of Physical Education
B.A., 1961, California State College, Los Angeles; M.A., 1972, Ball State.
- Gerald W. Haslam (1967) Professor of English
B.A., 1963; M.A., 1965, San Francisco State College.
- Sue E. Hayes (1974) Assistant 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

³ On leave, 1979–80

⁵ On leave, Spring semester 1981

⁶ On leave, 1980–81

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- 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.
- ⁵ Colin O. Hermans (1969) Professor of Biology
B.A., 1958, Pomona College; M.S., 1964; Ph.D., 1966, University of Washington.
- ³ Francisco J. Hernandez (1977) Assistant Professor in Mexican American Studies
B.A., 1970, University of California, Berkeley; M.A., 1976, Stanford University.
- Elizabeth C. Herron (1970) Assistant Professor of English, School of Expressive Arts
B.A., 1964; M.A., 1966, San Francisco State College.
- Wyman W. Hicks (1968) Professor of Management
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) Associate Professor of Music
B.A., 1953, Cascade College; M.A., 1955, University of Portland.
- ⁶ 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 Afro-American Studies
B.A., 1957; M.A., 1961, San Francisco State College; Ph.D., 1977, University of California, Berkeley.
- Robert E. Holmes (1965) Professor of Chemistry
B.S., 1958, St. Mary's College; Ph.D., 1965, Oregon State University.
- 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 Sociology
B.A., 1971; M.A., 1972; Ph.D., 1977, University of California, Santa Barbara.

³ On leave, 1979–80

⁵ On leave, Spring semester 1981

⁶ On leave, 1980–81.

- 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) Assistant Professor of Management
B.S., 1954; M.S., 1963; Ph.D., 1972, University of California, Berkeley.
- Robert H. Johnson (1973) Professor of Mathematics
B.A., 1960; M.A., 1965, University of California, Berkeley; Ph.D., 1974, Virginia Polytechnic Institute and University.
- William T. Johnson (1969) Professor of Music
B.A., 1964, Princeton University; M.A., 1966, University of California, Berkeley.
- George L. Johnston (1969) Associate Professor of Physics
B.S., 1954, California Institute of Technology; L.L.B., 1957, Harvard Law School; M.S., 1962; Ph.D., 1967, University of California, Los Angeles.
- William A. Jordan III (1971) Associate Professor of Anthropology
B.S.F.S., 1955, Georgetown University; M.A., 1960, Northwestern University; M.S., 1962, Columbia University.
- Glenna G. Joyce (1979) Lecturer in Psychology
B.S., M.S., 1965, University of Utah.
- Paul V. Juhl (1970) Professor of Management
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) Associate Professor of Physics and Astronomy
B.A., 1964; M.A., 1966; Ph.D., 1970, University of California, Berkeley.
- ³Bjorn 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.
- ⁴Robert A. Karlsrud (1970) 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 Euro-American Studies
B.S.S., 1949, College of the City of New York; M.A., 1959; Ph.D., 1963, University of California, Los Angeles.
- ⁵Marvin 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.

³ On leave, 1979–80.

⁴ On leave, Fall semester 1980.

⁵ On leave, Spring semester 1981.

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- 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) Assistant Professor in Nursing
B.S.N., 1968, University of Pittsburgh; M.S., 1973, University of California, San Francisco.
- Ardath M. Lee (1972) Acting Dean of Graduate Studies/Sponsored 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.
- ² 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; Certificat, 1961, University of Paris; Ph.D., 1969, University of Iowa.
- Wingham John H. Liddell, Jr. (1971) Associate Professor of Management
B.A., 1954; M.A., 1967; M.B.A., 1967; Ph.D., 1969, University of California, Berkeley.
- ⁴ 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.
- Alan Lipkin (1975) Assistant Professor of Geography
B.A., 1969, City University of New York City College; M.A., 1973; M.Phil., 1975, Columbia University.
- Ching-lung Liu (1971) Associate Professor of Biology
B.S., 1955, National Taiwan Normal University; M.S., 1964; Ph.D., 1970, University of Oklahoma.
- Wallace M. Lowry (1969) Professor of Management
B.A., 1955, Stanford University; M.B.A., 1969, University of California, Berkeley. CPA.
- Mark W. Lundy (1978) Coach
B.A., 1975, University of California, Berkeley; M.S. 1979, California State University, Hayward.
- ³ 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

² On leave, Spring Semester 1980.

³ On leave, 1979–80.

⁴ On leave, Fall Semester 1980.

- B.A., 1954; M.A., 1960, Sacramento State College; M.S., 1968; Ed.D., 1969, University of Oregon.
- ⁶ Nancy E. Lyons (1971) Associate 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.
- ³ 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 Political Science
B.A., 1952; M.A., 1953, University of Michigan; Ph.D., 1961, University of Illinois.
- Daniel W. Markwyn (1970) Associate Professor of History
B.A., 1959, University of Colorado; M.A., 1967, San Jose State College; Ph.D., 1970, Cornell University.
- sh 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.
- ch Ada Hall Mason (1972) Assistant Professor of Afro-American Studies
B.A., 1971; M.A., 1973, California State University, San Francisco.
- Marylou 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.
- ch George E. McCabe (1961) Professor of Education and Psychology
B.A., 1941, University of California; M.A., 1952; Ed.D., 1953, Teachers College, Columbia University.
- ra 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.
- 75 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) Assistant Professor in Art
A.B. (English), B.J. (Journalism), 1951, University of Missouri, Columbia; M.A., 1953, University of California, Berkeley; Ph.D., 1966, Harvard University.
- PA ³ Peter J. D. Mellini (1970) Professor of History
B.A., 1962; M.A., 1965; Ph.D., 1971, Stanford University.
- act ⁴ Herminia Q. Menez (1970) Professor of American Ethnic Studies
B.A., 1955, St. Scholastica's College; M.A., 1956, Dominican College; Ph.D., 1973, University of Pennsylvania.
- si Edith P. Menrath (1964) Associate Professor of Psychology
Higher School Certificate, Cambridge University; License-ès-Lettres, University of Paris, France.
- og Charles H. Merrill (1969) Associate Professor of Psychology
B.S., 1961; M.S., 1962, East Texas State University; Ed.D., 1968, University of Florida.

