

# Sonoma State College

*1972-1973*

## Catalog

1801 East Cotati Avenue  
Rohnert Park, California 94928

*\$1.00 plus tax*

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# 1972-73 ACADEMIC CALENDAR

## FALL SEMESTER

November 1-30, 1971 .....	Period to apply for admission to the College and to the Credential Programs for Fall Semester, 1972. Applications submitted after this date will be processed on a space available basis.
January 3-March 31, 1972 .....	Period to apply for financial aid (scholarships, NDEA, EOG, State Guaranteed Loan, and Work-Study employment) to insure consideration in the initial round of awards.
September 1 .....	Schedule of Classes on sale in Bookstore.
September 5-8 .....	Advisement and class sign-up period. On-campus student orientation.
September 8 .....	Faculty meeting.
September 8-10 .....	New student orientation retreat.
September 11 .....	First day of instruction. Registration packets available at Registrar's Office.
September 18-22 .....	Official Class Cards distributed by instructors to students in all classes.
September 25-26 .....	Registration packets officially filed and fees paid.
September 27 .....	Late registration. \$5.00 late fee charged.
October 2 .....	First day to drop a class or convert grade type from P/NC to letter grade or vice versa. \$1.00 schedule change fee charged.
October 6 .....	Last day to drop a class without risk of penalty grade; after this date "W" or "WF" grade will be assigned for all dropped classes.
October 13 .....	Last day to apply for degree to be awarded January 1973.
October 20 .....	Last day to convert grade type from P/NC to letter grade or vice versa. Last day to apply for partial refund of non-resident tuition.
November 1-30 .....	Period to apply for admission to the College and to the Credential Programs for Fall Semester, 1973. Applications submitted after this date will be processed on a space available basis.
December 15 .....	Last day to drop a class. Last day to withdraw from the College.
December 18-January 1 .....	Christmas and New Year recess. Classes not in session.
January 2 .....	Classes resume after holiday recess.
January 8-12 .....	Final Examinations.
January 12 .....	Semester ends.

## HOLIDAYS

September 4 .....	Labor Day—College closed.
October 9 .....	Columbus Day—College open.
October 23 .....	Veteran's Day—College closed.
November 7 .....	Election Day—College open.
November 23, 24 .....	Thanksgiving—College closed.
December 18-January 1 .....	Christmas and New Year recess. Classes not in session.
December 25 .....	Christmas—College closed.
January 15-February 2 .....	Mid-semester recess. Classes not in session.

## 1972-73 ACADEMIC CALENDAR

### SPRING SEMESTER

August 1-31, 1972.....	Period to apply for admission to the College and to the Credential Programs for the Spring Semester, 1973. Applications submitted after this date will be processed on a space available basis.
October 2-31.....	Period to apply for financial aid (scholarships, NDEA, EOG, State Guaranteed Loan, and Work-Study employment) to insure consideration in the initial round of awards.
November 1-30.....	Period to apply for admission to the College and to the Credential Programs for Fall Semester, 1973. Applications submitted after this date will be processed on a space available basis.
January 2, 1973.....	Schedule of Classes on sale in Bookstore.
January 30, 31—	
February 1, 2.....	Advisement and Class sign-up period. On-campus student orientation.
February 2.....	Faculty meeting.
February 5.....	Instruction begins.
	Registration packets available at Registrar's Office.
February 12-16.....	Official Class Cards distributed by instructors to students in all classes.
February 20, 21.....	Registration packets officially filed and fees paid.
February 22.....	Late registration. \$5.00 late fee charged.
February 26.....	First day to drop a class or convert grade type from P/NC to letter grade or vice versa. \$1.00 schedule change fee charged.
March 2.....	Last day to drop a class without risk of penalty grade; after this date "W" or "WF" grade will be assigned for all dropped classes.
March 9.....	Last day to apply for degree to be awarded June 1973.
March 16.....	Last day to convert grade type from P/NC to letter grade or vice versa.
	Last day to apply for partial refund of non-resident tuition.
April 16-20.....	Easter recess. Classes not in session.
May 18.....	Last day to drop a class.
	Last day to withdraw from the College.
May 24, 25, 29-31.....	Final Examinations.
June 1.....	Commencement.

### HOLIDAYS

February 12.....	Lincoln's Birthday—College open.
February 19.....	Washington's Birthday observation—College closed.
April 16-20.....	Easter recess. Classes not in session.
May 28.....	Memorial Day—College closed.





THE  
CALIFORNIA  
STATE  
UNIVERSITY  
AND  
COLLEGES





# TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

## EX OFFICIO TRUSTEES

Hon. Ronald Reagan.....	State Capitol, Sacramento 95814
Governor of California and President of the Trustees	
Hon. Ed Reinecke.....	State Capitol, Sacramento 95814
Lieutenant Governor of California	
Hon. Bob Moretti.....	State Capitol, Sacramento 95814
Speaker of the Assembly	
Hon. Wilson Riles.....	721 Capitol Mall, Sacramento 95814
State Superintendent of Public Instruction	
Dr. Glenn S. Dumke .....	5670 Wilshire Blvd., Los Angeles 90036
Chancellor of the California State Colleges	

## APPOINTED TRUSTEES

Appointments are for a term of eight years expiring March 1 on dates of the year in parentheses. Names are listed in order of accession to the Board.

Charles Luckman (1974)	Robert A. Hornby (1978)
9220 Sunset Blvd., Los Angeles 90069	P.O. Box 60043, Terminal Annex Los Angeles 90060
Mrs. Philip Conley (1972)	Dr. William F. McColl (1979)
3729 Huntington Blvd., Fresno 93702	1433 West Merced Ave., West Covina 91790
Daniel H. Ridder (1975)	Wendell W. Witter (1979)
604 Pine Avenue, Long Beach 90801	45 Montgomery St., San Francisco 94106
George D. Hart (1975)	Mrs. Winifred H. Lancaster (1977)
111 Sutter St., San Francisco 94104	P.O. Drawer JJ, Santa Barbara 93102
Alec L. Cory (1973)	Gene M. Benedetti (1978)
530 B Street, Suite 1900, San Diego 92101	8990 Poplar Ave., Cotati 94928
William A. Norris (1972)	Robert F. Beaver (1976)
609 So. Grand Avenue, Los Angeles 90017	254 East 27th Street, Los Angeles 90011
Edward O. Lee (1974)	Roy T. Brophy (1980)
P.O. Box 23361, Oakland 94623	2160 Royale Road, Suite 20, Sacra- mento 95815
Karl L. Wentz (1976)	Mrs. C. Stewart Ritchie (1980)
5565 Tesla Road, Livermore 94550	1064 Creek Drive, Menlo Park 94025
W.O. Weissich (1977)	Frank P. Adams (1973)
1299 Fourth Street, San Rafael 94901	781 Highland, Piedmont 94611

## OFFICERS OF THE TRUSTEES

Governor Ronald Reagan  
President

George D. Hart  
Vice-Chairman

Chancellor Glenn S. Dumke  
Secretary-Treasurer

## OFFICE OF THE CHANCELLOR

The California State University and Colleges  
5670 Wilshire Boulevard  
Los Angeles, California 90036  
(213) 938-2981

Glenn S. Dumke.....	Chancellor
H. E. Brakebill.....	Executive Vice Chancellor
Norman L. Epstein .....	Vice Chancellor and General Counsel
D. Dale Hanner.....	Vice Chancellor, Business Affairs
Harry Harmon.....	Vice Chancellor, Physical Planning and Development
C. Mansel Keene.....	Assistant Chancellor, Faculty and Staff Affairs
William B. Langsdorf.....	Vice Chancellor, Academic Affairs

# THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

California State College, Bakersfield  
9001 Stockdale Highway  
Bakersfield, California 93309  
Paul F. Romberg, President  
(805) 833-2011

California State College, Dominguez Hills  
1000 East Victoria Street  
Dominguez Hills, California 90246  
Leo F. Cain, President  
(213) 532-4300

California State College, Fullerton  
800 North State College Boulevard  
Fullerton, California 92631  
L. Donald Shields, Acting President  
(714) 870-2011

California State College, Hayward  
25800 Hillary Street  
Hayward, California 94542  
Ellis E. McCune, President  
(415) 884-3724

California State College, Long Beach  
6101 East Seventh Street  
Long Beach, California 90804  
Stephen Horn, President  
(213) 498-4111

California State College, Los Angeles  
5151 State College Drive  
Los Angeles, California 90032  
John A. Greenlee, President  
(213) 224-0111

California State College, San Bernardino  
5500 State College Parkway  
San Bernardino, California 92407  
John M. Pfau, President  
(714) 887-6311

California State Polytechnic College,  
Kellogg-Voorhis  
3801 West Temple Avenue  
Pomona, California 91768  
Robert C. Kramer, President  
(213) 964-6424, (714) 595-1241

California State Polytechnic College,  
San Luis Obispo  
San Luis Obispo, California 93401  
Robert E. Kennedy, President  
(805) 546-0111

Chico State College  
Chico, California 95926  
Stanford Cazier, President  
(916) 345-5011

Fresno State College  
Shaw and Cedar Avenues  
Fresno, California 93726  
Norman A. Baxter, President  
(209) 487-9011

Humboldt State College  
Arcata, California 95521  
Cornelius H. Siemens, President  
(707) 826-3011

Sacramento State College  
6000 Jay Street  
Sacramento, California 95819  
Bernard L. Hyink, President  
(916) 454-6011

San Diego State College  
5402 College Avenue  
San Diego, California 92115  
Donald E. Walker, Acting President  
(714) 286-5000

San Fernando Valley State College  
18111 Nordhoff Street  
Northridge, California 91324  
James W. Cleary, President  
(213) 885-1200

San Francisco State College  
1600 Holloway Avenue  
San Francisco, California 94132  
S. I. Hayakawa, President  
(415) 469-9123

San Jose State College  
125 South Seventh Street  
San Jose, California 95114  
John H. Bunzel, President  
(408) 294-6414

Sonoma State College  
1801 East Cotati Avenue  
Rohnert Park, California 94928  
Thomas H. McGrath, President  
(707) 795-2011

Stanislaus State College  
800 Monte Vista Avenue  
Turlock, California 95380  
Carl Gatlin, President  
(209) 634-9101

## THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

On November 29, 1971, the Governor signed into law Assembly Bill 123 which created the California State University and Colleges, thereby redesignating the system previously known as the California State Colleges. This legislation provided legal recognition that the California State Colleges have achieved the status of universities in their first decade as a unified system of higher education.

First brought together as a system under an independent Board of Trustees by the Donahoe Higher Education Act in the early 1960's the California State University and Colleges now consists of nineteen campuses, covering the state from Humboldt in the north to San Diego in the south. Current enrollment exceeds 263,000 full- and part-time students, with a faculty of approximately 14,500.

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

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

Each college in the system has its own unique geographic and curricular character, but all emphasize the liberal arts and sciences. Programs leading to the bachelor's and master's degrees are master-planned to anticipate and accommodate student interest and the educational and professional needs of the State of California. A limited number of joint doctoral programs are also offered. Although there is increasing recognition of the importance of research to the maintenance of quality teaching, the primary responsibility of the faculty continues to be the instructional process.

While San Jose State College, the oldest, was founded over a century ago, prior to World War II only seven State Colleges were in existence, with a total enrollment of 13,000. Since 1947, twelve new campuses have been established, and sites have been selected for additional ones in Ventura, San Mateo, and Contra Costa counties. California State College, Bakersfield, the newest, was opened to students in 1970. Enrollment in the system is expected to pass 300,000 by 1980.





SONOMA  
STATE  
COLLEGE



# SONOMA STATE COLLEGE ADMINISTRATION

## EXECUTIVE

President.....	Thomas H. McGrath
Assistant to the President.....	Norman M. Redeker
Public Affairs Officer.....	Carl Campbell
Executive Vice President.....	James B. Enochs
Administrative Assistant to the Executive Vice President.....	Louis A. Dallara
College Librarian.....	A. S. Pickett
Dean of Instructional Services and Continuing Education.....	Carroll V. Mjelde
Coordinator, Audio-Visual Services.....	Harold R. Skinner
Coordinator, Computer Services.....	Arthur A. Hughes
Coordinator, Extension Services.....	Charles E. Wallace
Director, Hidden Talent Program (EOP).....	James J. Ware, Jr.
Coordinator, International Education Services.....	Marvin N. Dillon
Director, Research and Grants.....	Rita B. Garant
Director of Institutional Research.....	George L. Proctor
Director, Physical Planning and Development.....	Wesley R. Burford
Building and Planning Coordinator.....	Nore F. Thiesfeld

## INSTRUCTION

Acting Provost, Old School.....	Yvette M. Fallandy
Co-Chairmen, Division of American Ethnic Studies.....	Herminia Q. Menez, Elaine Towns
Chairman, Division of Humanities.....	William O. Cord
Chairman, Division of Natural Sciences.....	Joe H. Brumbaugh
Chairman, Division of Psychology, Education, Health Sciences and Physical Education.....	John D. Lawrence
Chairman, Division of Social Sciences.....	Delmar S. Valleau
Coordinator of Academic Advising.....	Katherine H. Wiley
Provost, Robert Hutchins School of Liberal Studies.....	Warren E. Olson
Provost, School of Environmental Studies.....	Kenneth M. Stocking
Provost, School of Expressive Arts.....	Hobart F. Thomas

## STUDENT PERSONNEL SERVICES

Dean of Students.....	John T. Palmer
Associate Dean of Students.....	Warren R. Tappin, Jr.*
Associate Dean of Students, Activities-Housing.....	William L. Carr
Activities Advisor.....	Rand E. Link
Director of Housing.....	John R. Simmons
Associate Dean of Students, Admissions and Records.....	Harold J. Soeters
Registrar.....	Frederick H. Jorgensen
Associate Dean of Students, Counseling and Testing.....	Charles H. Merrill
Director of Testing Services.....	Gerald J. Alves
Psychometrist.....	Phillip B. Brownell
Coordinator of Judicial Affairs.....	Paul V. Juhl
Director of Financial Aid.....	William E. Frenaye
Financial Aid Counselor.....	Paul R. Molino
Director of Placement.....	Ralph B. Rustigan
Placement Associate.....	Priscilla M. Ewing
Director, Student Health Service.....	Thomas R. Plowright

\* On leave.

Business Manager.....	R. M. D. Chil
Accounting Officer.....	Ben Y. Quo
Budget and Planning Officer.....	Joseph C. V
Chief of Plant Operations.....	Joseph O. Killi
Personnel Officer.....	Raymond N. Dugg
Procurement and Support Services Officer.....	George E. Dillemt

## SONOMA STATE COLLEGE ADVISORY BOARD

Each of the California State Colleges, by action of the Legislature is privileged to name an advisory board composed of citizens representative of the area served by the college. Appointees are approved by the California State College Board of Trustees, and through their participation, the local college is better enabled to develop its program in relationship to the needs of the college service area. The college is grateful to the following persons for their willingness to serve in this important capacity:

W. Baird Anton (1975)  
Lakeport (Lake County)

A. B. Broaddus (1972)  
Ukiah (Mendocino County)

Edward G. Lopez, M.D. (1975)  
Vallejo (Solano County)

Edwin V. Grundstrom (1975)  
Novato (Marin County)

Bradford W. Lundborg, M.D. (1973)  
Santa Rosa (Sonoma County)

Mrs. E. W. Hartzell (1973)  
Sonoma (Sonoma County)

John H. Moskowitz (1975)  
Santa Rosa (Sonoma County)

Stephen K. Jones (1974)  
Cotati (Sonoma County)

Richard L. Payne (1975)  
Vallejo (Solano County)

John W. Kelly (1974)  
Santa Rosa (Sonoma County)

Mrs. William J. Rudee (1974)  
Santa Rosa (Sonoma County)

## GENERAL INFORMATION

### Historical Development

Sonoma State College was established by act of the Legislature in 1960 and opened its doors to the first students in September 1961. Coming at that particular juncture in time, the college occupies a unique position. Since it was established in 1960, it may be considered the last of the old State Colleges, under the State Board of Education. Since it opened its doors in September 1961, it is the first new State College to become operative under the Board of Trustees.

From the beginning the college faculty has emphasized the liberal arts and sciences, and expressed determination to develop a program which would reflect this emphasis. In the years since 1961, this philosophy has guided the development of the college. The bachelor degree programs from anthropology and art through English, chemistry, history, political science, to physics, sociology and Spanish, represent the traditional arts and science disciplines.

The college has also been strongly committed to the development of solid undergraduate programs before undertaking the development of master's degree programs. It was not until 1966 that the first master's degree, in biology, was established, coinciding with the opening of the new science building. This program capitalized upon an undergraduate major which had been in existence since the beginning of the college. The second master's degree was in the field of psychology. The emphasis here was upon the relatively new "Humanistic" psychology field, an emphasis in keeping with the humanistic arts and sciences philosophy of the college. M.A. degree programs in English, Spanish, education, mathematics, and history have also been approved. Proposals for master's degrees in counseling, political science and physical education have recently been approved by the Chancellor's Office.

During its early formative years, while the basic program in the arts and sciences were being developed, the college occupied rented quarters in the City of Rohnert Park. These were small, two-story buildings, grouped in a courtyard arrangement so that it was easy and pleasant for members of the faculty and the administration to see and to speak with each other. There grew up very early a tradition of mutual trust and respect between faculty and students.

This free and easy communication was further enhanced by the fact that the college grew at a relatively slow place. From 274 students in 1961, the college grew to 1400 students in the fall of 1966. This slow, but steady, growth provided maximum opportunity for all the members of the college community to become acquainted with each other and to appreciate the opportunity for close, personal relationships.

In the fall of 1966 the college moved to its permanent campus, with quite different surroundings—two very large, three-story buildings with the departments more segregated than they had been on the old



## **General Information**

campus. Furthermore, it seemed that the new buildings did not provide quite the same degree of accessibility that had characterized the offices and classrooms on the old campus. Nevertheless, the tradition of open communication and good personal relationships had become so strong a part of the college community that every effort was made to keep this tradition alive.

The problems associated with keeping this tradition alive were aggravated in the fall of 1967 by the fact that the educational program had developed enough and the opportunities available here had become well enough known that the college for the first time experienced an unusually large enrollment growth, greater than had been anticipated. This experience was repeated in the fall of 1968, with the result that the college actually accommodated one-third more students than the budgeted enrollment. This necessitated the adoption of expedients with which none of us were comfortable. For the first time the college began to experience some of the unpleasant results of bigness: students and faculty alike began to complain of a sense of anonymity, of being cogs in a machine, of institutional impersonality. To a considerable degree, however, the complaints were more in the nature of prophecies for the future than in descriptions of the present.

Associated with these problems of growth and the consequent lessening of opportunities for communication and personal relationships, the faculty and students had also begun to ask questions about the nature and direction of the entire college program. They suggested that perhaps there were ways in which the traditional disciplines could be more clearly and definitely related to each other to provide an education that was more unified, not so splintered as traditional degree programs. They also suggested that the educational program should be more clearly directed toward the solution of some of the problems confronting society.

A corollary to these suggestions was that, given an educational program which was more unified, given an educational program more clearly related to the solution of social problems, the students would become more active participants in their own education, excitedly involved in learning.

It was under these circumstances that in the spring of 1968 one of the college faculty committees proposed that a special committee be established to take a look at the educational program of Sonoma State College and prepare recommendations for the kinds of changes which would help us to maintain some of our traditions and, at the same time, move in new directions.