³ On leave, 1979–80.

⁴ On leave, Fall Semester 1980.

⁶ On leave, 1980–81.

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- Jean A. Merriman (1974) Assistant 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 Y. Meyer (1974) Assistant Professor of Nursing
B.S., 1963; M.S. 1964, University of California, San Francisco Medical Center.
- 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., 1955, San Francisco Art Institute; M.A., 1956, San Francisco State College.
- ⁶ 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) Associate 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) Assistant Professor of Nursing
B.S., 1966, University of British Columbia; M.S., 1968, University of California, San
Francisco.
- 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.
- Harriet A. Neves (1972) Associate Professor of Mexican-American Studies
B.A., 1967, Universidad de las Americas; M.A., 1972, California State University,
Sacramento.
- Marion L. Nielsen (1962) Professor of German
B.S. 1935, Utah State University; M.A., 1936, Stanford University; Ph.D., 1945,
Stanford University.

⁶ On leave, 1980–81.

- 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 Geology,
School 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.
- Dorothy Overly (1961) Professor of English
B.A., 1939; M.A., 1941, University of Alabama; Ph.D., 1949, University of Chicago.
- ¹ 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.
- ³ Don R. Patterson (1970) Associate 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.
- ⁴ Len Eli-ezer Pearson (1968) Professor of Psychology
M.A., 1949; Ph.D., 1956, University of Chicago.
- 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) Dean of Undergraduate Studies and
Professor of History
B.A., 1963, Duke University; B.D., 1966, Princeton Theological Seminary; M.A., 1969;
Ph.D., 1971, Brandeis University.
- Duncan E. Poland (1965) Acting Dean of Faculty and Professor of Physics
B.S., 1957, University of Michigan; Ph.D., 1963, University of Wisconsin.
- Donald E. Potts (1977) Lecturer in Art
B.A., 1963; M.A., 1965, San Jose State University.
- Joseph H. Powell (1968) Professor of Biology
B.S., 1959, Whitworth College; Ph.D., 1964, University of Washington.
- ² Giovanni Previtali (1970) Professor of Spanish
B.A., 1934; M.A., 1950, Oxford University; Ph.D. 1959, Yale University; J.D., 1970,
University of Virginia.

¹ On leave, Fall Semester 1979.

² On leave, Spring Semester 1980.

³ On leave, 1979–80.

⁴ On leave, 1980–81.

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- Glenn W. Price (1967) Professor of History
B.A., 1940, La Verne College; A.M., 1950; Ph.D., 1966, University of Southern California.
- ³ Deborah R. Priddy (1971) Associate Professor of Education
B.A., 1959, California State College, Los Angeles; M.A., 1969; Ed.D., 1971 University of California, Los Angeles.
- George L. Proctor (1968) Director of Institutional Research and
Professor of Philosophy
B.A., 1950; M.A., 1955; Ph.D., 1957, University of Virginia.
- 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.
- 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) Assistant Professor in Management
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.
- Mary M. Rich (1967) Professor of English
B.A., 1940, Skidmore College; M.A., 1942, Columbia University; Ph.D., 1948, University of Minnesota.
- ² 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.
- A. Richard Rizzo (1974) Assistant Professor of Sociology
B.A., 1964; M.A., 1969, San Francisco State College; Ph.D., University of California, San Francisco.
- ³ 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., 1966, 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.
- ³ E. Gardner Rust (1969) Professor of Music
B.A., 1957, University of California, Los Angeles; M.A., 1959; Ph.D., 1970, University of California, Berkeley.

² On leave, Spring Semester 1980.

³ On leave, 1979–80.

‡ On assignment to chancellor's office

of California, Berkeley.

³ Douglas S. Rustad (1969) Associate Professor of Chemistry
B.S., 1962; M.S., 1964, University of Washington; Ph.D., 1967, University of California, Berkeley.

⁴ Roshni Rustomji (1973) Associate Professor of India Studies
B.A., 1961, American University of Beirut; M.A., 1963, Duke University; Ph.D., 1972, 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.

³ Gene D. Schaumberg (1965) Professor of Chemistry
B.S., 1961, Pacific Lutheran University; Ph.D., 1965, Washington State University.

⁴ Sandra Schickele (1972) Associate Professor of Economics
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.

Harvey Segal (1970) Assistant Professor of Sociology
B.A., 1960, City College of New York.

Sara Sharratt (1976) Assistant Professor in Counseling
B.A., 1965; M.A., 1968, George Washington University; Ph.D., 1971, Southern Illinois University.

Brian T. Shears (1970) Professor of Education
B.A., 1958, University of Wales; M.A., 1960; Ph.D., 1969, University of Minnesota.

² Robert J. Sherman (1970) 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) Associate Professor of Education
B.S., 1949 (Classics); M.A., 1956 (English), Northwestern University; Ph.D., 1975, University of California, Berkeley.

Frank R. Siroky (1964) Professor of Psychology
B.S., 1952, John Carroll University; M.A., 1954, Fordham University; Ph.D., 1964, Duquesne University.

David Sklar (1979) Lecturer in Mathematics
B.A., 1970, New York University; M.A., 1973, San Francisco State University.

Harold R. Skinner (1965) Director of Instructional Resources
and Professor of Education
B.A., 1949, Earlham College; M.S., 1958; Ed.S., 1960; Ed.D., 1963, Indiana University.

Robert W. Slagle (1970) Associate Professor of Psychology
B.S., 1963, University of New Mexico; Ph.D., 1968, University of California, Berkeley.

² On leave, Spring Semester 1980.

³ On leave, 1979–80.

⁴ On leave, 1980–81.

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- David L. Sloss (1970) Associate 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) 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.
- ⁶ 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) Associate 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) Assistant 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.
- Robert W. Tellander (1971) Assistant Professor of Sociology
B.A., 1960, Princeton University; M.A., 1966, University of California, Berkeley.
- ³ Philip O. Temko (1964) Professor of Philosophy
B.A., M.A., 1950, Columbia University; Ph.D., 1968, Stanford University.
- Joseph S. Tenn (1970) Associate 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.

³ On leave, 1979–80.

⁶ On leave, 1980–81.

- Sue A. Thomas (1972) Professor of Nursing
B.S., 1960, University of California, San Francisco; M.S., 1969, Boston University.
- ⁶ Michael D. Tirado (1973) Professor of Political Science
B.A., 1964, University of Southern California; M.A., 1965, Middlebury College
Graduate School in Spain; M.A., 1967, Johns Hopkins School of Advanced
International Studies; Ph.D., 1970, Claremont Graduate School.
- ¹ Ellen Kay Trimberger (1975) Assistant Professor of Sociology
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
B.S., 1959; M.B.A., 1960; Ph.D., 1967, University of California, Los Angeles.
- Richard A. Van Gieson (1963) Associate Professor of Economics
B.A., 1958, Sacramento State College.
- David W. Van Nuys (1971) Associate 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, Conservatory of Music, Kansas City, Missouri; B.A., 1956, St. Mary's
College, Kansas; M.M., 1955, Conservatory of Music, Kansas City, Missouri; Cand. for
Ph.D., 1972, University of California, Los Angeles.
- Margaret B. Vaughan (1972) Associate Professor of Management
B.A., 1953, University of Iowa.
- Walter R. Vennum (1971) Associate Professor of Geology
B.A., 1964, University of Montana; Ph.D., 1971, Stanford University.
- Augustus O. Vidal (1971) Associate Professor of Music
B.A., 1968; M.A., 1971, University of California, Los Angeles.
- Thomas R. Volk (1966) Associate Professor of Mathematics
B.A., 1961; M.A., 1963, San Francisco State College.
- ¹ Sommai Vongsuri (1967)..... Professor of Mathematics
B.S., 1960; M.S., 1963; Ph.D., 1967, Oregon State University.
- Lynn E. Waddington Associate Professor of Speech-Drama,
School of Expressive Arts
B.A., 1962, Maryville College; M.A., 1964, San Francisco State College.
- Albert L. Wahrhaftig (1969) Professor of Anthropology
B.A., 1957, Stanford University; M.A., 1960, University of Chicago; 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.

¹ On leave, Fall Semester, 1979.

⁶ On leave, 1980-81.

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- 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.
- ³ Alice R. Wexler (1972) Associate Professor of History
B.A., 1964, Stanford University; M.A., 1966, Georgetown University; Ph.D., 1972, Indiana University.
- ³ Margaret F. Wheaton (1974) Assistant Professor, School of
Environmental Studies and Planning
B.A., 1960, Radcliffe College; M.C.P., 1962, University of Pennsylvania; Ph.D., 1978, University of California, Berkeley.
- 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.
- Donald C. Wilkinson (1971) Assistant Professor of Psychology
B.A., 1968, University of Michigan; M.A., 1972, Sonoma State College.
- Janice L. Wilson (1969) Professor of English
B.A., 1957, Stanford University; M.A., 1962; Ph.D., 1969, University of California, Berkeley.
- ³ Bruce E. Woelfel (1969) Associate Professor of Political Science,
School of Environmental Studies and Planning
B.A., 1953, Ohio State University; Master of City Planning, 1956, University of California, Berkeley.
- 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
- ⁴ William H. Wright, III (1969) Professor of Geology
B.A., 1965, Middlebury College; M.A., 1967, Indiana University; Ph.D., 1970, University of Illinois.
- 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) Associate Professor of Sociology
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.

³ On leave, 1979–80.

⁴ On leave, Fall Semester, 1980.

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Caroline H. Zainer (1967) Associate Professor of English
B.E., 1942, Northern Illinois State Teachers College; M.A., 1948, Northwestern
University.

David A. Ziblatt (1969) Professor of Political Science
B.A., 1959, Reed College; M.A., 1961; Ph.D., 1965, University of Oregon.

⁴ Richard A. Zimmer (1971) Associate 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.

⁴ On leave, 1980–81.