All of the faculty accepted the recommendation with enthusiasm. A committee was established, composed of three members of the administration, three members of the student body, and six faculty members. This committee began its deliberations in the fall of 1968. Through many meetings and much reading, and after consultation with faculty

and students from several other colleges and universities, the committee developed and presented to the faculty of Sonoma State College the "Cluster School" concept for academic planning. The concept proposed that School No. 1 be planned to accommodate six or seven thousand FTE students. Within this school the traditional bachelor's and master's degree programs in the arts and sciences will be continued and developed. It will also furnish a rich resource of specialized facilities in the areas of the sciences, art, music, drama, and physical education which may be used by any other school that is established. The Library also will be considered a single, central library for the entire college community. Duplication of expensive, specialized facilities will therefore be avoided.

In addition to "Old School", there will be established a series of cluster schools, limited in size, not to exceed 1,000 students. Each of the schools will have an educational program unified around a central focus or objective. Furthermore, it is expected that each of the schools will be, in the best sense of the words, innovative and experimental. This expectation may be achieved in different ways, probably in ways not yet thought of.

Three such schools will be offering programs in 1972: the Hutchins School of Liberal Studies, the School of Expressive Arts, and the School of Environmental Studies. Both within them and throughout the total college, the concern is with three general goals:

One, that different disciplines can be related to each other in more specific and definite ways, so that the student who graduates will know that his education has been a unified and unifying experience.

Second, the attempt to provide maximum opportunity for students and faculty to develop and maintain strong inter-relationships, to keep alive the feeling on the part of students that they are working with the faculty on an individualized basis, and that the faculty members are genuinely concerned about them as individuals.

Third, the effort to develop programs which seek, not just the definition of problems, but also the possible solutions. Perhaps in the offering of this kind of educational opportunity, in which both students and faculty are intimately and intensively involved, we are expressing our own definition of educational "relevance".

To the degree that Sonoma State College achieves those goals it will be what the faculty and students really want: An exciting place to learn.

### *Campus Development*

Planning for the physical facilities of the campus to meet the requirements of the total college program is the responsibility of the Office of Physical Planning and Development, working with the Campus Planning Committee.

## **General Information**

The Campus Master Plan, first approved in 1962, was revised in 1969 to meet the "cluster schools" concept adopted by the faculty in the latest Academic Master Plan for the College.

Permanent facilities now accommodate an enrollment of approximately 4600 full time equivalent (FTE) students. Plans are under way to provide for an ultimate FTE student enrollment of approximately 12,000, projected for 1980. With growing enrollment pressures, more concern with legislative appropriations, and higher classroom utilization standards, it seems inevitable that the College will be called upon to exceed this enrollment figure.

The first on-campus Residence Halls will be completed ready for occupancy in the fall of 1972. Plans are well under way for the Student Health Services Building, planned for occupancy in the 1972-73 academic year; Hutchins School (the first of the cluster schools) with occupancy planned for the fall of 1974; and the Art Building, on which construction should begin in 1975, with completion a year later; plus various utilities, landscaping, and parking projects. Requests have been submitted to the Chancellor's Office for a Natural Science Building, a Library-Administration addition to the present Library, and a Pool.

The ability of the College to meet the challenges facing it in the area of physical development is dependent upon funds being made available by the legislature in the coming years.

The Office of Physical Planning and Development cooperates with the greater community in planning to meet problems of traffic circulation, land use, architectural standards, housing, commercial and recreational services for the whole college community.

### ***Sonoma State College Foundation***

The Sonoma State College Foundation, a California non-profit Corporation, was established in 1961 for the purpose of promoting and assisting the educational services of the College. The intent of the Foundation is to supplement the services provided by the State of California and to sponsor such activities as will help attain the goals of the College but for which the State has not appropriated funds. Its activities include the sponsoring of conferences and workshops, the receiving and administration of gifts and donations, a financial aids program, certain depository functions, and such other activities as can be more conveniently handled by the Foundation than by the State.

## General Information

### BOARD OF DIRECTORS, 1971-72

#### *Officers*

Thomas H. McGrath (President of the College)	President
James B. Enochs (Executive Vice-President)	Vice-President
John T. Palmer (Dean of Students)	Secretary
R. M. D. Childs (Business Manager)	Treasurer
Robert E. Holmes	Member-at-Large

#### *Members*

Gerald J. Alves (Director of Testing Services)  
Louis G. Beary (Alumni Representative)  
Wesley R. Burford (Director, Physical Planning and Development),  
Duncan V. Gillies (Professor of Education and Psychology)  
Robert E. Holmes (Associate Professor of Chemistry)  
F. Russell Lockner (Assistant Professor of Biology)  
Carroll V. Mjelde (Dean of Instructional Services and Continuing Education)  
Don R. Patterson (Assistant Professor of English)  
\_\_\_\_\_ (Advisory Board Representative)  
Daniel J. Christensen (Foundation Accountant)

## ADMISSION TO THE COLLEGE

Requirements for admission to the California State University and Colleges are in accordance with Title 5, Chapter 5, Subchapter 2 of the California Administrative Code as amended by the Board of Trustees of the California State University and Colleges on November 24, 1970. A prospective applicant who is unsure of his status under the requirements is encouraged to consult his school or college counselor or the College Admissions Officer.

All students who wish to attend Sonoma State College in on-campus resident classes during a regular semester must qualify for admission in accordance with the requirements and procedures in this bulletin.

### *Admission Classification*

Those who must make application for admission are:

#### *Undergraduates*

**New Students**—Any student who has never attended Sonoma State College in a regular semester.

**Readmitted Students**—Any student who has not been in attendance at Sonoma State College during either of the two semesters immediately preceding the semester for which application is made or who has attended another college or university in any interval of his absence, except summer session.

#### *Graduates*

**New Students**—Any student who has never been admitted to a graduate program at Sonoma State College. This includes graduates of Sonoma State College.

**Readmitted Graduate Students**—Any student who has not been in attendance at Sonoma State College during either of the two semesters immediately preceding the semester for which application is made or who has attended another college or university in any interval of his absence, except summer session.

### *Application Procedure for 1973-74*

All prospective students must file a completed application for admission within the appropriate filing period. A completed undergraduate application includes Part A, the application form; Part B, the data form; and the non-refundable application fee of \$20.00. A graduate application includes Part A; Part B; Part C, the supplemental graduate admission application; and the non-refundable application fee of \$20.00. Graduate applicants who were enrolled as undergraduate students at the college in the term immediately preceding the term for which they now wish to apply must also complete all the required



forms and submit the \$20.00 application fee. Each applicant may file only one application for any one term within the California State University and College system. The application should be filed with the college of first choice. Alternate choice campuses may be listed on the application.

### *Application Filing Periods for 1973-74*

<i>Term</i>	<i>Initial Filing Period</i>	<i>Extended Filing Period Begins (continues until quotas are reached)</i>
Summer 1973.....	Jan. 2-31, 1973.....	Feb. 2, 1973
Fall Quarter 1973.....	Nov. 1-30, 1972.....	Dec. 1, 1972
Fall Semester 1973.....	Nov. 1-30, 1972.....	Dec. 1, 1972
Winter Quarter 1974.....	June 1-30, 1973.....	July 1, 1973
Spring Semester 1974.....	Aug. 1-31, 1973.....	Sept. 1, 1973
Spring Quarter 1974.....	Aug. 1-31, 1973.....	Sept. 1, 1973

#### *Semester Calendar*

Chico	San Diego
Fresno	San Fernando
Fullerton	San Francisco
Long Beach	San Jose
Sacramento	Sonoma

#### *Quarter Calendar*

Bakersfield	Cal Poly,
Dominguez Hills	Kellogg-Voorhis
Hayward	San Bernardino
Humboldt	Cal Poly,
Los Angeles	San Luis Obispo
	Stanislaus

### *Initial Filing Period*

All applications received during the initial filing period will receive equal consideration within established enrollment categories and quotas, irrespective of the time and date they are received.

### *Space Reservations*

Applicants who can be accommodated within category quotas will receive confirmation of space reservation. Although the space reservation is not a statement of admission, it is a commitment on the part of the college to admit a student once eligibility has been determined. When the student receives notice of the space reservation, he should initiate action to have transcripts of all college and high school work sent to the college where space has been reserved. The college will inform him of the number of copies of transcripts required, dates for submittal, and where they should be sent. **THE STUDENT SHOULD NOT REQUEST THAT TRANSCRIPTS BE SENT UNTIL REQUESTED TO DO SO BY THE COLLEGE WHERE SPACE HAS BEEN RESERVED.\***

### *Redirection*

Applications of students who cannot be accommodated at their first choice college will automatically be redirected to their second choice, and, if they cannot be accommodated there, to their third choice, etc.

\* Check specific admission classification for number and place transcripts are to be sent.

## **Admissions**

### ***Hardship Petitions***

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

### ***Extended Filing Period***

Colleges not filling category quotas during the initial filing period will continue to accept applications during the extended filing period until quotas are filled. Application priority within the extended period will be granted in chronological order of application receipt by the colleges.

### ***Undergraduate Admissions Requirements***

#### ***First-Time Freshmen***

Applicants who have completed no college work after high school graduation will be considered for admission as first-time freshmen under one of the following provisions.

Results of either the CEEB Scholastic Aptitude Test (SAT) or the American College Testing program examination (ACT) are acceptable in establishing eligibility.

Exceptions: College credit earned concurrent with high school enrollment; college credit earned in summer session after high school and prior to regular matriculation in college; college credit granted for the CLEP or ADVANCED PLACEMENT programs, or military or USAFI courses; or college credit granted for some non-traditional learning experience, will *not* affect the applicant's status as a first-time freshman for application quota purposes as well as admission. Further, the accelerated student, who completes his high school program mid-year, who has applied to the California State University and Colleges for the following Fall term, but chooses to attend a local community college in the spring term will be considered a first-time freshman for application quota purposes as well as admission. All such college or advanced standing credit, if fully acceptable as transfer credit, will be granted the student after admission.

*California High School Graduates and Legal Residents for Tuition Purposes* must have a grade point average and total score on the SAT, or composite score on the ACT, which together provide an eligibility index placing them in the upper one-third of California high school graduates. The grade point average is based upon all high school course work completed in grades 10–12, excluding physical education and military science courses.

## Admissions

*High school graduates from other states or possessions who are non-residents* for tuition purposes must present an eligibility index which places them in the upper one-sixth of California high school graduates.

The following table gives 'grade point averages and test scores which together combine to establish eligibility.

<i>Grade Point Average</i>	<i>SAT Needed</i>	<i>ACT Needed</i>
3.21 and above	Eligible with any score	Eligible with any score
2.80	832	19
2.40	1,152	27
2.00	1,472	35
1.99 and below	Not eligible	Not eligible

Registration forms for either test may be obtained from high school and community college counselors, State College testing offices or directly from the testing service at the address below:

**SAT**  
CEEB  
Box 1025  
Berkeley, Calif. 94770

**Dates Test Given:**

Oct. 14, 1972 (SAT only Calif-Tex)  
Nov. 4, 1972 (SAT only)  
Dec. 2, 1972 (SAT & ACT)  
Jan. 13, 1973 (SAT & ACT)  
Mar. 3, 1973 (SAT & ACT)  
Apr. 7, 1973 (SAT only)  
May 5, 1973 (ACT only)  
July 14, 1973 (SAT & ACT)

**ACT**  
Registration Unit  
P.O. Box 168  
Iowa City, Iowa 52240

**Dates Test Given:**

Oct. 21, 1972  
Dec. 9, 1972  
Feb. 24, 1973  
Apr. 28, 1973  
July 21, 1973

### ELIGIBILITY INDEX

The following chart is used in determining the eligibility of graduates of California high schools (or California legal residents) for freshman admission to a State College. Grade point averages are based on work completed in the last three years of high school, exclusive of physical education and military science. Scores shown are the SAT Total and the ACT Composite. Students with a given G.P.A. must present the corresponding test score. Conversely, students with a given ACT or SAT score must present the corresponding G.P.A. in order to be eligible.

The minimum eligibility index is:  $SAT = 3072$  and  $ACT = 741$ . The index is computed either by multiplying the grade point average by 800 and adding it to the total SAT score, or multiplying the grade point average by 200 and adding it to 10 times the composite ACT score.

## Admissions

G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score	G.P.A.	A.C.T. Score	S.A.T. Score
(—) <sup>1</sup>	--	---	2.96	15	704	2.71	20	904	2.47	25	1096	2.22	30	1296
3.20	11	512	2.95	16	712	2.70	21	912	2.46	25	1104	2.21	30	1304
3.19	11	520	2.94	16	720	2.69	21	920	2.45	26	1112	2.20	31	1312
3.18	11	528	2.93	16	728	2.68	21	928	2.44	26	1120	2.19	31	1320
3.17	11	536	2.92	16	736	2.67	21	936	2.43	26	1128	2.18	31	1328
3.16	11	544	2.91	16	744	2.66	21	944	2.42	26	1136	2.17	31	1336
3.15	12	552	2.90	17	752	2.65	22	952	2.41	26	1144	2.16	31	1344
3.14	12	560	2.89	17	760	2.64	22	960	2.40	27	1152	2.15	32	1352
3.13	12	568	2.88	17	768	2.63	22	968	2.39	27	1160	2.14	32	1360
3.12	12	576	2.87	17	776	2.62	22	976	2.38	27	1168	2.13	32	1368
3.11	12	584	2.86	17	784	2.61	22	984	2.37	27	1176	2.12	32	1376
3.10	13	592	2.85	18	792	2.60	23	992	2.36	27	1184	2.11	32	1384
3.09	13	600	2.84	18	800	2.59	23	1000	2.35	28	1192	2.10	33	1392
3.08	13	608	2.83	18	808	2.58	23	1008	2.34	28	1200	2.09	33	1400
3.07	13	616	2.82	18	816	2.57	23	1016	2.33	28	1208	2.08	33	1408
3.06	13	624	2.81	18	824	2.56	23	1024	2.32	28	1216	2.07	33	1416
3.05	14	632	2.80	19	832	2.55	24	1032	2.31	28	1224	2.06	33	1424
3.04	14	640	2.79	19	840	2.54	24	1040	2.30	29	1232	2.05	34	1432
3.03	14	648	2.78	19	848	2.53	24	1048	2.29	29	1240	2.04	34	1440
3.02	14	656	2.77	19	856	2.52	24	1056	2.28	29	1248	2.03	34	1448
3.01	14	664	2.76	19	864	2.51	24	1064	2.27	29	1256	2.02	34	1456
3.00	15	672	2.75	20	872	2.50	25	1072	2.26	29	1264	2.01	34	1464
2.99	15	680	2.74	20	880	2.49	25	1080	2.25	30	1272	2.00	35	1472
2.98	15	688	2.73	20	888	2.48	25	1088	2.24	30	1280	(—) <sup>2</sup>		
2.97	15	696	2.72	20	896	----	----	----	2.23	30	1288			

<sup>1</sup> Students earning grade point averages above 3.20 are eligible for admission.

<sup>2</sup> Students earning grade point averages below 2.0 are not eligible for admission.

## Non-Residents Graduating from High Schools in Other States or Possessions

An applicant who is a nonresident for tuition purposes and who is a graduate of a high school in another state or a U.S. possession must have an eligibility index which would place him among the upper one-sixth of California High School graduates. The minimum required eligibility index is 3402 using the SAT, and 826 using the ACT, and is calculated as in the previous section.

## Graduates of High Schools in a Foreign Country

Applicants who are graduates of foreign high schools must have preparation equivalent to that required of eligible California high school graduates. The College will carefully review the previous record of all such applicants and only those with promise of academic success equivalent to that of eligible California high school graduates will be admitted. Such applicants are not required to take the (SAT)/(ACT) except when specifically requested to do so.

The college entrance aptitude test is not required of applicants for whom English is a foreign language. However, for those applicants for whom English is a second language the college does require the Test of English as a Foreign Language (TOEFL). Students should write directly to Educational Testing Service, Princeton, New Jersey, U.S.A. 08540 for information.

### *Non-High School Graduates*

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

### *High School Students*

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment. Such applicants are required to take the entrance examination and to submit transcripts of high school work completed to date.

### *Advanced Placement Program*

Sonoma State College grants credit toward its undergraduate degrees for successful completion of examination 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 (nine quarter units) of college credit.

1. Allow 6 semester-units per exam in subject matter areas upon completion of the Advanced Placement Examination with a score of 5, 4, or 3.
2. Allow such credit as advanced standing for first-time freshmen.
3. Allow credit to meet General Education requirements, as evaluated by the Admissions and Records Office at the time of the students admission.
4. Allow Advanced Placement credit to apply to major requirements at the discretion of the major department.

### *College-Level Examination Program*

The College will allow credit for the College-Level Examination Program (CLEP) under the following conditions:

1. "CLEP" General Exams—allow up to 6 semester-units of credit for each examination passed with a score of 500 or better.
2. "CLEP" Subject Exams—allow 3 semester-units of credit for each subject examination passed with a minimum score set by the department. "CLEP" subject examination credit may be applied to department major requirements at the discretion of the major department in question. Interested students should consult with the testing office.

### *Admission as Undergraduate Transfers*

Applicants for admission to the State University and Colleges as undergraduate transfers will be considered for admission under one of the following provisions:

## Admissions

*Applicants who have successfully completed 60 or more transferable \* semester units, or the equivalent, are eligible for admission if they have achieved a grade point average of 2.0 (C) and were in good standing at the last college attended. Nonresident applicants must have earned a grade point average of at least 2.4 (C+).*

*Applicants who have successfully completed fewer than 60 transferable \* semester units, or the equivalent, are eligible for admission if they meet the above requirements and the current first-come freshman requirements. Applicants for admission as transfer students who have been continuously enrolled at a college since graduation from high school are eligible if they meet the first-time freshman requirements in effect at the time of their high school graduation. Either SAT or ACT test results are required of transfer applicants with fewer than 60 semester units.*

### *Admission as International (Foreign) Students*

The admission of international (foreign) students is governed by separate requirements. Prospective applicants from abroad should consult the individual college catalogs and international (foreign) student informational brochure available from the colleges.

### *Other Applicants*

Applicants not admissible under one of the above provisions should enroll in a junior college or other appropriate institution. Only under the most unusual circumstances will such applicants be permitted to enroll in the college. Permission is granted only by special action.

### *Returning Students*

A student previously enrolled at Sonoma State College 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 limitation and dates as new applicants. If any college or university work has been undertaken since the last enrollment at Sonoma State College, the applicant must request that each college attended send a complete official transcript to the Office of Admissions and Records. A new health record form must be filed with the student health service.

### *Readmission After Disqualification*

Disqualified students may, after one regular semester has elapsed, apply for admission and petition the College Standards Committee

\* Applicable to students entering on or after September 1, 1974. Until that time, the former regulation applies, i.e., applicants who have successfully completed 60 or more semester units, or the equivalent, are eligible for admission if they have achieved a grade point average of 2.0 (C) and were in good standing at the last college attended. Nonresident applicants must have earned a grade point average of at least 2.4 (C+).

through the Office of Admissions and Records. Petitions will receive consideration if they are accompanied by evidence that would justify readmission, such as satisfactory academic work elsewhere. A disqualified student who is readmitted will be on a probationary basis until he has removed all grade point deficiencies or is again disqualified.

No application for readmission for a particular semester will be accepted for consideration from a disqualified student if it is presented later than three weeks before the first day of registration.

## GRADUATE ADMISSIONS

### *Graduate Students*

1. Commencing with the August 1971 graduating class, all students wishing to enter the graduate program must make application for admission to the college, whether graduates of Sonoma State College or some other institution.
2. Students applying for admission for advanced degrees or credential programs at Sonoma State College must file official transcripts in duplicate for each accredited college or university attended since high school. A separate application for admission to these programs must be made through the departments involved.
3. Students applying for admission to teaching credential programs must file three official transcripts of all collegiate work completed since high school graduation. One copy to the Office of Admission and Records and two copies to the credential secretary's office.

### *Unclassified Graduate Standing \**

For admission with graduate standing as an Unclassified Graduate Student, a student shall have completed a four-year college course and hold an acceptable baccalaureate degree from an accredited institution, or shall have completed equivalent academic preparation as determined by the appropriate college authorities *and must satisfactorily meet the professional, personal, scholastic and other standards for graduate study, including qualifying examinations, as the appropriate college authorities may prescribe.* Admission to unclassified graduate status does not constitute admission to a graduate degree curriculum or teacher education program.

### *Classified Graduate Standing*

A student who has been admitted to a State University or College campus under the Unclassified Graduate requirement above may, upon application, be admitted to an authorized graduate degree curriculum if he satisfactorily meets the professional, personal, scholastic, and other standards for admission to the graduate degree curriculum, including

\* Admission to unclassified graduate standing for students without a specific graduate objective (i.e. Masters degree or Teacher Education Program) is closed for 1972-73.

## **Admissions**

qualifying examination, as the appropriate college authorities may prescribe.

### *Admission to Teacher Education Program*

In addition to an application for admission to the College, an applicant for the Teacher Education Program must make a separate "Application for Admission to Teacher Education Candidacy" with the Department of Education. The same application filing periods apply to the Teacher Education Program as to the College. The Department of Education requires two (2) transcripts of all previous college work since high school graduation to complete their application.. The College Admissions Office requires one transcript which must show the award of the Baccalaureate degree or higher from an accredited college or university to complete your application.

### *Determination of Residence*

The following statement of the rules regarding residency determination is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The statutes governing residence determination for tuition purposes are found in Education Code Sections 23753.2-23762, Government Code Sections 243-244, and Civil Code Section 25. The determination of whether a student qualifies as a "resident" for admission and tuition purposes is made by the College after review of a "Residence Questionnaire" completed by each student upon entering the College. The residence questionnaire is designed to provide to the College information necessary for residency determination, including the applicability of any exceptions.

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 admission and tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term.

Whether a student has acquired California residence usually depends on whether the student has attained majority; i.e., has become an adult. Majority is attained at 18 years of age. If the student is a minor, residence is derived from (and therefore is the same as) that of his or her father. If the father is not living, the student's residence is that of the mother while she remains unmarried. A minor cannot change his residence by either his own act or that of his guardian.

Upon attaining majority, the student may acquire a residence apart from his or her parents. The acquisition of California residence by an adult requires both physical presence in the state and, at the same time, an intent to remain in California indefinitely, that is, an intent to regard California as one's permanent home. Although physical presence is



easily proven, subjective intent is more difficult, requiring the student to present evidence of various objective manifestations of such intent.\*

The residence of a married woman is that of her husband unless she is separated, in which case she can establish her own residence. An alien is not eligible to acquire residence until admitted into the United States for permanent residence under an immigrant visa.

Since the general rules of residence determination, summarized above, work hardships in some cases, the Legislature has provided a number of exceptions which, in effect, waive non-resident tuition. These rules are limited in scope, and are quite detailed. If it appears that any of them may be applicable, the student may wish to discuss the matter with the residence clerk of the College. Exceptions are provided for:

1. Minors living under the direct care and control of a California resident for periods of time which are specified in the law.
2. Minors whose parents were California residents but who have left the state. (Depending on the length of the parents' residence in California, the minor is given a "grace period" during which he is considered a California resident even though his or her parents have become residents of another state.)
3. Minors who have a parent in active military service and stationed in California on the residence determination date; California resident minors who have a parent in active military service but stationed outside the United States on the residence determination date, and California resident spouses of such servicemen.
4. Persons who have attained their majority by the residence determination date, and who were entirely self-supporting and present in California for the entire preceding year.
5. Women who are California residents and who marry nonresidents provided residence is not established in any other state.
6. 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.
7. Full-time State College employees and their children and spouses.
8. Certain credentialed, full-time employees of school districts.
9. Certain exchange students.

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 by the Legislature between the time this catalog is published and the relevant residence determination date.

\* The foregoing rules will have a special application during the 1972-73 academic year with respect to persons who attain their majority as a result of the recent legislative change reducing the age of majority from 21 to 18.

## **Admissions**

### *Notification of Admission to the College*

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.

### *Cancellation of Admission*

Students who have been admitted to the college for a given semester but do not register will have their admission automatically canceled. Should they later wish to undertake work at the college, 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.

### *Health Examination*

All new students who register for more than six (6) semester units of work are classified as regular students and are required to file with the Student Health Service the student health record form prior to admission in the college. This form is forwarded to each student at the time of his notification of space reservation and must be completed by a student's private physician at the student's expense. The form when complete should be mailed directly to the Student Health Service. A special Health examination is required for applicants to the Teacher Education Program.

### *Recommended Preparation*

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

1. College preparatory English.
2. Foreign Language.
3. College preparatory mathematics.
4. College preparatory laboratory science.
5. College preparatory history and/or social science.
6. Study in speech, music, art, and other subjects contributing to general academic background.

***Allowance of Credit for Degree Requirements***

***Junior College Credit:*** No more than 70 units of credit for work taken at a junior college may be transferred to Sonoma State College. No credit may be allowed for professional education courses taken in a junior college, other than an introductory course in education, nor may any upper division credit be allowed.

***Credit for Extension and Correspondence Courses:*** A maximum of 24 units of credit earned in correspondence and extension courses may be allowed toward the bachelor's degree, not more than 12 of which may be transferred from another college or university. Extension course credit does not apply toward the residence requirements at Sonoma State College.

***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 college.

***Credit for Military Service:*** Students who have completed more than six months 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 his DD Form 214. Credit for service schools will be allowed only insofar as such training is recommended by the American Council on Education Guide.

## FEES AND EXPENSES

### *Fees*

The regular fees of the college are given below. *Fees are subject to change by the Trustees of the California State Colleges.* Checks should be made payable to Sonoma State College in the exact amount of the fees to be paid.

Application for Admission Fee ..... \$20.00

### *Registration Fees Per Semester* (Payable at time of registration)

#### *Materials & Service Fees*

0 to 3.9 units .....	39.00
4 to 7.9 units .....	44.00
8 to 11.9 units .....	49.00
12 or more units .....	59.00

#### *Student Union Fees*

6 units and under .....	4.00
Over 6 units .....	8.00

#### *Facilities Fee*

All Students .....	3.00
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Nonresident † tuition for domestic and foreign students (in addition to above fees)

15 units or more .....	555.00
Less than 15 units, per unit .....	37.00
Per academic year .....	1110.00

### *Other Fees or Charges*

(Payable when service is rendered)

Late registration .....	5.00
Transcript of records .....	1.00
Library books, or materials overdue, damaged or lost (consult the library for schedule of fees) .....	
Failure to meet administratively required appointment or time limit .....	2.00
Credential Application Fee * .....	20.00
Check returned for any reason † .....	2.00
Graduation Fee .....	5.00
Items Lost or Broken .....	Cost
Lost room keys .....	2.00
Replacement of fee receipt .....	2.00

Deposits for locker keys and breakage are required in some laboratory courses. Keys \$2.50; Breakage \$5.00. These are refundable in whole or part. If deposits are not required, charges may still be made against the student for undue breakage or failure to clear locker and/or return key.

Field Trip Fee .....	Cost
Sailboat Rental Fee .....	5.00
Beginning Ceramic Sculpture Lab Fee .....	7.00
Advance Ceramic Sculpture Lab Fee .....	9.00
Beginning Printmaking Lab Fee .....	7.50
Advanced Printmaking Lab Fee .....	10.00
Advanced Sculpture, Metal Lab Fee .....	10.00

\* Subject to change without notice.

† In addition to the returned check charge, the \$5.00 late fee is charged if the returned check was in payment of registration fees, unless the check is reimbursed prior to commencement of the late registration period.

‡ Eligibility for residency status is frequently difficult to establish. An attorney will be available during registration for consultation.

## **Fees and Expenses**

### **Summer Session Fees:**

Per unit .....	24.00
Student union fee:	
Intersession .....	.50
Regular six week session .....	4.00
Post session .....	2.00
Special session (based on number of units)	

### **Extension Program Fees:**

Per unit .....	19.00
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### **Parking Fees:**

Non-reserved spaces Students and employees, per semester .....	13.00
Summer sessions, 6-week session or period .....	5.00
Summer sessions, 4-week session or period .....	3.00
Other sessions, one week or more—\$1.00 per week.	
Reserve spaces, \$5.00 per calendar month or major fraction thereof.	
Two-wheeled self-propelled vehicles, 25% of above fees.	
Each alternate vehicle in addition to fee for first vehicle \$1.00	
Coin-operated parking meter controlled spaces—at a rate not to exceed \$0.10 per hour.	
Coin-operated parking gate controlled spaces—\$0.25 per admission.	
No provision is made for part-time reserve parking.	

### **Refund Regulations**

Nonresident and Foreign Visa students are allowed refunds for tuition fees paid in accordance with the following schedule:

During the third week of semester .....	70%
During the fourth week of semester .....	50%
During the fifth week of semester .....	30%
During the sixth week of semester .....	20%

Other fees are only refunded in accordance with Subdivision (e) of Section 41802 of Article 3, Title 5 of the California Administrative Code.

Requests for refunds regarding Extension Classes should contact the Dean of Instructional Services and Continuing Education.

### **Dishonored Checks**

By authority of the State Administrative Manual, Section 8023, all persons who have issued a check to the College that was dishonored by the bank will be required to make all future payments by cash, certified check, cashiers check or money order.

### **Debts Owed to the College**

From time to time the student may become indebted to the college. This could occur, for example, when the student fails to repay money borrowed from the college. Similarly, debts occur when the student fails to pay college dormitory or library fees, or when the student fails to pay for other services provided by the college at the request of the student. Should this occur, Sections 42380 and 42381 of *Title 5* of the

## **Fees and Expenses**

*California Administrative Code* authorize the college to withhold "permission" to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise or any combination of the above from any person owing a debt until the debt is paid. For example, under these provisions the college may withhold permission to register, and may withhold other services, such as grades and transcripts. If a student feels that he or she does not owe all or part of a particular fee or charge, the student should contact the college business office. The business office, or another office of the college to which the student will 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.

# REGISTRATION

## *General Information*

Registration is the act of officially enrolling in classes. Students must be officially enrolled to receive credit for work completed. Grades will be assigned for all classes on a student's official schedule. A student is officially enrolled only when all fees, deposits or charges are paid in full. All payments are due in full on regularly announced days each semester. Late registration is authorized only if the student has petitioned the College Standards Committee for a waiver of the registration deadline and received approval by the Committee. A \$5.00 late registration fee is charged. Registration by proxy or mail is not permitted.

## *Schedule Changes*

All students are held responsible for completing each class listed on their official schedule of classes, which is filed in the Registrar's Office. A student's official schedule of classes may be changed by filing, at the Registrar's Office, the appropriate add cards or drop cards as noted below:

*Adding Classes:* Courses may be added only during the first two weeks of the semester. If registration takes place after the second week, classes may be added only if approved upon submission of a petition to the College Standards Committee.

*Converting Grade Type:* Changing course enrollment from P/NC to letter grade or letter grade to P/NC is authorized for the first six weeks of the semester.

*Dropping a Course:* If a student officially withdraws from a course during the first four weeks of a semester, no entry will be made on the record. If he withdraws during the fourth to fourteenth week of instruction either a "W" or a "WF" will be recorded, depending on whether or not he has the approval of the instructor and is doing passing work at the time of official withdrawal. Unofficial withdrawal from a class is indicated on the student's permanent record with the symbol "UW".

No withdrawal is permitted after the fourteenth week of instruction and students dropping out of classes after this time will receive a grade of "F" in each course dropped.

## *Classification of Students \**

Students are classified as full-time and part-time, and the procedures for registration vary with classification.

Full-time students are those who take more than 6 semester units.

Part-time students are those who take 6 or fewer semester units.

\* See Certification for Selective Service and Veterans for exceptions in the general classification of students.

## Registration

Students are further classified each semester according to earned credits as follows:

<i>Status</i>	<i>Units earned</i>
Lower Division	
Freshman .....	0-29%
Sophomore .....	30-59%
Upper Division	
Junior .....	60-89%
Senior .....	90 or more
Graduate	
Holding a baccalaureate degree from an accredited college.	

### *Majors leading to the Bachelor of Arts Degree*

Afro-American Studies	Liberal Studies—Environmental
Anthropology	Studies
• Art	Liberal Studies—Expressive
Biology	Arts
Biology-Mathematics	Management
Chemistry	Mathematics
Economics	Mexican-American Studies
English	Music
European Studies	Philosophy
French	Physical Education
Geography	Physics
Geology	Political Science
German	Psychology
History	Sociology
India Studies	Spanish
Liberal Studies—Liberal Arts	Theater Arts
	Urban Studies

### *Majors leading to the Bachelor of Science Degree*

Chemistry  
Nursing  
Physics  
Mathematics

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• Concentration in Art Cinematography, Art History and Art Studio is available to the student.



*Majors leading to the Master of Arts Degree*

Biology  
Counseling  
Education (Reading) (Special Education)  
English  
History  
Mathematics  
Physical Education  
Political Science  
Psychology  
• Spanish

*Credential Programs*

Standard Teaching Credential—Elementary  
Standard Teaching Credential—Secondary  
Restricted Credential—Educable Mental Retarded and Trainable  
Mentally Retarded  
Standard Teaching Credential—Early Childhood Education

*Grade Points*

Grade points for each unit of credit are allowed as follows: A, four points; B, three points; C, two points; D, one point; F, W, WF, UW, and I (incomplete), no points. Incompletes not made up within one year, F, WF, and UW are charged as units attempted. An incomplete when made up will receive the grade points appropriate to the mark received. Grade point average is computed by dividing the number of grade points earned by the number of units attempted.

*Registration for Teacher Education Candidacy*

Students planning to enter the Teacher Education program should, early in their undergraduate years, ask for an advisor in the Education Department.

Actual application for admission to the program must be filed several months prior to admission. Deadlines for application are subject to change each year and are correctly listed in each current Sonoma State College catalog.

For additional information on credential programs see page 82.

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• Will not be offered 1972-74.

## REGULATIONS AND PROCEDURES

### *Academic Records*

Student academic records are maintained by the Registrar's Office. 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.

Public information, which may be included in a student's academic record as well as other places on campus, may be released to inquirers in person or over the telephone. Public information includes verifying whether or not a person has ever been a student at Sonoma State College, dates of attendance, major, whether or not the student graduated, and if any honors were earned. Examples of information considered confidential and not released except as noted above include a student's address, telephone number, class schedule, grade point average, names of instructors, etc.

A student's permanent academic record cannot be changed except where error in recording has occurred or by approval of the College Standards Committee. One year is allowed for errors to be identified by a student and corrected by the Registrar's Office or for petition to the College Standards Committee.

### *Academic Load*

The normal maximum academic load recommended by the College is 16 units. However, students may register for up to 19 units without special approval.

Two hours of preparation for each hour of regular class work should be expected.

Ordinarily, part-time students who are employed as teachers should not plan to carry more than the equivalent of one three-unit course. Most courses will require library work, and part-time students should plan their schedule accordingly.

A "typical" academic load is becoming less and less common as a result of the increased number of students who find it necessary to work during the academic year. Students should plan their total schedule carefully to assure that they are able to do justice to both work and study.

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 College may enroll for up to 24 units by securing their advisor's signature on the necessary forms. 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 College Standards Committee and receive approval before they may enroll for more than the authorized unit load limits.

### Grading

1. The College, with the approval of the Chancellor, may utilize for designated courses or groups of courses any combination of the following grading systems:
  - a. Letter grades: A, B, C, D, F.
  - b. Letter grades A, B, C, and NC (no credit) for D and F.
  - c. CR (Credit) for letter grades A, B, and C and Grade NC (no credit) for letter grades D and F.
2. Required GPA: Each *undergraduate* student shall complete with a grade point average of 2.0 (Letter grade "C" on a 5-point scale: (A=4, B=3, C=2, D=0, F=-1) or better:
  - a. all units accepted toward a degree, including those accepted by transfer from another institution.
  - b. all units in the major; and
  - c. all units attempted at the College granting the degree.Furthermore, only letter grades (A, B, C, D, F) shall be used in computing the GPA ("CR" and "NC" shall not be computed in the GPA).

### 3. Progress Points

An undergraduate student's eligibility to remain in a CSC will be determined by his *progress points*, no matter what his GPA. A student's *Progress Points* = GPA (as defined above) plus 2 points per unit for each "CR" (no points for any "NC").

### Pass/No Credit Grading

Students in good standing, not on academic probation, may be permitted to enroll in courses outside their major to a maximum of 24 semester units on a Pass/No Credit basis. Instructors may, however, restrict enrollment to students desiring a letter grade, or limit enrollment by giving priority to majors, minors, and/or students being graded on a letter-grade basis.

Semester unit credit is allowed for courses with a grade of Pass. No semester unit credit is allowed for courses graded NC (No Credit), and courses graded pass or NC shall not be considered in computing grade point averages. For other purposes the grade of Pass shall be equated to the standard grade of C or better. The grades of Pass and No Credit may not be converted to a standard letter grade at any time for any reason whatsoever.

All enrollments in Pass/No Credit courses will appear on the student's grade report and cumulative permanent record with the proper explanation of the no-penalty status of the Pass/No Credit symbols.

Departments, at their discretion and with approval of the Educational Policies Council, may permit students majoring in that department to take courses in the major on a Pass/No Credit basis, in addition to the 24 units specified above.

## **Regulations and Procedures**

If a student changes his major and has taken courses on a Pass/No Credit basis in the new major, such courses, at the lower division level, shall be accepted for the new major. Upper division courses taken on a Pass/No Credit basis may not be accepted for the new major except by petition of the student to the new major department concerned.

### ***Repeat of Courses***

An undergraduate student receiving a D, F or N/C (no credit) grade may repeat the course and will be charged units for each time the course is attempted and will earn grade points for each attempt. The student will, however, be credited with earned units only once.

### ***Class Attendance***

Students are expected to attend classes regularly, as this is one of the necessary and important means of learning and of attaining the educational objectives of the institution.

Students should not miss classes except for valid reasons, such as illness, accidents, and participation in officially approved college activities. When a student is absent from classes, it is his responsibility to inform his instructors of the reason for absence and to arrange to make up missed assignments and class work insofar as this is possible. Students should be cautioned that even though absences may be for valid reasons, such absences can impair performance and result in a lower grade. If a student is absent for 1 week or more because of illness, he must be cleared by the health center before returning to classes.

If a student who registers for a class does not claim his seat in that class during the first week of instruction, or by the second meeting of the class, whichever is the later, the instructor may assign it to another student. The student who has lost his class seat must officially drop the class at the Registrar's Office; failing to do that, he will be assigned the grade of "UW".