INSTRUCTIONAL FACULTY PART-TIME

- Lawrence E. Anderson (1972) Lecturer in Music
B.A., 1959, University of California, Berkeley; M.A., 1966, San Francisco State College; Ph.D., 1972, University of California, Berkeley.
- Wesley A. Anderson (1979) Lecturer in Management
B.A., 1970, Sonoma State University; M.B.A., 1972, Golden Gate College, San Francisco.
- Arthur C. Austin (1977) Studio Instructor: Clarinet
B.A., 1974, Curtis Institute of Music, Pennsylvania.
- Nathan E. Averbuck (1975) Visiting Lecturer in Mexican-American Studies
B.A., 1960, University of California, Berkeley; M.A., 1973, Sonoma State College.
- 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
- James A. Bennyhoff (1975) Lecturer in Anthropology
B.A., 1948; Ph.D., 1961, University of California, Berkeley.
- Joy J. Best (1978) Lecturer in Nursing
B.S., 1957, Stanford University; M.S., 1962, University of California, San Francisco.
- Richard Beveridge (1979) Lecturer in Art
B.A., 1973; M.A., 1975, San Diego State University.
- Barbara A. Biebush (1976) Lecturer in the Institute of Interdisciplinary Studies
B.A., 1954, Stanford University; M.L.S., 1956, University of California, Berkeley.
- Eleanor Biondi-Duste (1978) Studio Instructor: Oboe
B.A., 1965; M.A., 1966, San Francisco State University.
- Glenn E. Blair (1977) Studio Instructor: Saxophone
A.A., 1943, Santa Rosa Junior College.
- Stephen L. Blateric (1979) Lecturer in Physical Education
B.A., 1977; M.A., 1979, University of Denver.
- Donald J. Blue (1979) Lecturer in Management
B.S., 1947, University of Pennsylvania.
- Gerald Bol (1969) Lecturer in Art
B.F.A., 1962, San Francisco Art Institute; M.A., 1967, San Francisco State College.
- Joel L. Brenner (1979) Lecturer in Mathematics
A.M., 1931; Ph.D., 1936, Harvard University.
- Joseph L. Britton (1979) Lecturer in Management
LLB, 1951, Rutgers University.
- Leffler A. Brown (1978) Lecturer in Management Studies
B.A., 1971; M.B.A., 1976, Golden Gate University, San Francisco.
- Marley R. Brown (1979) Lecturer in Anthropology
B.A., 1969; M.A., 1972, Brown University.
- Billy R. Browning (1976) Lecturer in Multi-Cultural Studies and Music
B.A., 1973; M.A., 1974, Sonoma State College.
- Elaine L. Bundesen (1976) Visiting Lecturer in the Institute of
Interdisciplinary Studies
B.A., 1945, University of Washington; M.A., 1974, Sonoma State College.
- Noel T. Byrne (1978) Lecturer in Management

- B.A., 1971, Sonoma State University; M.A., 1975, Rutgers University.
- Jon G. Callaway (1979) Lecturer in Physical Education
B.A., 1978, Sonoma State University.
- Herbert M. Castillo (1974) Visiting Lecturer in Mexican American Studies
B.A., 1969, San Francisco State University.
- Carmen Cesena (1978) Lecturer in Mexican American Studies
B.A., 1970, Universite d'Aix-Marseille, France; M.A., 1975, San Jose State University.
- Milton M. Cerf (1979) Visiting Coach
B.A., 1953, San Francisco State University
- Joyce Chong (1979) Lecturer in Education
B.A., 1972, City College of New York; M.A., 1979, Sonoma State University.
- Adele E. Clarke (1978) Lecturer in the Institute of Interdisciplinary Studies
B.A., 1966, Barnard College, N.Y.; M.A., 1970, New York University.
- Daniel A. Cotter (1979) Lecturer in School of Environmental Studies
and Planning
B.A., 1977, Sonoma State University.
- Anne W. P. Crowden (1971) Studio Instructor: Strings
L.R.A.M., 1952 Royal Academy of Music, London.
- Christine C. Cuevas (1973) Visiting Lecturer in the Institute of
Interdisciplinary Studies
B.A., 1965, San Jose State College; M.A., 1972, University of Santa Clara.
- Fred Curchack (1978) Lecturer in Theatre Arts
B.A. 1970; M.A., 1973, Queens College, N.Y.
- Charleen K. Daefield (1979) Lecturer in Management
B.S., 1974; M.B.A., 1979, California State University, Hayward.
- Michael D. Dale (1974) Lecturer in Health Sciences and Physical Education
B.A., 1972; M.A., 1976, Sonoma State University.
- Jay DeFeo (1976) Lecturer in Art
B.A., 1950; M.A., 1951, University of California, Berkeley.
- Holly A. DeGroot (1979) Lecturer in Nursing
B.S., 1977, Sonoma State University; M.S., 1979, 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.
- Michael Dow (1979) Lecturer in School of Expressive Arts
B.A., 1966; M.A., 1968, San Francisco State University.
- Thomas L. Durant (1979) Lecturer in Management
B.S., 1972; M.B.A., 1974, University of Southern California.
- Don Dutton (1979) Visiting Lecturer in Physical Education
B.A., 1977, Sonoma State University.
- Norman F. Erken (1979) Lecturer in Education
B.A., 1961; M.A., 1969, Central Washington State College; Ph.D., 1976, Utah State University.
- Lester Feldman (1977) Lecturer in the School of Environmental
Studies and Planning
B.S., 1970; M.S.E., 1972, University of Michigan.
- Barbara Fisher (1978) Lecturer in Nursing
B.S.N., 1973, State University of New York; M.S., 1975, Boston University.
- t Anne M. Fitzgerald (1979) Lecturer in Management