### ***Auditors***

Auditors are students pursuing courses without credit. Such students are not held for regular attendance at class and for examinations and reports. A student may register as an auditor under the following conditions:

1. When no student enrolled for credit will be deprived of the use of equipment or other college facilities.
2. When the auditor confines his time to the regularly scheduled class and/or laboratory meetings.
3. When the auditor secures the permission of the instructor before he registers in the class.

4. An auditor may not later petition for credit by examination in a course audited.

Auditors must apply to audit, and are required to pay the same tuition and fees as students who enroll in the class for credit.

### ***Withdrawal From the College***

Students contemplating withdrawal from the college because of personal or academic problems are encouraged to consult the Counseling Office and their academic advisor before making formal application for withdrawal. If withdrawal is necessary, an appropriate form is to be obtained from the Admissions and Records Office and filed with the Registrar. This procedure should be followed to make certain that incomplete records will not prevent the student from resuming his studies at a later date.

### ***Academic Standards***

A student is expected to maintain a grade point average of 2.0 (C) or better to continue in good standing. To be eligible for a bachelor's degree, a student is expected to complete with a grade point average of 2.0 (grade "C" on a five-point scale) or better: (a) all units accepted by transfer from other institutions; (b) all units in the major; and (c) all units attempted at Sonoma State College. Departments within the College may require, at their discretion, individual students to take an additional course for each course which the student completes with a passing but unsatisfactory grade. Departments within the College may establish additional admission, retention and graduation standards.

### ***Probation and Disqualification***

#### ***Undergraduate Students***

- a. A student shall be subject to probation if, in any semester or quarter, he fails to earn twice as many progress points as all units attempted during that semester or quarter;
- b. A student shall be subject to disqualification if during his second semester or quarter of probation he has failed to earn twice as many progress points as all units attempted during that semester or quarter.

#### ***Graduate Students***

Probation and disqualification of graduate students are subject to criteria established by each State College; provided, that criteria of probation and disqualification may not be less than those established for undergraduate students.

## **Regulations and Procedures**

### ***Readmission of Disqualified Students***

Disqualified students may, after at least one regular semester has elapsed, make application for readmission under the schedule for admission and petition the College Standards Committee through the Office of admissions for readmission. Applicants will receive consideration if they are accompanied by evidence that would justify readmission, such as satisfactory academic work elsewhere. A disqualified student who is readmitted will be on a probationary basis until he has removed all grade point deficiencies or is again disqualified.

### ***Student Conduct***

Students are expected to conduct themselves so as to reflect credit to themselves and to the college. One of the fundamental objectives of the college is to foster the development of students as active and responsible citizens in a democratic society; and students are, therefore, expected to make steady growth in maturity, self-reliance, and self-discipline as they progress toward a degree or credential. To help students achieve this end, the college places reliance not only upon its instructional program, but also upon student activities and student-faculty collaboration in many aspects of college community life. For the vast majority of students, these constructive means of defining and teaching good standards of conduct and integrity are effective.

Where disciplinary or grievance action is necessary, the college is guided by the *Student Disciplinary Procedures of the California State Colleges* authorized by the *California Administrative Code*.

They provide that a student may be placed on probation, suspended, or expelled for reasons specifically defined within these documents. Procedures which assure a student of a full and just hearing of any grievance or alleged offense are outlined in detail. The role, responsibilities, and functions of the Board of Trustees, the Chancellor of the California State Colleges, and the President of the College and his designees, are specifically defined to protect the rights and freedom of all segments of the college community. A copy of the procedures may be obtained from the Dean of Students' Office.

### ***Dean's List***

Each semester the College publishes the Dean's List of undergraduate students who meet the following criteria:

1. Students must be registered in a minimum of 12 semester units of letter grade courses in the semester under consideration.
2. Students must achieve a minimum grade point average of 3.50 for the semester.
3. Only courses taken in resident study will be used in computing the grade point average. Courses taken in extension and credit by examination will not be included in the computation.

## **Regulations and Procedures**

4. Only grades for the one semester under consideration will be used in computing the grade point average.
5. Only undergraduates will be considered for the Dean's List.

### **Foreign Language Requirements**

Certain majors at Sonoma State College require the completion of a specified number of units, or equivalent, in a foreign language. Students who, by a Placement Examination administered by the Department of Foreign Languages, demonstrate knowledge equivalent to all or part of this language requirement may select electives accordingly in consultation with their advisors. It is recommended, however, that all students who plan to enter graduate school take additional courses in the reading of a foreign language. Times and places for the Placement Examinations, as mentioned above, will be announced.

### **Credit Based on Examination—Challenge of a Sonoma State College Course**

Unit credit toward the degree may be secured by passing an examination given or approved by the proper college authority in courses offered by the college and for which credit has not otherwise been allowed. The College, in the interest of accelerating the work of capable students and recognizing their special interests and backgrounds, encourages this procedure. The following regulations should be observed:

1. Students wishing to challenge a course will secure the appropriate forms from the Registrar's office.
2. Only courses or their equivalents listed in the college catalog may be challenged.
3. The instructor, after consultation with the student and his advisor, will recommend approval or disapproval.
4. Only students in residence in a regular semester at the College may challenge a course.
5. When a student passes the examination for credit a "P" will be recorded on his permanent record. Units graded "P" do not affect the grade point average.

### **Special Courses**

The College has established special courses to meet the expressed needs of some students. Independent Study 495 and Special Problems 499 courses are offered for superior students who wish to pursue their individual interests beyond the scope of the established curriculum. Community Involvement courses 295 and 395 are offered for students who wish to participate in community activities. This participation takes the form of a Tutorial Program, Big Brother Program, Playground Supervision, and Outdoor Education. These courses are subject to the following regulations.

#### **495—Independent Study for Majors or Minors**

1. A maximum of 4 units per course.
2. A student may have in all areas for graduation no more than 6 units of 495 or 6 units of combined total of 495 and 499.

## **Regulations and Procedures**

3. This course may be included in a major pattern as a requirement, or it may be an elective.
4. A student may not pursue in independent study a course which is listed in the catalog and which is normally offered within a two-year period.
5. Independent Study may be designed for one student or be constituted as a seminar for several.
6. Approval for registration must be obtained from the advisor, instructor, and Department Chairman.

### **499—Special Problems**

1. A maximum of 2 units per course.
2. A student may not take more than 2 units per semester.
3. Students may have in all areas for graduation no more than 4 units of 499 or 6 units of combined total of 499 and 495.
4. Normally, enrollment will be limited to seniors and graduate students with "B" average.
5. Designed to meet special needs and interests and thus limited to upper division work not in catalog.
6. Approval for registration must be obtained from the advisor, instructor, Division Chairman, and the Provost of Old School.
7. For sufficient and demonstrated cause, the Division Chairman may authorize, with the approval of the Provost of Old School, exceptions to items 1, 2, 3, or 4 above.

### **295 and 395—Community Involvement Project**

1. 295 signifies lower division status; 395 signifies upper division status.
2. Variable credit from 1 to 3 units per course.
3. A maximum of 6 units allowable toward graduation.
4. Approval for registration must be obtained from the student's advisor and the instructor.
5. This course counts toward elective or unspecified requirements of a major or minor, and toward total units required for graduation.

## ***Certification to Selective Service***

Selective service local boards may grant a draft deferment to a student provided he is taking a full load of classes and is making normal progress toward his degree objective. At the request of a student, the college will certify enrollment status to a local board. Requests for certification are made through the Veteran's Clerk in the Office of Admissions and Records. Certification must be made one time each academic year. A student is considered to be full-time (for certification purposes) if he is taking 12 or more units. Normal progress toward degree objective is 24 units in the first year; 56 units by the second year; 90 units by the third year; graduation in four years.

## ***Continuing Graduate Study***

1. Undergraduate students, upon award of a baccalaureate degree from Sonoma State College, are required to file an application for admission to graduate status the same as new graduate students from other institutions. (Continuing students are exempt from the application fee.)



## **Regulations and Procedures**

2. Graduate students, upon award of a graduate degree or California Teaching Credential, are required to make application for admission for continued study at the graduate level.
3. Non-objective graduate students will be allowed to accumulate up to 24 semester units of graduate work in Unclassified Graduate Status. Upon reaching the 24 semester unit total, their continued enrollment will be subject to review by the College. Such student enrollment will be terminated by the College and further study by the student will be reviewed by the Graduate Studies Committee, upon the student presenting a petition for continued enrollment and recommendation by a graduate department or the Credential Office.

### ***Veterans, Social Security, Cal Vet, etc., Certifications***

Sonoma State College is approved for the training of veterans under Public Laws 190, 610, 634, 894, and the California State Bill for Educational Assistance. The College Office of Veterans Affairs, located in the Registrar's Office, will assist veterans in completing the forms for Federal and State Assistance Programs and in supplying information concerning Veterans Administration regulations.

Veterans with no prior training under the G.I. Bill must request a certificate of eligibility at least two months before enrolling; and those transferring from schools should submit transfer requests at least one month before enrolling. These forms should be submitted to the VA regional Office in San Francisco.

To receive (1) full-time subsistence the undergraduate student must carry at least 12 units, the graduate 10 units; (2) three-fourths subsistence the undergraduate must carry at least 9, the graduate 7 units; (3) one-half subsistence the undergraduate must carry at least 6 units, the graduate 5 units. These limits apply also to Social Security certification.

Students who may be eligible for the Cal Vets program should contact The Department of Veterans Affairs, 350 McAllister Street, San Francisco, California 94102.

### ***Petitions***

The college recognizes a need to provide for individual cases meriting exception to basic rules. A petition process has been created permitting individuals to request a change of rules or procedures. The College Standards Committee is the primary faculty committee judging these petitions. However, departments have the authority to rule on petitions for substitution of required courses within that department.





**STUDENT  
PERSONNEL  
SERVICES**



## STUDENT PERSONNEL SERVICES

The Student Personnel Services Program is under the general direction of the Dean of Students, it assists the student in deriving the maximum benefit from his academic career. This includes, but is not limited to: assisting the student at the beginning and throughout his college experience by means of the admissions process, counseling and testing services, coordination of student activities and housing, special assistance to Veterans and students from other nations, health and placement services, scholarship and loan assistance, and the maintenance of each student's cumulative records. Both prospective students, as well as those already enrolled are encouraged to take full advantage of the services provided and to suggest other means by which the college might better serve their needs.

### *Admissions and Records*

The services performed by the Admissions Office are outlined in the section on admission policies. In addition to the services described in the section on registration, the Registrar's Office maintains all official records of students and checks on the qualifications of degree candidates.

The Evaluations Office examines the previous academic records of applicants for admission to all programs and furnishes candidates with check sheets to assist in program planning. This work is done in cooperation with faculty advisors and administrators.

### *Counseling Services*

The Counseling Office offers a wide range of helping services including individual and group counseling. Opportunities are provided to assist students in career exploration and further development of their inner resources and potential for personal growth. Counselors are available on a "drop-in" basis, daily.

### *Testing Services*

The Sonoma State College Test Office in cooperation with the Student Personnel Services and the instructional program, administers a wide variety of tests. The outline below summarizes some of the current Sonoma State College test requirements:

Admissions Test (First-time freshmen and lower division transfers)	ACT (or SAT)
International students	TOEFL †
Graduation requirement (juniors and seniors)	Written English Proficiency
Elementary Education Candidates	Written English Proficiency

† Test of English as a Foreign Language.

## Student Personnel Services

Secondary Education Candidates	Written English Proficiency
Special Education Credential Candidates.....	Written English Proficiency
Early Childhood Education Credential Candidates.....	Written English Proficiency and the Edwards Personal Preference Schedule
Biology M.A. candidates.....	GRE Aptitude
Education M.A. candidates	Miller Analogies Test
English M.A. candidates	GRE Advanced Literature in English or Sonoma State College English Department Comprehensive Examination
History M.A. candidates	GRE Aptitude and Advanced Test in History
Mathematics M.A. candidates	GRE Advanced Math
Political Science M.A. candidates	GRE Aptitude Test (Preferred*)

These tests are scheduled throughout the academic year. In addition, the Law School Admission Tests, the Medical College Admissions Test, and the College Level Examination Program tests are also offered several times during the year. Specific times and places of the various test will be announced later or may be determined by consulting the Counseling and Testing Office, Room 2024, Stevenson Hall.

Students may make appointments in the Counseling and Testing Office to discuss their test scores with a counselor. Additional aptitude, achievement, vocational interest, and personality measures are available for further self exploration.

### *Student Activities: Activities, Housing, College Union Office (Temporary Building A)*

The College Experience is always defined broadly: it is the experience of life in college, where academics blend together with personal relationships, the cultivation or development of interests, residential life, experimentation, and "sorting out" all of these. The Activities, Housing, College Union Office is a place on campus where staff are available to talk with you about where you are and some of the options open to you through available resources or group activity.

With no student government on campus, the Office has become a center for initiation in areas of communications, all-campus lectures and concerts, management of student lounges, and club cooperation. Help with these areas, and service on Office-related groups for housing concerns and orientation are always welcome.

As a communications center, The Activities Office maintains a master calendar of all campus events, publishes a bi-monthly newsletter of future events on and off campus, and provides student locator files. All campus events are scheduled through this Office.

### ***Campus Clubs and Organizations***

Campus clubs and organizations span a broad spectrum of interests and concerns. The variety of organizations on campus offers numerous outlets to members of the college community to supplement curricular endeavors in informal group settings. Due to the lack of Associate Students, student clubs and organizations have become focal points for student initiative and genuine student interest. Some of the student organizations chartered through the Activities Office include:

Achvah, Ananda Marga Yoga Society, Anthropology Society, Avatar Meher Baba League, Benson Grove Association (Community Spirit), Black Student Union, California Association for Health, Physical Education and Recreation, Can You Dig It, Chess Club, Christians on Campus, Christian Science Organization, Committee for Prisoner Humanity and Justice, Cotati Archives Association, Draft Information Council, Environmental Center, Flying Club, Folkdancers, Friends of Cinema, Frontlash, Gay Student Union, Geography Club, Hiking Club, Horsemen's Etc., Industrial Workers of the World, Kundalini Yoga Association, Latter-Day Saint Student Association, Lettermen's Society, M.E.C.H.A., Model United Nations, Political Education Club, Radio Free Cotati, The Rhymer's Club, Sonoma Peace Action Committee, SSC People's Health Committee, Ski Club, Student Lectures and Concerts, Students International Meditation Society, Tai Chi Associates, World Peace Organism, and Young People's Socialist League.

### ***Student Opinion***

Fortunately, at Sonoma State student opinion is made and heard beyond the confines of the classroom and usual curricular activities. This is due largely to the energy and interest of the students themselves. Recognition of student opinion increases or decreases as that energy and interest increases or decreases. The Activities Office assists with all student requests for an "Open Mike," use of the free expression area, distribution of literature, and other means of student expression. Student opinion is also communicated through the participation of students on campus governing and planning boards and committees. Some academic departments are extremely involved in soliciting student opinion on campus and departmental issues.

### ***Placement Services***

The Placement Office functions as an employment guidance and service center for teacher candidates, for graduates seeking employment in business, industry, and government, and for students wishing part-time or summer jobs. In addition to counseling job applicants, keeping candidates informed about employment opportunities, scheduling interviews with prospective employers, and processing files for registrants. All placement services are rendered without a fee and may be used

## **Student Personnel Services**

as long as registrants keep materials up-to-date and request assistance in finding employment.

Teacher candidates who have completed or are completing teaching credential requirements at Sonoma State College are eligible to receive service from the Placement Office as are credentialed teachers who earn a master's degree in education at Sonoma State College.

Additionally, Sonoma State College students completing the college's requirement for a master's degree in an academic subject matter area will be given teacher placement service for both junior college and secondary school teaching positions.

Non-teaching career placement service is available to graduating seniors, graduate students and alumni who have completed or are completing 24 units at Sonoma State College. Any registered student may receive assistance in finding a part-time job.

Teacher candidates who wish to activate files in the Placement Office should complete all forms and schedule interviews with the Placement Director by December 1, 1972, if they are seeking January employment and by March 1, 1973, if they anticipate being employed in the fall. Non-teaching career candidates should activate files and schedule appointments with the Placement Associate by October 30, 1972, if they wish January employment and by March 30, 1973, if they intend to accept positions in the summer or fall of 1973.

### ***International Students***

An advisor is available in the Counseling Office to assist students from other nations who are in this country for the primary purpose of study. Their status is complicated by conditions established by federal law, specific regulations and requirements of the college, and provisos laid down by their governments. Each student must comply with these regulations to continue studies in this country.

### ***Housing***

At the present time, there is no on-campus housing at Sonoma State College; however, we are anticipating the completion of our first student housing complex which will accommodate 400 male and female students, in the Fall of 1972. Currently, the college does not restrict a student's choice of housing nor do we give college approval to any off-campus rental facility. Lack of college approval is not intended to reflect negatively upon the available facilities, but means simply that we do not have the personnel to inspect accommodations, supervise rentals, or make arrangements on behalf of our students.

The Office of Activities and Housing maintains current listings of all types of accommodations provided by landlords who have signed a statement that they will not discriminate on the basis of race, color, creed or national origin in keeping with the *Governor's Code of Fair Housing Practices*. All housing listed by the college is posted on the



bulletin boards inside the Housing Office, Temporary Building A-2. Students are advised to make arrangements for housing as early as possible because living accommodations are available on a first-come, first-served basis. Unfortunately, the housing situation in our area is such that students have to be here in person to make direct contact with the owners and managers who list with us. It is not possible for the Housing Office to act as intermediaries; to obtain and hold housing requires financial arrangements directly with the landlords.

There are several apartment buildings in the area of the campus and there is much new construction in progress. Some of the buildings are designed specifically for students while others are open to all segments of the local community. A detailed description of these facilities is available upon request from the Activities and Housing Office. In addition, there are various other types of housing available, including rooms or room and board accommodations in private homes, trailers, cottages, duplexes, etc. Let us share our resources with you by visiting our office Monday through Friday from 8:00 a.m. to 4:30 p.m.

### ***Health Services***

The student and/or his parents must accept responsibility for the health protection of the student. The college operates a Health Service with a full-time professional staff in charge for the treatment of emergencies and minor illnesses. This service is available to full-time students during the normal working hours of the college (8:00 a.m.-4:30 p.m.). More serious illnesses are referred to the proper medical facilities. A health and accident policy is available to all students, and they are encouraged to secure this protection.

### ***Student Financial Aid***

The financial aid program provides assistance to many students who could not attend Sonoma State College without it. The Office of Financial Aid, located in Stevenson Hall, Room 2021, seeks and distributes aid funds according to individual student needs, counsels students in financial planning, and encourages programs such as work-study that are relevant to the community.

The policies and procedures of the aid program are formed by the Financial Aid Committee of the Student Affairs Council. This committee has three students and three faculty members who are keenly aware of students' financial problems and of the need to provide additional funds to solve them.

Approximately \$500,000 per year is available for student aid. About 90% of this is in the three Federal programs described below, which assist 15-20% of the students.

## **Student Personnel Services**

### *Description of Aids*

Financial aids are in the form of grants or scholarships (gift aid), loans, or employment, or a combination of these.

Sonoma State College participates in the three basic *Federal* student aid programs described below. These programs are administered so as to give priority to applicants having the greatest financial need.

1. Educational Opportunity Grants (EOG) for students with *exceptional financial need*. To be eligible, gross family income should normally be less than \$6,000 per year. Grants are made first to those students with the greatest need. These grants range from \$200 to \$1,000. A student has to be enrolled for 12 units to be eligible for EOG. Each EOG is accompanied by other forms of aid.
2. Work-Study is primarily for students in families of low income. Most Work-Study jobs are for 10–15 hours per week at rates from \$1.85 per hour. Students may work up to 15 hours average per week while college is in session, and 40 hours maximum during vacation and term breaks. 12 units for undergraduates, 9 for graduates are the minimum course loads required. The Financial Aid Office assists students in finding appropriate Work-Study employment.
3. National Defense Student Loans (NDSL). The maximum undergraduate NDSL is \$1,000 per year. For the graduate the maximum is \$2,500 per year. 12 units (9 for graduates) are normally required for borrowing the maximum amounts. These loans are without interest while the student is in college or in the armed forces, Peace Corps, or VISTA. Nine months after completion of school, interest is payable at 3% per year. If you teach, loan principal is reduced at 10% per year for up to 50%. For teaching in a “poverty area”, the reduction is 15% per year with no limitation.

A new program of grants, called the *California Educational Opportunity Grants Program*, provides new “Hidden Talent” Program students grants of between \$200 and \$700. Students must meet the same criteria described under the Federal Educational Opportunity Grants. These California grants make possible smaller loan and employment aids.

Other special aid opportunities include short-term loans of up to \$100 which are interest free for 3 months; scholarships for students who need aid, have been at Sonoma State College for two semesters and show high academic promise.

### *Alan Pattee Scholarship*

#### *(Children of Deceased Peace Officers or Firemen)*

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

*Federally Insured Loans* are designed for middle income students. Any student whose family's adjusted gross income is less than \$15,000 per year is eligible to receive up to \$1,500 through this program. The funds are distributed by banks, not by Sonoma State College. Students may pick up application forms in the Financial Aid Office. These loans bear 7% interest which the Federal Government pays while the student is in school.

### *Application Procedure*

First step is to file an application available at the Financial Aid Office. This form asks confidential information about student resources, estimated expenses, and kinds of aid applied for. It should be filed by April 1 each year for aid in the following year, and by November 1 for aid in the spring semester. If these deadlines are not met, the student is unlikely to be considered.

The college also requires the filing of the Parent Confidential Statement (PCS) which asks confidential information about family income, assets, expenses, etc. which the College Scholarship Service and the Financial Aid Office reviews in order to help determine what, if any, aid the student is eligible for. This statement should accompany the application.

If a student claims financial independence from his parents, this claim must be substantiated by the parents, and a special form is provided at the Financial Aid Office for this purpose. The College takes the position that parents have the primary obligation to help meet educational expenses. Therefore, the college will assist only when it is clearly established that the student has been independent for at least one year or when parents are unable to assist. Normally, such students are married or over 25 years old. When the applications are complete, the student's financial need is determined by subtracting those resources available for his education (parents' contribution from income and assets, summer job saving, and the student's other resources) from his educational budget from September to June. The typical budget is \$2,000 for a single student, \$3,000 for a married student.

It is toward meeting this need—difference between costs and resources—that financial aid is directed. Generally, the need is met by a "package", or "combination" of ingredients—loan, employment, and/or

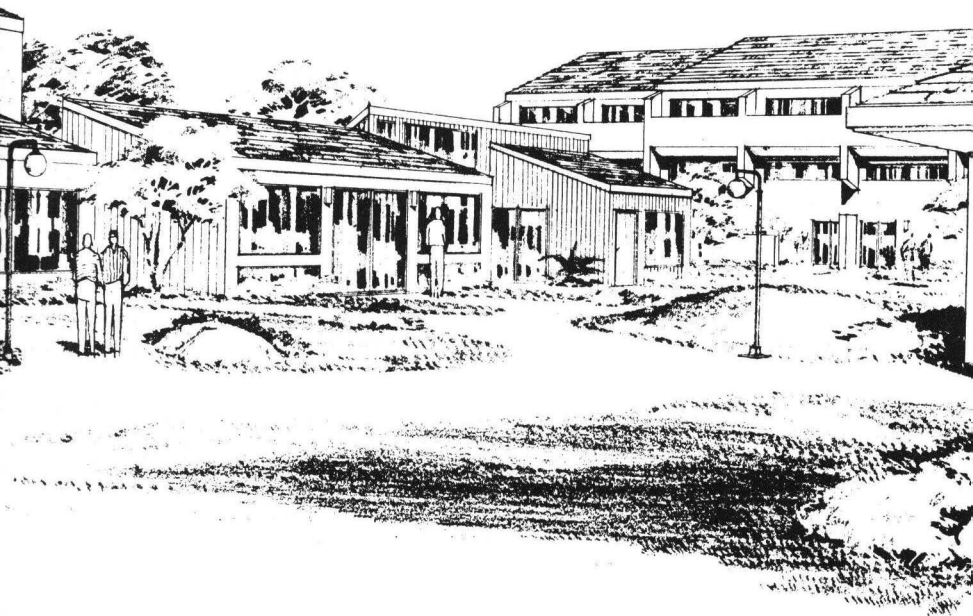
## **Student Personnel Services**

grant. Where feasible, the student's preferences are considered. For example, an outside job and a heavy course load may cause one student to prefer a loan over a Work-Study assignment. Another student, not wishing to borrow, might prefer to earn up to \$1,000 through part-time work in the Work-Study program.

Notification of aid for the following year is sent to each applicant in June.

When a student has a subsequent change in status (gets married, has a child) the Financial Aid Office should be notified. 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 \$100 repayable without interest in 3 months, may meet special needs.

*Appeal* of a financial aid award (or non-award) may be made in writing to the Chairman of the Financial Aid Committee of the Student Affairs Council. The Committee may ask the student to present his appeal in person.



**SPECIAL  
FEATURES**



# SPECIAL FEATURES

## LIBRARY

A. S. Pickett, College Librarian

Richard Bellamy, Barbara Biebush, Peter Briscoe, Patricia Chapman, Jean Day, Johanna Fritsche, Alice Holmes, Alexander Karolyi, Antoinette Maleady, Lenore Radtke, Ann Tucker, Sandra Walton, Patricia Wollter.

The new college library building, occupied in 1970, provides study space for 600 students. The college library book collection consists of 155,000 volumes and expands at the rate of 25,000 volumes annually. The periodical collection consists of 20,000 bound volumes and subscriptions exceed 2,500. Augmenting the bound periodicals is a file of microfilms totaling over 10,000.

The first floor of the library houses the card catalog, bibliography area and circulation department. Near the card catalog is the information desk where assistance is available to students. Regular books and reserve books are checked out at the circulation counter. The office of the College Librarian, the acquisitions department and catalog department are also located on the first floor.

The book stacks on the second floor contain the periodicals collection and reference books as well as the circulating collection. The periodicals indexes and abstracts are adjacent to the periodicals collection. The books are arranged by the Library of Congress classification letter and number.

In the center of the second floor are the reference offices staffed by trained librarians available at all times to assist students in their reference and reading problems.

Adjacent to the reference offices is the phonolisting area where there are 22 listening stations for tapes and records. In addition, this room has four individual listening booths for students. There is also two group listening rooms for class or informal group listening. The collection consists of over 7,500 phonorecords, tapes and cassettes.

The documents room for the local, state, and federal documents; a pamphlet room, and a microform room are also located in the center of the building. An extensive microcard, microfiche and microfilm collection as well as reader-printers are located in this room. The microfilm room also carries 100,000 microfiche of ERIC (Educational Resources Information Center) which are primarily useful in the field of education.

The library also has a collection of juvenile literature and is the regional depository for curriculum material published by school districts in California. An extensive elementary and secondary textbook collection is also maintained.

Copying machines, group study rooms and typing room are also available for student use.

## **Special Features**

### **TUTORIAL LEARNING CENTER**

The Tutorial Learning Center offers tutoring services to all Sonoma State College students at no charge. The center is open five days a week from 9 a.m. until 4 p.m. English and mathematics tutors are available daily. Some tutors are graduate students who can assist in lower division and upper division course offerings. Students wishing assistance in specific subject areas should come to the center and register. Tutors will be assigned on a "first come, first served" basis.

Students wishing to serve as tutors may make application with the center director. Additional information can be obtained by calling extension 2429. The Tutorial Center is located on the second floor of the Library, Room 59.

### **SIMULATION LABORATORY FOR THE SOCIAL SCIENCES**

In the fall of 1970 the Simulation Laboratory for the Social Sciences was opened on the second floor of Stevenson Hall. Designed and equipped to facilitate the simulation of real and imagined social, political, and administrative problems, the laboratory makes it possible for the student to learn to cope with some of the factors in real life situations.

The laboratory has nine decisionmaking posts from which teams of students can play various competitive or cooperative roles common to real life. A complete closed-circuit television system permits videotaping of simulations and gaming sessions for evaluation and review.

Mobile videotape units make it possible to use an ordinary classroom anywhere on campus, and portable units, operating on batteries, are used throughout the College service area for field projects, often in cooperation with local school districts.

A library of instructional games relevant to the social sciences is being developed for use by professors and student teachers.



## CONTINUING EDUCATION PROGRAM

### EXTENSION—SUMMER SESSIONS

The Office of Instructional Services and Continuing Education, Sonoma State College, provides year around continuing education opportunities for adults in the College's six county service area. The program is designed to extend the educational strengths of the College to serve adults throughout the six county service area, including courses for specific persons employed in school districts, governmental agencies, industries, and other organizations. The continuing education program is closely related to the total College with every attempt being made to ensure that it reflects the educational philosophy and faculty strengths of the resident College and at the same time serve the varied needs of an adult six county community. The continuing education program is twofold: the summer sessions program offering courses for resident credit; and the extension program which also includes both credit and non-credit extension courses, institutes, workshops, seminars and conferences, and travel study programs for extension credit.

The Summer Sessions program, mainly offered on-campus, includes courses offered during the academic year in order that those students who wish to do so may accelerate the attainment of their degrees and credentials. In addition, the Summer Sessions include many courses, workshops, institutes, and demonstration schools, designed to give special opportunities for the improvement of professional competence and the stimulation of renewed scholarly study. Resident credit is offered for Summer Session courses.

The three summer sessions include the one-week intersession, the regular six-week summer session, and the three-week post session. With classes meeting five days a week, the general rule is that one unit of semester credit may be earned for each week of attendance. Thus, in the ten weeks of the three summer sessions a student may earn a total of ten units of semester credit, either graduate or undergraduate. It is not necessary for enrollees in the summer sessions or extension courses to formally matriculate for admission at Sonoma State College by filing transcripts, taking entrance examinations, etc.

The extension programs are offered mainly during the academic year in order to allow students to also participate in the College's Summer Session program. Courses are offered in both on-campus and off-campus locations. Continuing education programs offered in our off-campus locations are presented in conjunction with a cooperating agency which expresses a need for the program and assists in the administration of the offering.

The extension credit, offered for extension study provided in each of the College's subject areas, may be applicable toward degree, credential, and other in-service and continuing educational objectives. Special

## **Special Features**

non-credit programs are also offered for those who desire to meet their needs for continuing education in an organized manner.

Subject to the approval of the department concerned, all extension courses may count toward college degrees and/or school service credentials except that no more than twenty-four units of extension credit normally may be counted toward the baccalaureate degree, nor more than six toward the master's degree. Students who plan to become candidates for a degree must file with the College Admissions Office.

In cooperation with the Center for the Performing Arts, continuing education cultural programs are presented by choral, drama, dance, Jazz, opera, and orchestra performing groups both on campus and for groups of students and adults in locations throughout the College's six county service area.

Requests for the Summer Session 1972 Catalog, the Extension Bulletin, or other information regarding either the extension or summer session programs should be sent to the Office of Instructional Services and Continuing Education.

### **MEN'S INTERCOLLEGIATE ATHLETICS**

An athletic program is available at the Varsity level for those students who wish to participate in intercollegiate competition. The college currently competes in cross country, basketball, football, wrestling, track and field, golf, tennis, fencing, gymnastics and baseball. Water polo, swimming, and soccer will be added to the program at an appropriate time in the growth of the college.

Sonoma State College is a member of the Far Western Intercollegiate Athletic Conference. Other conference schools include University of California at Davis, Chico State College, Humboldt State College, California State College at Hayward, Sacramento and San Francisco State Colleges.

### **WOMEN'S INTERCOLLEGIATE ATHLETICS**

The intercollegiate athletic program for women includes: field hockey, fencing, gymnastics, volleyball, basketball, tennis, track and field, cross country and softball. This program will be expanded with student interest, participation and when faculty are available. Sonoma State College is a member of the Northern California Women's Intercollegiate Council. Member schools include 16 colleges and universities in this area.

### **INTRAMURALS**

An intramural athletic program for all students is currently offered which includes flag football, cross country, basketball, horseshoes, swimming, etc. A full listing of the sports offered is included in the Sonoma State College Intramural Sports Handbook.

**INTERNATIONAL PROGRAMS**

A study-abroad program of global scope is offered by the California State University and Colleges International Programs. Year-long study opportunities for students from all nineteen campuses are available at distinguished institutions of higher learning throughout the world.

Cooperating universities abroad include the University of Provence, France; the Free University of Berlin and the University of Heidelberg, Germany; the University of Florence, Italy; the University of Stockholm and the University of Uppsala, Sweden; the University of Madrid and the University of Granada, Spain; Tel Aviv University and the Hebrew University of Jerusalem, Israel; Waseda University, Japan. In the United Kingdom, cooperating universities, which may vary from year to year, have included Dundee, Leicester, Liverpool, London, Oxford, Sheffield, Southampton and Wales.

An area studies program, with instruction in English, is also available in Taiwan, Republic of China.

Selected students remain enrolled and continue to earn residence credit at their California State College campus. Full credit is earned for academic work successfully completed at the cooperating institutions abroad. Application of credit earned toward the degree requirements of the home campus is in accordance with college regulations. Students are selected from each campus on the basis of academic, linguistic and personal qualifications, as well as career objectives. Requirements include:

Upper division or graduate standing by the beginning of the academic year abroad.

Grades of B or better in 30 semester units or 45 quarter units.

Proficiency in the language of instruction, as specified below.

Faculty recommendations.

Proficiency in the language of the host country is a requirement for the Programs in France, Germany, Italy (except for students applying for the area studies program), and Spain. Even where language proficiency is not required, however, competence in the language of the host country will assure broader curricular opportunities.

Average expenses for the entire year—including round-trip transportation between California and the study centers, room and board, health and accident insurance, home campus fees, moderate vacation traveling, textbooks, and personal expenses—range from \$2,600 to \$3,050. Students ordinarily remain eligible for any financial aids for which they otherwise would qualify on their home campus.

Application for the 1973-74 academic year must be submitted before March 1, 1973 (except for United Kingdom applicants who must submit applications by January 5, 1973. Detailed information may be obtained from the Student Personnel Office or by writing to the Cali-

## **Special Features**

fornia State University and Colleges International Programs, 5670 Wilshire Boulevard, Los Angeles, California 90036.

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 College 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.



**DEGREES AND  
CREDENTIALS  
PROGRAMS**

# BACHELOR OF ARTS DEGREE

(Fields for Majors and Minors)

## OLD SCHOOL

<i>Division</i>	<i>Majors</i>	<i>Minors</i> °
American Ethnic Studies	Afro-American Studies Mexican-American Studies	Afro-American Studies Mexican-American Studies
Education and Psychology	Physical Education Psychology	Physical Education Psychology
Humanities	Art English French German India Studies Music Philosophy Spanish Theatre Arts (Drama)	Art Drama English French German Linguistics Music Spanish Theatre Arts (Drama)
Natural Sciences	Biology Biology-Mathematics Chemistry Geology Mathematics Physics	Biology Chemistry Geology Mathematics Physics
Social Sciences	Anthropology Economics European Studies Geography History Management Political Science Sociology	Anthropology Economics Geography History International Studies Management Political Science Sociology

## HUTCHINS SCHOOL OF LIBERAL STUDIES

Hutchins School of Liberal Studies	Liberal Studies
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## SCHOOL OF ENVIRONMENTAL STUDIES

School of Environmental Studies	Liberal Studies—Environmental Studies Liberal Studies—Urban Studies
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## SCHOOL OF EXPRESSIVE ARTS

School of Expressive Arts	Liberal Studies—Expressive Arts
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## MINIMUM REQUIREMENTS FOR THE DEGREE

General Education .....	40 units †
Major .....	24–36 units
Minor and/or electives .....	48–64 units
Minimum requirements for the bachelor of arts degree.....	124 units

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

† Credential candidates should consult with an advisor in the Department of Education about fulfilling both the College General Education requirements and credential General Education requirements, since there are differences between the two sets of requirements.

## BACHELOR OF SCIENCE DEGREE

(Fields for Majors and Minors)

*Division*

Natural Sciences

*Majors*

Chemistry  
Physics  
Mathematics  
Nursing

*Minors*

Chemistry  
Physics  
Mathematics

## GRADUATION REQUIREMENTS

Candidates for graduation should file a "Request for Degree and/or Credential" form with the Admissions and Records Office two semesters prior to the anticipated date of graduation. This will enable the Evaluations Office to check and determine remaining requirements before the opening of the final semester. A thorough reading of this catalog will assure that one is aware of all requirements. In addition, the following general rules should be kept in mind:

1. A minimum of 124 units is required for the BA degree.
2. At least 40 units of upper division (courses numbered 300-499) work must be included in the degree program.
3. Twelve of the last 20 units must be completed in residence study at Sonoma State College.
4. Twenty-four units in residence (work completed at Sonoma State College) is the minimum required for graduation.
5. A grade point average of C (2.0) or better is required in work undertaken at Sonoma State College as well as in the student's total undergraduate work 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 or P/NC limits.
6. A maximum of 24 semester units earned in correspondence and extension studies may be applied toward degree requirements. Of the 24 maximum only 12 units may be transferred from another college or university.
7. Total of not more than 6 units of 295 and 395 courses and 495 and 499 courses may be counted toward graduation without approval of the provost of old school.
8. California law specifies that in order to receive a bachelor's degree, students must fulfill requirements in U.S. History and Constitution and California State and Local Government. These requirements may be fulfilled in either of two ways:
  1. By taking *one* of the following courses:

History 250, 250A History 251, 251A Political Science 200	}	These courses may also be used to fulfill General Education requirements.
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  2. By taking an examination administered by either the History Department of Political Science Department under authority of the Division of Social Sciences.
9. All specific major, and General Education requirements must be completed. (For General Education requirements see page 74.)
10. During the junior or senior year a test of competence in English composition must be passed or a grade of C or better earned in an advanced composition course taken at Sonoma State College.



## **Degrees and Credentials Programs**

11. A student who is in a period of continuous attendance at the time of filing application for degree and/or credential may elect to meet the catalog requirements in effect at the beginning of his last previous period of continuous attendance or at the time of completion of the curriculum. A student is considered in continuous attendance if he 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 and/or credential must meet the catalog requirements in effect at that time. Special exceptions may be made for students on active military duty.

12. After a degree is posted to a student's permanent academic record, that record is closed. It will not at a later date be changed to show grade changes, name changes, make-up of incomplete work, nor will incomplete grades be charged as units attempted. A closed record will not be changed.

Degrees are awarded in January, June and August. Commencement ceremonies are held once a year, in June.

ALL STUDENTS GRADUATING FROM SONOMA STATE COLLEGE AND WISHING TO CONTINUE FOR ADDITIONAL STUDY MUST MAKE APPLICATION FOR ADMISSION DURING THE NORMAL APPLICATION PERIOD. (CONTINUING STUDENTS ARE EXEMPT FROM THE APPLICATION FEE.)