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- B.S., 1974, University of Santa Clara.
- Marion J. Francoz (1979) Lecturer in Institute of
Interdisciplinary Studies
- B.A., 1972; M.A., 1973, Sonoma State University.
- James R. Frieman (1977) Lecturer in Music
- B.A., 1969, Temple University; M.A., 1976, San Francisco State University.
- Eduard Glaaser (1979) Visiting Lecturer in Mathematics
- B.A., 1960; M.S., 1978, University of Wisconsin.
- Joseph P. Giovinco (1976) Lecturer in Euro-American Studies
- B.A., 1964, University of Oregon; M.A., 1966, San Francisco State University; Ph.D.,
1973, University of California, Berkeley.
- Stuart Graham (1978) Visting Lecturer in Theatre Arts
- William H. Gray (1968) Lecturer in Health Sciences and Physical Education
- B.A., 1960, University of California, Berkeley.
- Stephen L. W. Greene (1976) Lecturer in School of Environmental
Studies and Planning
- B.A., 1965, Cornell University; M.A., 1966, University of California, Berkeley; Ph.D.,
1971, University of London.
- Fred J. Griffin (1979) Lecturer in Biology
- B.S., 1970, University of California, Davis; B.A., 1978, Sonoma State University.
- Carla L. Guggenheim (1976) Lecturer in Theatre Arts
- B.S., 1976, New York University.
- Jay W. Helman (1979) Lecturer in Physical Education
- B.A., 1974, University of Santa Clara.
- Lars H. Holbek (1979) Lecturer in Physical Education
- Robert P. Holten (1979) Lecturer in Mathematics
- B.A., 1953; M.A., 1955; Ph.D., 1958, University of California, Berkeley.
- Rita A. Hoots (1979) Lecturer in Biology
- B.S., 1956, City University of New York; M.A., 1960, University of Wisconsin.
- Timothy M. Huston (1975) 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 College.
- Roy L. Irving (1976) Lecturer in the School of Environmental
Studies and Planning
- B.A., 1976, Sonoma State College.
- Marilyn D. Jacobson (1979) Lecturer in Counseling
- B.A., 1957, Brooklyn College; M.A., 1970, San Francisco State University; Ph.D.,
1978, University of California, Berkeley.
- Sherril Jaffe (1976) Lecturer in English
- B.A., 1967, University of California, Berkeley; M.A., 1970, San Francisco State
University.
- Theodore R. Johnson (1975) Lecturer in Management
- B.A., 1970, California State College, Long Beach; J.D., 1974, Hastings College of
Law, Berkeley.
- Janice H. Kalbaugh (1978) Visiting Lecturer in Psychology
- B.A., 1966; M.A., 1967, Sonoma State University.
- Eunice R. Koller (1979) Lecturer in Nursing
- B.S., 1935, University of Washington; M.P.H., 1968, University of California,
Berkeley.

- Valdemir G. King (1972) Visiting Lecturer in Physics
B.S., 1972, University of California, Berkeley; M.A., 1974, Sonoma State College.
- Raymond E. Krauss (1976) Lecturer in the School of
Environmental Studies and Planning
B.A., 1964, Oberlin College; M.A., 1966, University of Michigan.
- Victor H. Krispin (1976) Lecturer in Art
B.A., 1969, Sonoma State College; M.F.A., 1974, San Francisco Art Institute.
- Richard T. Kvistad (1977) Lecturer in Music and Studio Instructor: Percussion
B.M.E., 1967, Oberlin College.
- Bill Kwong (1970) Lecturer in Psychology
- Michael R. LaCrone (1979) Lecturer in Management
B.A., 1971, Golden Gate University, San Francisco; M.B.A., 1979, San Francisco
State University.
- Peter B. Leech (1975) Lecturer in Psychology
B.A., 1961; M.S.W., 1963, University of Washington.
- Carolyn T. Lewis (1976) Studio Instructor: Voice
and Lecturer in Music
B.S., 1966, Utah State University.
- Lawrence Livingston, Jr. (1979) Lecturer in School of
Environmental Studies and Planning
A.B., 1940, Stanford University; M.C.P., 1949, Massachusetts Institute of
Technology.
- John P. Lynde (1979) Visiting Lecturer in Physical Education
B.A., 1978, Sonoma State University.
- Christopher A. Maack (1979) Lecturer in Chemistry
B.A., 1971; Ph.D., 1978, University of California, Berkeley.
- Bruce J. MacPherson (1978) Lecturer in School of
Environmental Studies and Planning
B.S., 1963; M.B.A., 1965, San Jose State University.
- Linda J. Magarian (1975) Lecturer in Theatre Arts
B.A., 1974, Sonoma State College.
- Ruth A. Mahaney (1975) Lecturer in the Institute of Interdisciplinary Studies
B.A., 1966, DePauw University; M.A., 1970, Indiana University, Bloomington.
- Riyuko I. Masada (1972) Lecturer in Chemistry
B.S., 1966, University of California, Berkeley; Ph.D., 1972, University of Washington.
- Leonide L. Martin (1974) Visiting Lecturer in Nursing
B.S., 1963, McNeese State College; M.S., 1967, University of California, Los
Angeles; F.N.P., 1973, University of California, Los Angeles Extension.
- Roston Maxie (1977) Lecturer in Management
B.A., 1968, Golden Gate University, San Francisco; M.B.A., 1970, University of
California, Berkeley.
- James H. May (1974) Visiting Lecturer in Native American Studies
B.S., 1958, Stanford University; M.B.A., 1964, Harvard University.
- Beverly McChesney (1978) Studio Instructor: Bassoon
B.M., 1970, San Francisco Conservatory of Music.
- Robert J. McLoughlin (1977) Lecturer in Management
B.A., 1964, John Carroll University, Ohio; M.A., 1969, California State University, Los
Angeles.
- Raymond N. Munoz (1979) Visiting Lecturer in
Mexican American Studies