### ***Honors at Graduation***

Two types of honors at graduation are awarded by the College to students meeting the criteria listed below:

"With Honors" are granted upon award of the baccalaureate degree to candidates whose entire collegiate scholastic record indicates a minimum grade point average of 3.30.

The following conditions also must be met by all candidates to be considered for honors:

1. A minimum of 45 semester units offered for the degree must have been earned in resident study at Sonoma State College. In exceptional cases this condition may be petitioned to the College Standards Committee.
2. The grade point average of all work completed at Sonoma State College must meet a minimum grade point average of 3.30.

An honors list will be computed on the basis of all work excluding the last semester. Those meeting honors requirements on this basis will be designated on the commencement program as "eligible for honors."

## ***Degrees and Credentials Programs***

The actual honors list will be computed on the basis of all work necessary for the degree.

“With Distinction” will be awarded to a student who is judged by his department to have made an outstanding contribution to his discipline. The psychology department does not practice the award of either variety of honors.

## GENERAL EDUCATION

The program of General Education at Sonoma State College is intended to provide students with a general intellectual point of reference and a common foundation of knowledge for specialized study leading to the bachelor's degree. More specifically, the courses are intended to serve a three-fold purpose within the framework of a liberal education.

To acquaint the student with those human achievements in philosophy, science, the letters and the arts which are of recognized universal value.

To help make the student aware of himself and of his relation to his natural, physical, and intellectual environment.

To make the knowledge which the student acquires relevant to the intellectual, social and ethical problems of his time.

### ENTERING FRESHMEN

Entering Freshmen will fulfill the General Education requirements of the college through either of two methods, or a combination thereof:

1. Satisfactorily complete the prescribed courses in each area listed below.
2. Satisfactorily complete courses listed below either through "Credit by Examination" or by a recognized comprehensive examination, for which appropriate credit will be allowed in General Education.

### *Humanities*

General Education requirements in the Humanities may be fulfilled by *either* of the two programs indicated below. Students should choose the program that best fits their interests and class schedules.

#### *Option I:*

Humanities 201, 202. <i>Introduction to Humanistic Studies</i> .....	12 units
An integrated examination of art, literature, philosophy and the performing arts. Fulfills General Education requirements in the Humanities and in English Composition. Six units each semester. Humanities 201 is a prerequisite to Humanities 202. (The English composition part of these courses applies toward the Basic Subjects requirement as noted below.)	

#### *OR Option II:*

English 101A (applies to Basic Subjects) .....	3 units
English 101B or Literature Course (including Foreign Literature in translation) .....	3 units
Art 212, 250, 210, or 211 or Music 250 or Theatre Arts 270 .....	3 units
Philosophy 100 .....	3 units
Total .....	12 units

## **Degrees and Credentials Programs**

### ***Social Sciences***

**8 units**

General Education requirements in Social Sciences may be fulfilled by at least 2 courses, in two different fields, chosen from the following to total 8 units.

- Anthropology 203. Introduction to Cultural Anthropology (4 units)
- Economics 201. Introduction to Economics (4 units)
- Economics 203. The Third World: Problems and Prospects (4 units)
- Economics 220. Urban Crisis (4 units)
- Geography 201. Introduction to Physical and Cultural Geography (3 units)
- History 111. Foundations of World Civilization (3 units) PLUS
- History 111a. Colloquium in above (1 unit)
- History 112. Development of the Modern World (3 units) PLUS
- History 112a. Colloquium in above (1 unit)
- History 250. A History of the United States to 1865 (3 units) PLUS
- History 250a. Colloquium in above (1 unit)
- History 251. A History of the United States Since 1865 (3 units) PLUS
- History 251a. Colloquium in above (1 unit)
- Management 225. Law and Society (4 units)
- Political Science 200. American Government (4 units)
- Sociology 201. Principles and Procedures in Sociology (6 units)
- Sociology 250. Survey of Sociological Theory (4 units)

With the approval of the Division Chairman, the student can take any other courses in Social Sciences to total not less than 8 units.

### ***Natural Sciences***

**9 units**

General Education requirements in the Natural Sciences may be fulfilled by choosing 2 or more courses (to a total of 9 units or more) from the following list. The courses chosen must include at least one in the biological sciences and one in the physical sciences, including one laboratory course.

### ***Biological Sciences***

- Biology 110. Evolution of Life on Earth (3 units)
- Biology 111. Man and His Environment (3 units)
- \*Biology 112. Introduction to Oceanology (3 units)
- \*Biology 113. Molecules and Man (3 units)
- Biology 114. Introduction to Behavioral Biology (3 units)
- Biology 115. Principles of Life Science (4 units)
- Biology 116. Plant Science (4 units)
- Biology 117. Animal Sciences (4 units)
- Biology 200. Trees and Shrubs (3 units)
- \*Biology 305. Environmental Conservation (3 units)
- Biology 314. Field Biology (3 units)
- \*Biology 332. Plants and Civilization (3 units)

### ***Physical Sciences***

- \*Astronomy 100. Descriptive Astronomy (3 units)
- \*Astronomy 200. Introductory Astronomy (3 units)
- \*Astronomy 300. Cosmology and Extraterrestrial Intelligence (3 units)
- \*Chemistry 102. Fundamentals of Chemistry (3 units)
- Chemistry 103. Fundamentals of Chemistry Laboratory (1 unit)

\* Non-laboratory course.

## Degrees and Credentials Programs

- Chemistry 115A. General Chemistry (5 units)
- Chemistry 125A. General Chemistry (5 units)
- Chemistry 302. Chemistry and the Environment (3 units)
- Geology 102. General Geology (3 units)
- Geology 115. Physical Geology (4 units)
- \*Physics 100. Descriptive Physics (3 units)
- \*Physics 114. Introduction to Physics I (3 units)
- Physics 116. Introductory Laboratory Experience (1 unit)
- Physics 210A. General Physics (4 units)
- \*Physics 300. Physics of Music (3 units)
- \*Physics 301. The Relation of Physics to Society (3 units)

## Ethnic Studies

4 units

General Education requirements in Ethnic Studies may be fulfilled by choosing one of the following courses or another course selected with approval of the advisors from the American Ethnic Studies Division.

- AAMS 250. An Analysis of Afro-American Culture (2 units)
- AMES 210. Ethnic Groups in America (4 units)
- MAMS 220. Mexican-American Culture (4 units)
- NAMS 200. Introduction to American Indians (4 units)

## Basic Subjects

3 units

The English Composition part of the Humanities courses applies toward partial fulfillment of the requirement in Basic Subjects. In addition, the student must take *one* of the following courses:

- Mathematics 107. Algebra and Trigonometry (4 units)
- Mathematics 114. Mathematical Elements for Freshman Science Courses
- Mathematics 115. Fundamentals of Mathematics (3 units)
- Mathematics 117. Mathematics for the Social Sciences (3 units)
- Mathematics 140. Calculus I or Mathematics 162. Calculus with Applications I (4 units)
- Mathematics 165. Elementary Statistics (3 units)
- Mathematics 190. Calculus II (4 units)
- Philosophy 200. Introduction to Logic (3 units)

## Electives

4 units

In order to complete the 40-unit General Education requirements for graduation, the student may elect one or more courses from the following areas.

- Psychology 200.* Human Behavior (4 units)

### Classical Studies

Some departments offer courses in Classical Studies as a General Education elective. Classical Studies are designated by the course number 313 under individual department headings. "Classical Studies" courses take an important text (in translation when required) for intensive study both of the text itself and its influence and other implications.

\* Non-laboratory course.

## **Degrees and Credentials Programs**

### *Language Studies*

- French 100X, 200X. Intensive French (9-9 units)
- French 101, 102. Elementary French (4-4 units)
- French 201, 202. Intermediate French (3-3 units)
- French 315. The Contemporary French Novel in Translation (3 units)
- French 316. The Contemporary French Theater in Translation (3 units)
- German 100X, 200X. Intensive German (9-9 units)
- German 101, 102. Elementary German (4-4 units)
- German 201, 202. Intermediate German (3-3 units)
- German 306. German Culture and Civilization (2 units)
- German 307. German Culture and Civilization (2 units)
- German 340. German Literature in Translation (3 units)
- Russian 101, 102. Elementary Russian (5-5 units)
- Russian 201, 202. Intermediate Russian (3-3 units)
- Russian 310. Survey of Russian Literature in Translation (3 units)
- Russian 311. Survey of Russian Literature in Translation (3 units)
- Spanish 101, 102. Elementary Spanish (4-4 units)
- Spanish 201, 202. Intermediate Spanish (3-3 units)
- Spanish 315. Spanish Literature in Translation (3 units)
- Spanish 316. Spanish-American Literature in Translation (3 units)
- Spanish 485. The Culture and Civilization of Spain (3 units)
- Spanish 490. The Culture and Civilization of Spanish America (3 units)

### *Physical Education*

- Physical Education 100. Scientific Basis of Health and Physical Education (2 units)
- Physical Education 101. Physical Education Activities (1 unit)

No courses chosen to fulfill General Education requirements may be used to fulfill requirements in a major.

Substitutions for specific courses may be made with the approval of the student's advisor and the chairman of the appropriate department. Petitions for substitution are available in the Registrar's Office.

## **TRANSFER STUDENTS**

Sonoma State College accepts the certification from a junior college that the 40-unit General Education requirement has been fulfilled. However, a transfer student who is not certified in all areas at the time of entrance may complete the area requirements by choosing appropriate courses from those listed above, or by choosing from the following courses:

### *Humanities*

Students who are partially certified or not certified from the Community College as having met the Humanities requirement may fulfill the Humanities General Education requirement by selecting appropriate courses from Option I or Option II. See page 74.

### *Natural Sciences*

One course each in the Physical and Biological Sciences, one with a laboratory.

## **Degrees and Credentials Programs**

### ***Social Sciences***

Any course in Anthropology, Economics, Geography, Sociology, Political Science, Management, or History for which prerequisites have been completed. Such courses should be chosen in consultation with advisor.

### ***Basic Subjects***

English 101 A or B (3 units) or Speech and Mathematics or Logic, or Mathematical Statistics.

### ***Electives***

One or more of the courses listed under *Electives* on page 76 with no more than 8 units selected from the Electives area. Ethnic Studies may be chosen as an elective for transfer students.

## GRADUATE STUDY AT SONOMA STATE COLLEGE

All students wishing to enter the graduate program must make application for admission to the college, whether graduates of Sonoma State College or some other institution. See also "Continuing Graduate Study" on page 31.

Graduate students at Sonoma State College fall into three categories: unclassified graduate students, teaching credential candidates, and classified graduate students.

1. *Unclassified students.* A student without a degree or credential objective (or who has not yet been accepted by a department into an M.A. program) may apply for admission to the college as an unclassified graduate student and allowed to accumulate up to 24 units of credit. Such a student must file, at the time of application, an official transcript showing that he has received a baccalaureate or higher degree from an accredited college or university. Many students planning to work for Master's Degrees enroll as unclassified students and are transferred to classified status when they secure departmental approval.\*
2. *Classified students.* Classified graduate students are those who have been accepted by one of the departments as candidates for the degree of Master of Arts. No student, of course, can achieve classified status until he is admitted to the college. All students desiring classified status should come to the office of the provost of old school to pick up the mimeographed instructions, "Steps Toward the Master's Degree." (The Provost of Old School is presently serving as the College Coordinator of Graduate Studies.) As they are completed, these forms are posted to the student's permanent record in the Office of Admissions and Records. See page 80 for information concerning M.A. degree programs.
3. *Teaching credential candidates.* Increasing enrollment pressures and limited openings in the credential programs make it expedient to complete both the application for admission to the college and to the desired credential program at the time shown in the "Academic Calendar" in this catalog for both deadline dates. See page 82 for information concerning credential programs.

\* The M.A. Programs in Psychology and Political Science are exceptions. Applicants for these programs should secure acceptance by the department as a prerequisite for admission to the college; enrollment in them is limited and students should not pay any fees prior to departmental acceptance. No unclassified students are accepted in Graduate courses in Psychology or Political Science. See the description of the program in the Psychology and Political Science sections of the catalog.



## MASTER OF ARTS DEGREE

### (Fields for Majors)

The Master of Arts degree at Sonoma State College is designed to improve the candidate's professional competence, develop his ability for independent study, and afford him an opportunity to increase his cultural background.

The college offers master's degree programs in the following disciplines at present. Additional offerings will be added from time to time as the college continues to expand:

Biology	Mathematics
Counseling	Physical Education
Education	Political Science (Political involvement emphasis)
Reading Emphasis	Psychology
Special Education Emphasis	Spanish *
English	
History	

### *Minimum Requirements for the Degree*

Minimum requirement .....	30 units
Minimum in 500-numbered courses .....	15 units
Minimum in major field .....	18 units
Residence requirement .....	24 units

### *Additional Regulations:*

1. At least 15 units must be taken after admission to classified Graduate Standing.
2. A maximum of 6 units of extension or transfer credit, or combination of the two, may be allowed, subject to the approval of the department or division concerned.
3. Student teaching is not acceptable toward a master's degree.
4. A maximum of 6 units of credit may be granted for the master's thesis.
5. A candidate must have a 3.0 (B) grade point average in all course work taken to satisfy the requirements for the degree.
6. A candidate must complete a master's thesis, a creative project, or an investigative project which will be subject to approval by the candidate's committee and the Graduate Studies Committee.
7. For special regulations applying to particular degree programs, consult the section of this catalog under the departmental title.

### *Provisional Unclassified Graduate Status for Senior Students*

Any student in his final semester before award of the baccalaureate degree by Sonoma State College may petition for provisional unclassified graduate credit. The petition may include any upper division and graduate level courses he will complete in the final semester that are not required for the baccalaureate degree. The petition for provisional unclassified graduate status must be filed at the same time as the application for the award of the degree. See education department for advisability, if seeking a teaching credential.

\* Not offered 1972-74.

## ***Degrees and Credentials Programs***

The following procedure will apply:

1. Courses taken in provisional graduate status will be recorded in the student's record as courses taken prior to the award of the baccalaureate degree but allowed provisional unclassified graduate credit.
2. Only courses numbered upper division and graduate will be allowed.
3. Courses taken in provisional unclassified graduate status may, at the discretion of the department involved, be applied to any graduate objective but there is no guarantee that they will.
4. If a student fails to complete the baccalaureate degree at the date specified on his application, the petition for provisional unclassified graduate credit becomes null and void.

## CREDENTIAL PROGRAMS

Admission to the college does not constitute admission to credential programs. Application is made separately at the Department of Education.

### CREDENTIALS FOR PUBLIC SCHOOL SERVICE

Sonoma State College offers courses leading to the Standard Teaching Credential with specializations in elementary and secondary teaching, and special education and early childhood education. A program leading to a pre-school instruction permit is also available.

The College is accredited by the State Board of Education.

Detailed information regarding professional requirements, and requirements for teaching majors and minors may be obtained in the Department of Education.

Students who plan to work toward a teaching credential should go to the Education Department during their first semester at the college for assignment of an education advisor.

### REQUIREMENTS FOR ADMISSION TO TEACHER

#### EDUCATION PROGRAMS

The requirements for admission to Elementary and Secondary Teacher Education Programs for all students, including transfer graduate students, are:

1. Accumulative grade point average of 2.5 or higher, or an upper division and graduate grade point average of 2.75 or higher.
2. Approval of the Department of Education and the major department. The number of applicants for admission to credential programs at Sonoma State College has increased to such an extent 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 recommendations from the major departments as well as to the interviews required of each applicant. Only candidates who can demonstrate promise of success and fitness will be recommended for admission to a teacher education program.
3. Passage of Written English Skills Test.\*
4. Health clearance prior to student teaching.
5. Candidates must demonstrate their ability to satisfy all requirements for the major and degree by the end of the Summer Session following their second semester of student teaching.

### STANDARD TEACHING CREDENTIAL

(Elementary Teaching Specialization)

Holders of this credential will be authorized to teach in kindergarten and grades one to nine, inclusive. Most majors offered at Sonoma State

\* This test is administered in English 375 (Advanced Composition). Passage of this course with a grade of C fulfills this requirement.

## Degrees and Credentials Programs

College are acceptable teaching majors for the Elementary Credential. Prospective teachers should consult with the Education Department regarding suitability of majors for teaching purposes.

There are two options available to students for the completion of the program leading to the Elementary Credential, both of which require 30 *upper division* post degree units. Under one option—the five-year option—the student may take a regular four-year undergraduate program satisfying major requirements, and take all of his professional work in his post-degree year.

Under the other option—the four-year option—the student will complete requirements for the major in his four years of undergraduate work, will only partially satisfy credential requirements for the minor, and will partially satisfy professional requirements, including student teaching, during his senior year. Upon graduation from the college he will be granted the Standard Teaching Credential with a specialization in Elementary Teaching under a "Postponement of Requirements" provision which will make it possible for him to satisfy the remaining minor and professional requirements, and the 30-unit upper division post degree requirement, in the succeeding seven years.

### PROFESSIONAL REQUIREMENTS

#### *Sequence of Courses*

#### *4 Year Elementary Program—Sonoma Undergraduates*

##### *Senior Year:*

##### *1st Semester:*

Educ. 405A .....	(4)
Educ. 407 .....	(3)**
Educ. 402 .....	(2)*
Electives † .....	(6)

Total ..... (15)

##### *2nd Semester:*

Educ. 405B .....	(5)
Educ. 400 .....	(2)
Educ. 403 .....	
or .....	
Educ. 408 .....	(2)
Electives † .....	(6)

Total ..... (15)

#### *5 Year Elementary Program—Sonoma Undergraduates*

##### *Post Degree Year:*

##### *1st Semester:*

Educ. 405A .....	(4)
Educ. 402 .....	(2)*
Educ. 407 .....	(3)**
Art, Music or P.E. 400 .....	(2-3)
Psych. 417 .....	(4)

Total ..... (15-16)

##### *2nd Semester:*

Educ. 405B .....	(5)
Educ. 400 .....	(2)
Educ. 403 .....	(2)
Educ. 408 .....	(2)
Educ. 410 .....	(3)

Total ..... (14)

#### *5 Year Elementary Program—Transfer Graduate Students*

Same as for 5 year elementary program for Sonoma State undergraduates. Math. 300 and Eng. 400, or equivalents, should be taken prior to entry. May be taken concurrently with Educ. 402 and Educ. 407 in 1st semester. This will necessitate deferring Art, Music or P.E. 400 and Psych. 417 to the following summer session—or deferring the 1st semester of student teaching, thus extending the student's program over a 3 semester period.

† Should be in major field if major is not completed. Eng. 400 and Math. 300 may be taken in 1st semester, concurrently with Educ. 407 and Educ. 402 if major can be completed by end of following summer session.

\* Math. 300 is prerequisite. May be taken concurrently in lieu of Art, Music or P.E. which would be deferred to summer session following 2nd semester of student teaching. Elementary credential candidates will have a minimum of six units of mathematics. This is accomplished by requiring three units of college mathematics, or its equivalent as a prerequisite to Math. 300. The prerequisite to Math. 300, if unavoidable, may be taken concurrently with Math. 300.

\*\* English 400 is prerequisite. May be taken concurrently in lieu of Psych. 417 which would be deferred to summer session following 2nd semester of student teaching.

## Degrees and Credentials Programs

Deferred Requirements: (To be completed within seven years.)

Psych. 417 .....	(4)	Art, Music or P.E. 400.....	(2-3)
Educ. 410 .....	(3)	Educ. 403 or 408.....	(2)
		General Electives .....	(18-19)

### MINOR FIELD FOR ELEMENTARY CREDENTIAL CANDIDATES

Neither the State of California nor the college require a minor for this credential. However, it is of importance to the employability and professional future of the candidate that he discuss with his major and education advisors the value, in his case, of completing a minor.

### STANDARD TEACHING CREDENTIAL

*(Secondary Teaching Specialization)*

Holders of this credential will be authorized to teach their major or minor subjects in grades 7 through 12. Most majors and minors offered at Sonoma State College are acceptable for teacher preparation. However, choice of majors and minors should be discussed with an education advisor.

The majors and minors of students transferring from other colleges will be evaluated for acceptability by the appropriate instructional departments and the Education Department.

### PROFESSIONAL REQUIREMENTS

#### Post Degree Year

*Sequence of Courses*

#### *Semester I*

- |  |          |
|--|----------|
| 1. Social Foundations (Educ. 410) .....  | 3 units  |
| 2. Electives (300, 400, or 500 level at least) .....   | 11 units |
| (Including at least 6 units at 400 or 500 level in major and approved by your major department.) |          |

#### *Semester II (Student Teaching Semester)*

No courses other than the following may be taken during this semester.

- |                                     |                |
|-------------------------------------|----------------|
| 1. Psych. 417 .....                 | 4 units        |
| 2. Educ. 425A,B,C,D,E,F,G,J,K ..... | 9 units        |
| 3. Educ. 522A,B,C,D,E,F,G,J,K ..... | 3 units        |
|                                     | <hr/> 16 units |

Provided Education 410 is completed prior to student teaching, a student may enroll in the Semester II sequence first and complete the major and elective requirements in the semester immediately following student teaching.

Majors in Music and Art must follow the following sequence of courses:

#### *1st Semester:*

- |                              |            |
|------------------------------|------------|
| Education 522H or 522I ..... | (2)        |
| Education 410 .....          | (3)        |
| Education 425 Phase I .....  | (2)        |
| Electives* .....             | (8)        |
|                              | <hr/> (15) |

#### *2nd Semester:*

- |                                       |            |
|---------------------------------------|------------|
| Psychology 417 .....                  | (4)        |
| Education 425H or 425I Phase II ..... | (8)        |
| Education 426 .....                   | (1)        |
| Electives* .....                      | (2)        |
|                                       | <hr/> (15) |

\* Electives must be at 300, 400 or 500 level and must include at least six approved units in major.

## Degrees and Credentials Programs

### MINOR FIELD FOR SECONDARY CREDENTIAL CANDIDATES

Neither the State of California nor the college require a minor for this credential, except for non-academic majors. However, it is of importance to the employability and professional future of the candidate that he discuss with his major and education advisors the value, in his case, of completing a minor. In some fields, it is likely to be of great importance.

### STANDARD TEACHING CREDENTIAL

*(Early Childhood Education Specialization)*

*Pattern of Courses for the Credential*

#### *1st semester*

Education 433A	Student Teaching—Pre-School .....	(5)
Education 420	Child Development: Family, Child, School Interaction ...	(3)
Education 410	Social Foundations of Education .....	(3)
Education 437A	An Integrated Curriculum for Early Childhood Education .....	(4)

#### *2nd semester*

Education 405B	Student Teaching—Elementary School .....	(5)
Education 437B	An Integrated Curriculum for Early Childhood Education .....	(4)
Education 437C	A Developmental Approach to Reading .....	(2)
Psychology 416	Educational Psychology .....	(2)
Education 438	Supervision, Management and Evaluation of Early Childhood Education Programs .....	(2)

The legal requirements for the credential are met by requiring a B.A. degree with an acceptable major, a post-degree year of professional preparation, a course or test in U.S. Constitution, and a course in the teaching of reading, including phonics (Education 437C).

Students are screened and selected for the program following the procedures described for the elementary credential program. Each student is personally interviewed and a questionnaire related to the applicant's background in working with children and educational and autobiographical information is used.

### PROGRAM IN PRE-SCHOOL EDUCATION

#### *General Description*

The Pre-School Education Program is designed for those students who are interested primarily in the education of young children, from two to five years old. The courses are scheduled to enable such students to complete the program by the end of their senior year in college. The graduate will be eligible for an Instructional and/or Supervision permit authorizing work in children's center programs. The holder will be qualified to teach in any type of pre-school situation, public or private, in California.

## Degrees and Credentials Programs

### Prerequisites

1. Either (a) a major in Psychology, Anthropology or Sociology or an approved behavioral science or (b) a minimum of 12 semester units in Psychology including Psychology 402.
2. Junior standing, or above.
3. Persons actively working in programs involving young children may enroll in this program with consent of instructor to continue their career development.

### Admission Procedures

1. Fill out an application for admission form, available from the Education Department, Stevenson 3096.
2. Make an appointment with one of the instructors involved in the program, to whom the secretary will direct you. This instructor will become your program advisor.
3. At the time of your appointment with your advisor, the program will be explained, and your schedule of courses outlined. Be sure to bring your completed application form with you.
4. Make an appointment in the Counseling Office, Stevenson 2024, to take the Edwards Personal Preference Schedule. When the scoring is completed, see your advisor to discuss the results.

### Please Note:

Continuous evaluation will be made of each student's progress and growth by the student, the instructors of the required classes, the student's advisor and participating teachers, both individually and jointly. Therefore, acceptance into the program does not mean automatic completion of it by every student who is admitted.

### Sequence of Courses

<i>Junior year</i>		<i>Senior year</i>	
Educ. 431 .....	(3)	Educ. 432 .....	(3)
Educ. 435 .....	(3)	Educ. 433 .....	(4)
		Educ. 434 .....	(3)
<hr/>		<hr/>	
6		10	

### PROGRAM IN SPECIAL EDUCATION

The Special Education Program is designed to prepare personnel for service with mentally retarded children. Students completing a prescribed program of courses may obtain a restricted credential to teach educable mentally retarded and trainable mentally retarded children at both the elementary and secondary level. The credential program is taken during a student's fifth year since a baccalaureate degree is part of the minimum requirements for a teaching credential.

## **Degrees and Credentials Programs**

### *Admission Requirements (Special Education only)*

1. Three basic courses:
  - a. A course in child development or adolescent psychology
  - b. A survey course in exceptional children
  - c. A field experience course with exceptional children
2. Grade point average of 2.50 cumulative or 2.75 upper division
3. Graduate standing
4. Autobiographical composition to be written for special education faculty prior to interview. Composition to include information about social/emotional disposition, temperament, flexibility, resourcefulness, creativity, tolerance, humor, physical stamina, and interest in special education.
5. Completion of basic forms for credential program:
  - a. Admission to credential program
  - b. Health clearance
  - c. English proficiency examination\*
6. Interview with special education faculty

Enrollment in the program is limited and students will be taken into the program only during the fall semester of each academic year.

Students interested in preparing for service with exceptional children should meet with the coordinator of special education to discuss their plans during their junior or senior year.

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\* This test is administered in English 375 (Advanced Composition). Passage of this course with a grade of C fulfills this requirement.





CLUSTER SCHOOLS  
AND  
SPECIAL PROGRAMS



# HUTCHINS SCHOOL OF LIBERAL STUDIES

Warren E. Olson, Provost

Les Adler, Maurice Blaug, Michael Coleman, George Jackson, Marylu Mattson,  
Louallen Miller, Edgar Morse, Anthony Mountain, Jacqueline Strain,  
Richard Zimmer

The Robert Maynard Hutchins School of Liberal Studies was inaugurated in the Fall of 1969 as the first "cluster school" on the campus of Sonoma State College. The Hutchins School offers a broad, interdisciplinary liberal arts program for undergraduates and has a faculty drawn from a variety of academic disciplines. While autonomous in its academic program, the Hutchins School draws upon the resources and facilities of the parent school and cooperates in the formulation of over-all College policy.

The Hutchins School offers an integrated, problem-oriented education which enables the student to discover relationships between ideas and among the approaches of the various liberal arts and sciences. A common core of studies in the lower division draws heavily on the rich heritage of the Western tradition and on non-Western sources; students are encouraged to make that material their own through tutorials and independent study. The Hutchins School seeks to develop the student's sense of responsibility for his own continuing education. To that end, the program balances seminar learning with a gradually increasing emphasis on individual projects. Thus, in the upper division, a student typically devotes about one-half his time to independent study.

Since the seminar is the chief instrument of instruction, each student in the Hutchins School is responsible for helping to make the seminars work. The student is expected to be largely self-motivated, to keep up with assignments on his own initiative, and to participate fully in seminar discussions. In other words, the student must take an active, rather than passive, role in his own education. Grading is on a Pass/No Credit basis. At the end of each term the student receives a written evaluation of his work. If the level of his participation and achievement falls below that expected of students in the Hutchins School, he may be placed on probation, or given a "terminal" Pass, thereby necessitating a transfer to another school within the college. If a student receives the grade of No Credit in a lower division seminar he may not continue in the program unless he repeats that semester's work.

## ADMISSION

Students who have been admitted to Sonoma State College may apply for admission to the Hutchins School by writing to its Provost. A student seeking admission ordinarily should:

1. Be a first-time freshman, or a first-term junior.
2. Enter in the fall term.

First-term juniors will be admitted but only on the recommendation of a member of the Hutchins School faculty who has had an interview with the applicant.

### *Liberal Studies Degree Requirements*

Graduation from the Hutchins School of Liberal Studies with a Bachelor of Arts degree will depend on fulfilling the degree requirements specified for all graduates of Sonoma State College. In addition, graduates from the Hutchins School must:

1. Complete the two-year lower division seminar sequence of 48 units. (Students entering as Juniors may have this requirement waived.)
2. Complete an upper division area concentration of 40 units comprised of seminars, independent study, and special problems in the Hutchins School.
3. Satisfactorily complete a Senior Project.

## Liberal Studies

### LIBERAL STUDIES MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	40 units
Electives .....	44 units
Total .....	124 units

### LIBERAL STUDIES MAJOR COURSE REQUIREMENTS FOR THE B.A. DEGREE

301, 302, Junior Seminar .....	6 units
401, 402, Senior Seminar .....	6 units
310, 311, 410, 411, Independent Study .....	16 units
Any combination of:	
315, 316, 415, 416, Special Problems	
or	
320, 321, 420, 421, Elective Seminars .....	12 units
Total .....	40 units

### Curriculum

Lower division coursework in the Hutchins School consists of a sequence of four seminars (Liberal Studies 101-2, 201-2), each of which confers twelve units of credit. Seminars focus upon specific problems and draw materials from the Western tradition, non-Western sources, and the contemporary era. A major goal of these seminars lies in coming to grips with current problems in the light of their meaning and rootedness in particular historical epochs. Of the 48 units earned, 40 units serve to fulfill the College General Education requirement and 8 are counted as elective units.

Upper division coursework shifts emphasis from the seminar to independent work. While Junior and Senior seminars and elective seminars enable the student to continue group learning, each student will be expected to pursue his own specific interests. The student who is ready to focus on a single problem or topic may do so by negotiating a long-term contract with the faculty committee which is selected to guide his work. The student who prefers to deal with several smaller issues can arrange a series of shorter studies. Each student, however, will be expected to complete a Senior Project prior to graduation. In essence, the student fashions his own "major" or "concentration" in the process of frequent meetings with his faculty advisors who will help him to deepen his study and who will suggest courses in the College which are prerequisite to the completion of his work.

### LIBERAL STUDIES COURSES

#### Lower Division

#### 101. Man the Enigma (12) I

How has man sought to understand himself? What can he know? Is he truly social? Is he free? How do his questions help him live? Can his answers be synthesized toward a unified view of man? What are the philosophical, social, and personal implications of such a view? Seminar materials drawn from various disciplines and time periods, with an emphasis on Ancient Greece.

#### 102. Man and the Unknown (12) II

How does man experience the unknown? What is the basis of his religious language and myths? What is the role of reason, intuition and mystical insight? How do personal and institutional authority arise? What role do myth, symbol, and ritual play in his search for understanding? Seminar inquiry will include the Judeo-Christian tradition and the Renaissance as well as heretical, secular, and Eastern viewpoints.

**201. Nature and Man (12) I**

In what ways does man order and express his relationship to the natural world? What causes him to change his view of the natural world? What are the emotional, intellectual, and social consequences of that change?

Science, political theory and art will be emphasized in this seminar, using readings from 17th-century Europe, 18th-century America, and the modern period.

**202. Man and Change (12) II**

What are the causes and consequences of changes in world view? What is the relationship between changes in society and changes in consciousness? What are the philosophical, personal and social implications of such changes? Seminar emphasis on 19th-century social, scientific, and intellectual revolutions as well as on contemporary experience.

**Upper Division****301-302. Junior Seminar (3) I and II**

The purpose of this seminar is to prepare the student for independent study. Attempts will be made to integrate and coordinate students' independent study projects, and various interdisciplinary relationships and approaches will be explored.

**310. Independent Study (4) I****311. Independent Study (4) II****315. Special Problems (3) I****316. Special Problems (3) II****320-321. Elective Seminar (3) I**

The focus of this seminar will be on some problem chosen by students and the instructor. The approach will be interdisciplinary and the content will vary from semester to semester.

**401. Senior Seminar (3) I**

Emphasis will be on the development of the student's Senior Project in relation to common readings.

**402. Senior Seminar (3) II**

Using students' Senior Projects as the focal point, the seminar will attempt to integrate and synthesize the student's intellectual experience and accomplishments.

**410. Independent Study (4) I****411. Independent Study (4) II****415. Special Problems (3) I****416. Special Problems (3) II****420-421. Elective Seminar (3) I**

The focus of this seminar will be on some problem chosen by students and the instructor. The approach will be interdisciplinary and the content will vary from semester to semester.

# THE SCHOOL OF ENVIRONMENTAL STUDIES

Kenneth M. Stocking, Provost

David Eck, Leland Gralapp, Chris Kjeldsen, Stanley McDaniel, Bruce Woelfel

The School of Environmental Studies offers an upper division interdisciplinary program in the biological sciences, humanities, physical sciences, and social sciences with the opportunity to specialize in one of these and to earn a degree in Liberal Studies-Environmental Studies or in Urban Studies. Personalized relationships among students and faculty will be assured by a great emphasis on seminars, independent studies and flexible scheduling.

## ADMISSION

After being admitted to Sonoma State College a student may apply for admission to the School of Environmental Studies by writing to its Director. A student seeking admission should:

1. Have junior standing.
2. Have completed all or nearly all general education requirements.
3. Have an area of special interest which matches that of a professor.
4. Have the written recommendation of a member of the School of Environmental Studies faculty.

## CURRICULUM

Four seminars, independent studies which accompany them, and a study of current problems are basic in the junior year.

The senior curriculum includes a senior problem, current problems, and the completion of work in an area of special emphasis.

### 301. The Human Environment (4) I, II

The identification and enunciation of principles fundamental to the esthetics and ethics of the environment.

### 311. The Social Environment (4) I, II

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.

### 321. The Biological Environment (4) I, II

Ecosystems analysis; human population and the environment; diet, malnutrition and hunger; environmental health; biological controls; pesticides; species extinction.

### 331. The Physical Environment (4) I, II

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.

### 302. Independent Study—Tutorial. Human Environment (1-4) I, II

### 312. Independent Study—Tutorial. Social Environment (1-4) I, II

### 322. Independent Study—Tutorial. Biological Environment (1-4) I, II

### 332. Independent Study—Tutorial. Physical Environment (1-4) I, II

### 401. Special Problems. The Human Environment (1-4) I, II

### 411. Special Problems. The Social Environment (1-4) I, II

### 421. Special Problems. Biological Environment (1-4) I, II

### 431. Special Problems. Physical Environment (1-4) I, II

### 441. Current Problems in Environmental Studies (2) I, II

490. Senior Problems (4) I  
491. Senior Problems (4) II

**URBAN STUDIES DEGREE PROGRAM**  
(*Regional Planning Emphasis*)

School of Environmental Studies  
Bruce Woelfel, Assistant Professor of Political Science  
Coordinator of Program

Wyman Hicks.....	Associate Professor of Management
Jerry Mandel.....	Assistant Professor of Sociology
Glenn Price.....	Associate Professor of History
Kenneth Stocking.....	Professor of Biology
Richard Van Gieson.....	Assistant Professor of Economics
Arthur Warmoth.....	Assistant Professor of Psychology

This program is directed toward the profession of City and Regional Planning and is designed to apply to suburban and rural areas outside of the urban core. It is areas such as those counties comprising the service area of Sonoma State College which offer the greatest remaining opportunities to the physical planner who wishes to work toward an environment better suited to both man and nature. Where the urban form of the future is not yet determined, the potential for environmental change is greatest. Some illustration of the alternatives may be seen by examining the counties to the north and south of San Francisco, Marin and San Mateo; the former still predominantly rural with many hills and trees still intact, the latter predominantly urban and increasingly reminiscent of Los Angeles. Students graduating from this program would achieve a pre-professional level in the city planning field. They could go into positions in planning or other roles in local government or they could go on into graduate programs in planning and other environmental fields.

Students entering the program would be encouraged to select an emphasis from the following: (1) comprehensive physical planning; (2) administration for planning and development; (3) social planning; (4) transportation planning; (5) resource development; (6) economic planning; (7) programming and budgeting. The program provides a basic preparation for occupations in planning and other areas of local government or for continuation into graduate study in city and regional planning.

The major consists of 52 units. 36 units must come from the "required courses" and 20 units from the list of "electives."

*Required Courses*

Economics 322—City and Regional Planning Practices .....	4 units
History 469—The City in American History and .....	3 units
History 469a—Colloquium .....	1 unit
Management 455—The Planning Process .....	4 units
Environmental Studies 321—Ecology .....	4 units
Environmental Studies 411AB—Land Development Problems (Region) ....	4 units
Environmental Studies 411C—New Town Design .....	4 units
Environmental Studies 411D—Urban Transportation .....	4 units
Sociology 434—Urban Sociology .....	4 units
<hr/>	
36 units	

## **Urban Studies**

Upon consultation with an advisor, the student will be required to complete 20 units in electives chosen from the following departments:

### *Electives*

Anthropology  
Biology  
Economics  
Ethnic Studies  
Environmental Studies  
Geography  
Geology

History  
Management  
Mathematics  
Political Science  
Psychology  
Sociology



# SCHOOL OF EXPRESSIVE ARTS

Hobart F. Thomas, Provost

Ernest L. Caillat, Lynn Clark, William E. McCreary, Elizabeth Owens,  
Wright W. Putney, Katherine Wiley

The Cluster School of the Expressive Arts is conceived of as providing a highly personalized structure where the student is required to accept the major responsibility for his own education. This curriculum is designed for the individual who believes that there exists inside him a demand for concrete expression. Rejecting the notion of art as therapy, the school is interested in attracting those students who are willing to involve themselves as totally as possible in individual or group expressive projects, who are willing 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 so 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.

Enrollment is intentionally limited. A variety of disciplines are represented. Encouragement is offered for the student to initiate a search for the things that may give his life meaning. The opportunity is offered for the student to try to capture, in some substantial way, the words, fragmented conversations and images, those things glimpsed and overheard which, somehow, give dimension and substance to his view of reality.