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- B.A., 1973, San Jose State University.
- Macario M. Naranjo (1979) Visiting Lecturer in Physical Education
- Mary Ann Newcomb (1979) Lecturer in Education
A.B., 1944, University of Colorado; M.A., 1961, San Francisco State University.
- James P. Nielson (1976) Visiting Lecturer in Institute
of Interdisciplinary Studies
B.A., 1965, Sonoma State College; M.S.W., 1968, San Francisco State University.
- Joseph P. O'Neil (1973) Lecturer in Management Studies
B.A., 1954; M.B.A., 1958, Stanford University. CPA, 1960.
- David E. Orr (1976) Lecturer in Physical Education
B.A., 1972, Biola College.
- Walter W. Oster (1968) Associate Professor of Music
San Francisco Conservatory of Music.
- Jack F. Palacios (1976) Studio Instructor: Bass Viol
A.B., 1959; M.A., 1962, California State University, Long Beach.
- Charles A. Peck (1979) Lecturer in Education
B.A., 1972, University of California, Santa Barbara; M.A., 1976, Sonoma State University.
- Raymond L. Peterson (1979) Visiting Lecturer in Biology
B.A., 1975, San Francisco State University; M.A., 1978, Sonoma State University.
- Donna Lee Phillips (1976) Lecturer in Expressive Arts
B.F.A., 1968, Cooper Union; M.F.A., 1972, Pratt Institute.
- John W. Podboy (1979) Lecturer in Education
B.A., 1966, Dickinson College; M.S., 1971, San Diego State University; Ph.D., 1973, University of Arizona.
- Charles O. Prickett (1979) Lecturer in Education
B.A., 1970; M.A., 1972, University of Illinois.
- Kathleen A. Puntillo (1979) Lecturer in Nursing
B.S., 1976, Sonoma State University; M.S., 1978, University of California, San Francisco.
- Anne-Catherine Quibell (1979) Lecturer in Foreign Language
B.A., 1960, University of California, Berkeley; Certificat d'études pédagogiques, 1969, University of Paris; M.A., 1979, San Francisco State University.
- Margaret J. Rattle (1978) Lecturer in Art
B.A., 1967, University of Washington; M.F.A., 1976, Claremont Graduate School.
- Philip Rosheger (1979) Studio Instructor: Guitarist
- Arnold D. Rosenfield (1979) Lecturer in Management
B.A., 1967; J.D., 1971, Vanderbilt University.
- David A. Reiss (1977) Visiting Lecturer in Political Science
B.A., 1971, Humboldt State University; M.A., 1974, University of California, Santa Barbara.
- George M. Robertson (1976) Visiting Lecturer in the Institute of
Interdisciplinary Studies
B.A., 1920, Carleton College; B.S., 1922, North Dakota Agricultural College; M.A., 1925, Dartmouth College; Ph.D., 1937, Yale University.
- Gerald Rosen (1971) Lecturer in English
B.E.E., 1960, Rensselaer Polytechnic Institute; M.B.A., 1962, Wharton Graduate School; M.A., 1966, Ph.D., 1969, University of Pennsylvania.
- William S. Sakai (1975) Visiting Lecturer in Biology

- B.S., 1966, University of Michigan; Ph.D., 1970, University of Hawaii.
- Beverly K. Safreno (1979) Visiting Lecturer in Physical Education
B.A., 1959, San Francisco State University.
- Earl S. Saxton (1979) Studio Instructor: French Horn
B.A., 1947, University of California, Berkeley; M.A., 1960, San Francisco State University.
- Frank Scalercio, Jr. (1979) Visiting Lecturer in Physical Education
B.A., 1971; M.A., 1973, Sonoma State University.
- Peter Scarlet (1973) Lecturer in Art
A.B., 1964, Kenyon College.
- Joaquin J. Sanchez (1975) Visiting Lecturer in Mexican American Studies
B.S., 1961, Loyola University of Los Angeles; M.S., 1963, California State University, Los Angeles.
- Richard K. Schultze (1979) Visiting Coach
B.A., 1968, San Francisco State University.
- Mark Siderits (1977) Visiting Lecturer in Philosophy
B.A., 1969, University of Hawaii; Ph.D., 1976, Yale University.
- Harold R. Skinner (1965) Visiting Lecturer in English
B.A., 1949, Earlham College; M.S., 1958; Ed.D., 1963, Indiana University.
- Charles R. Stasek (1974) Lecturer in Biology
B.A., 1952, University of California, Santa Barbara; M.A., 1958; Ph.D., 1961, University of California, Berkeley.
- 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.
- Anna K. Stern (1978) Lecturer in the Institute of Interdisciplinary Studies
B.S., 1975, Sonoma State College; M.S., 1978, University of California, S.F.
- Inez Mary Storer (1976) Lecturer in Art
B.A., 1970, Dominican College; M.A., 1971, San Francisco State University.
- Mary T. Taylor (1979) Lecturer in Native American Studies
B.S., 1946, Southeastern Oklahoma State University; M.A., 1953, North Texas State University.
- Laxmi G. Tewari (1974) Lecturer in the Institute of Interdisciplinary Studies
B.Mus., 1963; M.Mus., 1965; D.Mus., 1967, Banaras Hindu University; M.A., 1971; Ph.D., 1974, Wesleyan University.
- Marilyn Thompson (1976) Studio Instructor: Piano
and Lecturer in Music
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.
- Arturo M. Vazquez (1979) Lecturer in Education
B.S., 1971, San Jose State University.
- Anais M. Vernaza-Mock (1979) Lecturer in Education
B.S., 1944, J.D. Arosemena Teachers College, Panama; M.A., 1946, University of Panama; B.S., 1948, Northwest Missouri State University.
- Bruce Walford (1979) Lecturer in Music
- Sandra D. Walton (1970) Visiting Lecturer in English and the Institute
of Interdisciplinary Studies
B.A., 1961; M.L.S., 1963, University of California, Berkeley; M.A., 1975, Sonoma State College.

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- Lois J. Welches (1979) Lecturer in Nursing
B.S. 1955; M.S., 1965, University of California, San Francisco; M.P.H., 1966,
University of California, Berkeley; D.N.S., 1976, University of California, San Francisco.
- Bonnie L. Williams (1977) Studio Instructor: Flute
and Lecturer in Music
B.A., 1967, San Francisco State University.
- Sydney H. Williams (1979) Lecturer in School of Environmental
Studies and Planning
B.A., 1938; M.A., 1939, University of California, Berkeley.
- R. Steve Wilson (1978) Lecturer in Mathematics
B.A., 1969; M.A., 1970; Ph.D., 1972, University of California, Santa Barbara.
- Sandra R. Winter (1978) Lecturer in Nursing
B.S., 1975, Sonoma State University; M.S., 1977, University of California, San
Francisco.
- John A. Wright (1979) Visiting Lecturer in Physical
Education

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.
- 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.
- Robert B. Marberry, B.A., B.S. in L.S. Science Librarian
Appointed 1963, Emeritus since 1972.
- Ambrose R. Nichols, Jr., B.S., Ph.D. 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.
- Kenneth M. Stocking, B.A., M.A., Ph.D. Professor of Biology
Appointed 1963, Emeritus since 1979. School of Environmental
Studies and Planning
- † Katherine H. Wiley, B.A., M.A. Associate Professor of Psychology,
Appointed 1962, Emeritus since 1975. School of Expressive Arts

† Deceased 1978

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) Senior Assistant 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.
- Johanna E. Fritsche (1963) Associate Librarian
B.A., 1936, Hunter College; B.S. in L.S., 1939, Columbia University.
- 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 College.
- Marie K. Luethe (1972) Associate Librarian
B.S., 1964, California State College, Hayward; M.L., 1965, University of Washington; M.P.A., 1975, California State University, Hayward.
- Antoinette O. Maleady (1968) Associate Librarian
B.S., 1940, West Virginia Wesleyan; M.L.S., 1968, University of California, Berkeley.
- James H. May (1974) Associate Library Director
B.S., 1958, Stanford University; M.B.A., 1964, Harvard University; D.L.S., 1978, Columbia University.
- Lenore S. Radtke (1962) Associate Librarian
B.A., 1947, University of California; M.S.L.S., 1962, Florida State University.
- Sandra D. Walton (1970) Senior Assistant Librarian
B.A., 1961; M.L.S., 1963, University of California, Berkeley; M.A., 1975, Sonoma State College.
- *** Patricia M. Wollter (1970) Senior Assistant Librarian
B.A., 1966, San Francisco State College; M.L.S., 1967, University of California, Berkeley.

MEDICAL OFFICERS

- Martin H. Bauman, M.D. (1970) Psychiatrist, Part-Time
1959, North Western 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.

*** On leave, Fall Semester 1979

STUDENT AFFAIRS OFFICERS

- Scott Anderson (1978) Director, Relations with Schools
B.A., 1969, U.S. International University, San Diego.
- 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., 1976, Webster College, Missouri.
- Christine Cuevas (1973) Counselor
B.A., 1965, San Jose State University; M.A., 1972, University of Santa Clara.
- Fred Engbarth (1971) Special Assistant to the President/
Judicial Affairs Officer/Associate,
Dean of Students
B.A., 1970, University of California, Irvine.
- Albert G. Fortin (1974) Director, Veterans Affairs
B.A., 1973; M.A., 1974, University of Northern Colorado.
- Richard S. Goodenough (1979) Director of Financial Aid
B.S., 1973, Oklahoma Christian College; M.Ed., 1979, University of Oklahoma,
Norman.
- Jann Kalbaugh (1971) Counselor
B.A., 1966; M.A., 1967, Sonoma State University.
- Rand Link (1970) Director, Counseling and Career Development
B.A., 1968, University of California, Santa Barbara; M.S., 1970, Ohio State University.
- Jeanne L. Moore (1969) Assistant Director of Educational
Opportunity Program
B.A., 1947, Roosevelt University, Chicago.
- Berle Post (1974) Counselor—Part-Time
B.A., 1958, University of Wisconsin, Milwaukee; M.S., 1961; Ph.D., 1967, University
of Wisconsin, Madison.
- Joaquin J. Sanchez (1976) Dean of Students
B.A., 1961, Loyola University of Los Angeles; M.S., 1963, California State University,
Los Angeles.
- 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.

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 both the Biology & Physical Sciences sections will also have their lab requirement waived.	Biology 100 Physical Science 100
Mathematics General Examination	3 (fulfills 3 units of general education in <i>Basic Subjects</i> . May not be substituted for Math 115).	Mathematics 114 or 117
Social Sciences—History General Examination	6 (fulfills 6 units of general education requirements in <i>Social Sciences</i>).	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 Subject Examination and Essay	3 (fulfills 3 units of course credit in <i>United States History</i> , History majors passing the exam will be exempted from History 251, and 252. Satisfies state code requirement in U.S. History.	History 150
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
General Chemistry Subject Examination	6 (fulfills 6 units of course credit in <i>General Chemistry</i>).	Chemistry 115A & B
Educational Psychology Subject Examination	3 (fulfills 3 units of course credit in <i>Educational Psychology</i>).	Psychology 416
Elementary Computer Program—Fortran IV Subject Examination)	4 (fulfills 4 units of course credit in <i>Introduction to Fortran</i>).	Management 216
General Psychology Subject Examination	3 (fulfills 3 units of course credit in <i>General Psychology</i>).	Psychology 200
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 Micro- Macro Economics Subject Examination	4 (fulfills 4 units of course credit in <i>Introduction to Economics</i>).	Economics 201
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 and Essay	3 (fulfills 3 units of course credit in Statistics for the Social Sciences)	Management 315
Tests & Measurements Subject Examination	3 (fulfills 3 units of course credit in <i>Tests & Measurements</i>).	Psychology 437
Western Civilization Subject Examination and Essay	3 (fulfills 3 units of course credit in <i>Western Civilization</i>). History majors passing the exam will be exempted from History 201 or 202.	History 201 or 202

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 and Colleges are financed primarily through funding provided by the taxpayers of California. Including capital outlay, the CSUC 1979/80 budget totals \$970 million. Approximately \$950 million of the \$970 million total has been budgeted to provide support for a projected 229,350 full-time equivalent (FTE*) students. Thus, excluding costs which relate to capital outlay (e.g., building amortization), the average cost per FTE student is \$4,138 per year. Of this amount, the average student pays \$333. Included in this average student payment calculation is the amount paid by non-resident students. The remaining \$3,805 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 1979-80 CSUC BUDGET (Projected Enrollment: 229,350 FTE)

<i>Funding Source</i>	<i>Amount</i>	<i>Average Cost Per Student (FTE) *</i>	<i>Percentage</i>
State Approp. (Support)	\$819,474,471	\$3,573	86.3%
Student Charges.....	76,461,258	333**	8.1%
Federal (Financial Aids).....	53,241,128	232	5.6%
State Funding (Capital Outlay)	21,083,400		
Total	\$970,260,257	\$4,138	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 and Colleges is enrolled for 15 units of academic credit. Some students enroll for more than 15 units; some students enroll for fewer than 15 units.

** The average costs paid by a student include the student services fee, health facilities fee, college union fee, student body fee, and the nonresident tuition. This amount is derived by taking the total of all student fees and dividing by the total full-time equivalent student enrollment. Individual students may pay more or less than \$333 depending on whether they are part-time, full-time, resident or nonresident students.

*** Not included in the Average Cost Per Student (FTE), and Percentage columns. The estimated replacement cost of all the system's permanent facilities and equipment on the 19 campuses is currently valued at \$2.85 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 Health, Education and Welfare. 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), Department of Health, Education and Welfare, 330 Independence Avenue, SW, Washington, D.C. 20201.

The campus is authorized under the Act to release public 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, the most recent previous educational agency or institution attended by the student and any other information authorized in writing 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 ON THE BASIS OF SEX

The California State University and Colleges 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 officer, the campus officer assigned the administrative responsibility of reviewing such matters or to the Regional Director of the Office of Civil Rights, Region 9, 1279 Market Street, 14th floor, San Francisco, California 94103.

NONDISCRIMINATION ON THE BASIS OF HANDICAP

The California State University and Colleges does not discriminate on the basis of handicap in violation of Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder

More specifically, The California State University and Colleges does not discriminate in admission or access to, or treatment or employment in, its programs and activities. The Director, 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 Stevenson 1041, (707) 664-2677.

NONDISCRIMINATION ON THE BASIS OF RACE, COLOR, OR NATIONAL ORIGIN

The California State University and Colleges complies with the requirements of Title VI of the Civil Rights Act of 1964 and the regulations adopted thereunder. No person shall, on the ground 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 and Colleges.

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 and Colleges Trustees, academic, non-academic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.

(2) The term "campus property" includes:

(A) real or personal property in the possession of, or under the control of, the Board of Trustees of the California State University and Colleges, and

(B) All campus feeding, retail, or residence facilities whether operated by a campus or by a campus auxiliary organization.

(3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, sling shot, billy, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.

(4) The term "behavior" includes conduct and expression.

(5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.

(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 and Colleges other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

41303. Conduct by Applicants for Admission. Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to 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 and Colleges. The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University and Colleges. 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. The Residence Questionnaire and, if necessary, other evidence furnished by the student is used in making this determination. A student may not register and enroll in classes until his Residence Questionnaire has been received by the Admissions Office.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by the California State University and Colleges is found in *Education Code* Sections 68000–68090, 90403, 89705–89707.5 and 68122, 68124 and 68121, 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 while, at the same time, intends to make California his 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. An intention to establish and maintain California residence can be shown by 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 his parents, or, in the case of permanent separation of the parents, from the parent with whom the minor maintains his place of abode. The residence of a minor cannot be changed by 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.

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 1980–81 academic year are:

Quarter Term Campuses		Semester Term Campuses	
Fall	September 20	Fall	September
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 below the age of 19 who have been present in California 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 transfer of the military person directly to a post outside the 50 states and District of Columbia.

5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.
6. A student who is an adult alien is entitled to residence classification if 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 refugees.
8. Certain credentialed, full-time employees of school districts.
9. Full-time State University and Colleges employees and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.
10. Certain exchange students.
11. 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.
12. A person in continuous full-time attendance at an institution who had resident classification on May 1, 1973, shall not lose such classification as a result of adoption of the uniform student residency law on which this statement is based, until the attainment of the degree for which currently enrolled.

Any student, following a final decision on campus on his residence classification, only may make written appeal to:

The California State University and Colleges
Office of General Counsel
400 Golden Shore
Long Beach, California 90802

within 120 calendar days of notification of the final decision on campus of his classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the 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.

1 The minimum eligibility index for California Residents and California high school
1 graduates is: $SAT = 3072$ and $ACT = 741$. The method used to compute scores is

2 —Multiply the grade point average by 800 and add it to the total SAT score; or

3 —Multiply the grade point average by 200 and add it to 10 times the composite ACT
t 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 Students earning grade-point averages above 3.20 are eligible for admission.

² Students earning grade-point averages below 2.0 are not eligible for admission.

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