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. Students are urged to assume leadership and responsibility in the same way as faculty.

## ADMISSION

Students who have been admitted to Sonoma State College may apply for admission to the School of Expressive Arts by writing the Provost. Prerequisites:

1. First semester junior standing.
2. Completion of all, or nearly all, of the General Education requirements.
3. Entrance in the fall semester. Because of the unique nature of this educational experience, it is the belief of the faculty that students must begin their work in Expressive Arts in the fall. It is our policy that no students be admitted for the spring semester.

### *To apply:*

1. The applicant should write a letter to the Provost, School of Expressive Arts, Sonoma State College, Rohnert Park, California 94928. He should state as clearly and definitely as possible his interest in the School, touch on past experiences, personal and educational, discuss the degree of focus he is currently expressing in his educational interest, his specific or general goals, and what he has to offer to those in such an experimental curriculum.
2. The applicant's letter should include his address and a telephone number where he may be contacted.
3. Each student is asked to come in for a personal interview with our faculty and students to determine the appropriateness of the curriculum for him and to allow him to make an informed choice of direction.

## **Expressive Arts**

### **CURRICULUM**

Work in Expressive Arts is largely independent. That is, it centers almost entirely around the individual himself and his 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 units**

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 units**

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 units**

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 .....	1-4 units
495	Independent Study .....	1-4 units
496	Senior Tutorial .....	1-4 units
499	Special Problems .....	1-2 units

The choice of which of these supplementary courses may be appropriate is made by the student in consultation with his advisor. The description of a student's work by specific courses is an attempt to facilitate the recording process within the college. It is not intended to imply specific structure in a student's profoundly independent venture.

# EUROPEAN STUDIES PROGRAM

(Division of Social Sciences)

Robert Smith, Assistant Professor of Political Science, Program Director

Ellen Amsterdam	Assistant Professor of Music
Mary Arnold	Associate Professor of Russian
Robert Brown	Assistant Professor of History
Robert Clayton	Associate Professor of English
Yvette Fallandy	Professor of French
John Sandberg	Assistant Professor of Art
Marion Nielsen	Professor of German
Robert Smith	Assistant Professor of Political Science
John Steiner	Associate Professor of Sociology
Philip Temko	Associate Professor of Philosophy

The B.A. in European Studies is a program of interdisciplinary nature emphasizing language skills and focusing upon Europe. Students will be encouraged to spend up to one year in residence at a European university, earning credits which will be applied towards the degree. The program provides a basic preparation for teaching and postgraduate study, and for employment with the Federal government and corporations with European interests.

## EUROPEAN STUDIES MAJOR—COURSE REQUIREMENTS

### 1. A concentration (minimum 40 units) within

#### A. The Humanities, to include

Art History  
Drama and Dance  
English Literature  
French Literature  
German Literature  
Music  
Philosophy  
Russian Literature  
Spanish Literature

AND

#### B. The Social Sciences, to include

Economics  
History  
Political Science  
Sociology

### 2. A language minor (minimum 20 units) in either French or German or Italian or Russian or Spanish.

This requirement may be met by demonstrating equivalent competence in the language. Course elections will be guided by the criterion of interdisciplinary association, i.e. courses in several disciplines relating to the same period or movement or theme; e.g. The Age of Reason, The Romantic Movement, The European Novel. A list of qualifying courses is available for consultation. (For course descriptions, consult the Departments' listings.)

## European Studies

The following is an example of a theme:

The social and intellectual origins of (French) Impressionism

	<i>Units</i>
1. Concentration (40 Units)	
A selection of art and art history courses .....	12
History 405—Europe: The Age of Dominance, 1789–1914 .....	3
PLUS History 405a (Colloquium in above) .....	1
History 414—Intellectual and Cultural History of Europe .....	3
PLUS History 414a (Colloquium in above) .....	1
History 412—Origins of Modern France to 1870 .....	3
PLUS History 412a (Colloquium in above) .....	1
(If preferred, students may take 413 and 413a)	
Political Science 310—Political Thought .....	6
Sociology 450—History of Sociological Thought .....	4
French 311—Survey of French Literature .....	3
Music 250—Intro to Music Literature .....	3
Music 342—Studies in Music History .....	3
(Music of Romantic Era recommended)	
2. Language minor .....	20
3. General Education .....	40
	<hr/>
	103
4. European Studies seminar (4 semesters) .....	8
Senior thesis .....	6
5. Electives .....	7
	<hr/>
TOTAL .....	124

Each student, in developing his individual program, will be able to work closely with an advisor.

To provide intellectual continuity and a measure of social intercourse, all students will be required to participate in a bi-weekly seminar, which will run for two years. The themes will vary, but all will relate to Europe historically and intellectually and reflect broad areas of interest cutting across the traditional academic disciplines, e.g., the concept of authority in European thought.

Each student's study program will facilitate the earning of a double major, where this is felt to be desirable. In all cases, great emphasis will be attached to the study of one or more European languages, and students will be encouraged to go beyond the minimum graduation requirement of 20 units.

Admission to the Program will depend upon the applicant's academic record, personal motivation, and explicit interests. Continuation in the Program will depend upon a satisfactory performance. Graduation will require, in addition to the 40 units of concentration and 20 units of language, submission of a senior thesis on the student's chosen theme and a comprehensive oral related to that theme. While the Program is in some respects rather demanding, it should be emphasized that it is also highly flexible, having been designed to try to meet the particular needs of each student enrolled.

# INDIA STUDIES

(Division of Humanities)

Thomas Rosin, Program Director

Barry Ben-Zion (Economics), Eleanor Criswell (Psychology), Victor Daniels (Psychology), Nirmal Singh Dhesi (English), William Frazer (Geography), Susan Garfin (Sociology), Leland Gralapp (Art), William Kwong (Psychology), Han Sheng Lin (History), Stanley McDaniel (Philosophy), Peter Mellini (History), William Nighswonger (Political Science), William Poe (History), Thomas Rosin (Anthropology), E. Gardner Rust (Music), Gordon Tappan (Psychology), Robert Tellander (Sociology).

The India Studies Program is an interdisciplinary one that allows you to choose your own directions to an extent unique among Asian Studies Programs in California. You can obtain breadth by studying many different aspects of Indian (and other Far Eastern) cultures, or you can delve deeply into specific areas that especially interest you. The major combines easily with many minors, providing you with flexibility in meeting your own interests.

The Program's place in the Division of Humanities reflects its unusual character. It places an emphasis on understanding the full cultural context: the psychology, the way of living, the art, the music, and the religion of the people, as well as the political, historical, and demographic dimensions that are usually emphasized in Asian Studies programs.

## THE MAJOR

The major consists of 36 units. At least 16 of these must come from the "basic list." India Studies 301 must be included among this 16. You may choose the remaining 20 units from all Asian Studies courses offered at the college, 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.

If you are interested in an Asian culture other than India, you can pursue your interest with a major in India Studies by taking the basic 16 units in India and the balance of your work in courses dealing with the culture that most interests you.

## THE MINOR

The minor consists of any 18 units in Indian and Asian Studies. India Studies 301 must be included in these 18 units.

### Courses in the Program

#### Basic List

Anthropology 375—Cultures of South Asia.....	4 units
Anthropology 377—Ethnography of Southeast Asia .....	4 units
Art 417A—Oriental Art .....	3 units
English 431—Classical Indian Literature.....	3 units
English 432—Modern Indian Literature.....	3 units
History 439—History of India Since 1512 .....	3 units
PLUS History 439a—Colloquium in above .....	1 unit
Music 452—Music of India and the Near East .....	3 units
Philosophy 340A—Eastern Thought: India .....	3 units
Political Science 452—Asian Politics .....	6 units
Psychology 480—Psychology of India .....	4 units
Psychology 482—Psychology of Yoga.....	4 units
India Studies 301—Introduction to India .....	4 units
India Studies 401—Seminar on India (may be repeated) .....	4 units
India Studies 493—Field Experience in India.....	4-12 units
India Studies 495—Independent Studies .....	1-3 units
India Studies 499—Seminar in Special Problems.....	2-4 units

## India Studies

### Other Courses on Asia

Anthropology 203—Introduction to Cultural Anthropology.....	4 units
Anthropology 343—Peasant Societies .....	4 units
Anthropology 493—Seminar in Cultural Anthropology: Southeast Asia .....	3 units
Art 417B—Oriental Art .....	3 units
Asian-American 350—Identity Workshop .....	4 units
Economics 203—The Third World: Problems and Prospects .....	4 units
Geography 430—Geography of Asia .....	4 units
History 335—East Asia to 1800 .....	3 units
PLUS Hist 335a—Colloquium in above .....	1 unit
History 336—East Asia Since 1800 .....	3 units
PLUS Hist 336a—Colloquium in above .....	1 unit
History 435—Twentieth Century China .....	3 units
PLUS Hist 435a—Colloquium in above .....	1 unit
History 436—History of Chinese Thought .....	3 units
PLUS Hist 436a—Colloquium in above .....	1 unit
History 438—History of Japan .....	3 units
PLUS Hist 438a—Colloquium in above .....	1 unit
History 488—Senior Seminar: Asian History .....	4 units
History 588—Graduate Seminar: Asian History .....	4 units
Music 451—Music of the Far East .....	3 units
Philosophy 340B—Eastern Philosophy .....	3 units
Political Science 480—Southeast Asia Seminar .....	3 units
Psychology 484—Seminar Psychology of China .....	4 units
Psychology 486—Seminar in Zen .....	4 units
Psychology 490—Psychology seminars that deal with Asian psychology .....	4 units
Sociology 330—Sociology of Religion .....	5 units
Sociology 331—Seminar in Religion .....	3 units
Sociology 337—Politics of Religion .....	4 units
Sociology 432—Social Organization of Western and Non-Western Societies .....	4 units
Sociology 440—Comparative Societies .....	3 units

## INDIA STUDIES

### 301. Introduction to India (4)

An exploration of the culture and thought of India.

### 401. India Seminar (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. Independent Study for Majors (1-3) I and II

### 499. Special Problems (2-4) I and II

## INTERDEPARTMENTAL MINOR IN 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 Political Science and confer with the chairman of the committee for the International Studies minor, or the advisor for the program.

### *The International Studies Minor †*

#### 1) At least one course from each of four of the fields below:

Anthropology

Anthro. 342—Social Structure

Economics

Econ. 302—Theory of International Trade and Finance

Econ. 310—Comparative Economic Systems

Geography

Geog. 320—Political Geography

History

Hist. 423—British Empire to 1914

Hist. 423A—Colloquium

Hist. 424—British Empire and Commonwealth Since 1914

Hist. 424A—Colloquium

Political Science

Pol. Sci. 342—International Politics

Sociology

Soc. 432—Social Organization of Western and Non-Western Societies

#### 2) One interdisciplinary course (after completion of the series above):

a) Seminar in Area Studies (Geography 460 or Poli. Sci. 460) OR

b) Seminar in International Organization (Poli. Sci. 345 and 346)

(the latter by special permission)

Total units required for the International Studies Minor: 20

(21 if including Poli. Sci. 345 and 346).

\* All courses carry four units of credit except Political Science 345 (2) and 346 (3) which total five units.

† The numbered courses listed here are described in more detail in the departmental sections of the catalog. There are no prerequisites for courses listed under 1 below.







**SONOMA  
OLD SCHOOL**

**COURSES  
OF  
INSTRUCTION  
AND  
DEGREE  
REQUIREMENTS**

## *Numbering of Courses*

### *Course Numbers*

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

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- \* 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

# AMERICAN ETHNIC STUDIES DIVISION

Herminia Menez and Elaine Towns, Co-Chairmen of Division

The Division of American Ethnic Studies provides an interdisciplinary and cross-cultural approach to the study and research of ethnic groups in the United States. In addition to providing the opportunity for study and research, the Division offers students the further opportunity to understand the life-styles, histories, problems, and prospects of ethnic peoples in America. The division allows for specialization and emphasis on one or more ethnic groups while enabling students to choose from a wide variety of courses. The division provides a sound undergraduate foundation for work leading toward the M.A. and Ph.D. degrees in multicultural studies, urban education, or in any of the Social Science fields. The Division offers a B.A. through the Departments of Afro-American and Mexican-American Studies. In addition to these, other programs offered by the Division are: American Ethnic Studies; Asian Studies; Euro-American Studies; and Native-American Studies.

Students may fulfill their G. E. requirement in American Ethnic Studies by taking any one of the courses listed below:

1. *American Ethnic Studies 210: Ethnic Groups in America*

A study of non-European ethnic groups in the United States. The course will encompass the achievements, contributions and experiences of these groups in America.

2. *Mexican-American Studies 220: Mexican-American Culture*

A survey of those institutions and beliefs which make up the Mexican-American culture and sub-cultures. Specifically, a close examination of the community, family, economy, religion, education and arts of the Mexican-American.

3. *American Ethnic Studies 301: Ethnic Arts in the United States*

A study of the aesthetic expression of American ethnic groups as represented in the fine arts.

## DEPARTMENT OF AFRO-AMERICAN STUDIES

LeVell Holmes, Chairman of Department

Ronnie Blakeney, James Gray, Velesta Jenkins, Jeanne Moore, William Payne, Elaine Towns, Augustus Vidal.

The major in Afro-American Studies is designed as an interdisciplinary undergraduate academic program for students planning to do graduate work in any of the traditional disciplines and to serve as an academic major for the standard teaching credential. The program also serves as liberal education background for all individuals who will be working directly with public agencies and private business.

### AFRO-AMERICAN MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	44-48 units
Core Courses .....	13-17 units
Areas of Concentration .....	31 units
Electives/or Second Major .....	36-48 units
Total .....	124 units

Students majoring in Afro-American Studies should follow one of three tracks: Humanities, Public Relations, Counseling and Administration or Social Science. Students who are going into teaching should choose the Humanities or Social Science track.

# American Ethnic Studies

## A. HUMANITIES

AAMS 250—Analysis of Afro-American Culture .....	2 units
AAMS 255—Black Humanities .....	2 units
AAMS 270—Black Community .....	4 units
AAMS 285—Pan African Cultures .....	4 units
<b>Total</b> .....	<b>12 units</b>

### Core Courses

AMES 420—Theories of Ethnic Studies .....	4 units
AMES 435—Seminar in Ethnic Interaction .....	4 units
AMES 450—Black, Brown, Red, Yellow Education in America .....	4 units
AAMS 480—Seminar in Afro-American Studies .....	5 units
<b>Total</b> .....	<b>17 units</b>

### Areas of Concentration

AAMS 420—Afro-American Art .....	4 units
AAMS 472—Contemporary Afro-American Literature (4 units <i>or</i> ) .....	
AAMS 465—Black Religion <i>or</i> .....	
AAMS 390—Black Drama .....	5 units
AAMS 300—Afro-American Musical Heritage .....	4 units
<b>Total</b> .....	<b>42 units</b>

## B. PUBLIC RELATIONS, COUNSELING AND ADMINISTRATION

### Lower Division

AAMS 260—Psychology of Blackness .....	3 units
AAMS 270—Black Community .....	4 units
<b>Total</b> .....	<b>7 units</b>

### Core Courses

AMES 420—Theories of Ethnic Groups .....	4 units
AMES 435—Ethnic Interaction .....	4 units
AMES 450—Black, Brown, Red and Yellow Education in America .....	4 units
AAMS 480—Seminar in Afro-American Studies .....	5 units
<b>Total</b> .....	<b>17 units</b>

### Areas of Concentration

AAMS 310—Black Women <i>or</i> .....	
AAMS 350—NAACP to Black Power .....	4 units
AAMS 360—Military History <i>or</i> .....	
AAMS 468—History of Black Americans .....	3 units
AAMS 360—Military History <i>or</i> .....	
AAMS 405—Black Family <i>or</i> .....	
AAMS 425—Black Entrepreneur .....	5 units
Mgt 425—The Legal Environment of Management .....	4 units
AAMS 475—Black Politics <i>or</i> .....	
AAMS 476—Black Leaders .....	4 units
<b>Total</b> .....	<b>44 units</b>

**C. SOCIAL SCIENCE**

**Lower Division**

AAMS 255—Black Humanities .....	2 units
AAMS 270—Black Community .....	4 units
Total .....	6 units

**Core Courses**

AMES 420—Theories of Ethnic Groups .....	4 units
AMES 435—Ethnic Interaction .....	4 units
AMES 450—Black, Brown, Red, and Yellow Education in America .....	4 units
AAMS 480—Seminar in Afro-American Studies .....	5 units
Total .....	17 units

**Areas of Concentration**

AAMS 345—Sunni Ali Ber <i>or</i> AAMS 405—Black Family .....	5 units
AAMS 356—Afro-American Folklore <i>or</i> AAMS 465—Black Religion .....	5 units
AAMS 360—Military History .....	4 units
AAMS 400—Black Culture .....	4 units
AAMS 405—Black Family .....	4 units
Total .....	45 units
Total units for the B.A. ....	124 units

**MINOR IN AFRO-AMERICAN STUDIES**

The minor is designed to meet the requirements for the Standard Teaching Credential for both elementary and secondary education. The minor as designated below may be altered in consultation with the student's advisor.

**Lower Division**

AAMS 250—Analysis of Afro-American Culture (2 units) <i>or</i> AAMS 255—Black Humanities .....	2 units
AAMS 260—Psychology of Blackness (3 units) <i>or</i> AAMS 270—Black Community .....	4 units

**Upper Division**

AAMS 345—Black History: Sunni Ali Ber-W.E.B. DuBois .....	5 units
AMES 450—Black, Brown, Red and Yellow Educ. in America .....	4 units
AMES 420—Theories of Ethnic Studies .....	4 units
AAMS 356—Afro-American Folklore (5 units) <i>or</i> AAMS 487—Afro-American Children Literature .....	5 units
Total for minor .....	24 units

**Afro-American Studies**

**250. Analysis of Afro-American Culture (2)**

A laboratory and clinical approach to an understanding of the Negro through a study of art forms. Two hours of lectures per week.

**255. Black Humanities (2)**

This course is designed to provide an integrated examination of the press, literature, dance, music, drama, theater, etc., as they have developed in the Black Community, as they affect and influence the wider and surrounding communities.

## **American Ethnic Studies**

### **260. Psychology of Blackness (3)**

An analysis of the psychological motivations and behavioral responses of Afro-Americans and the life "behind the veil." Two hours of lecture and one hour of group session.

### **265. The Black Athlete (4)**

A study of the Negro athlete, his cultural background and his impact on the "world of sports" and the social consciousness of Americans. Two hours of lecture and two hours of field work.

### **270. Sketches in Black Expressions (4)**

Designed to capture unique and/or classical expressions of black individuals and the black community involved in activities. All means of recording expressions will be utilized and encouraged. Lectures and field work.

### **285. Pan African Cultures (4)**

After analyzing problems common to Black people of the African, Afro-American and Caribbean Cultures, the course treats in depth the effects of Imperialism and Neo-Colonialism. Three hours of lectures and one hour of group session.

### **300. Afro-American Musical Heritage (4)**

A survey of Afro-American music from its African origins through spirituals, blues, jazz, folk and classical music to "rhythm and blues". With emphasis on the surviving African musical characteristics in Afro-American music.

### **310. Black Women in the American Society (4)**

A survey of the role of Afro-American women leaders in the United States and their influences in "Negro Life", the Black Power Movement and the society at large. Three hours of lecture and one hour group session.

### **345. Black History: Summi Ali Ber to W.E.B. Du Bois (5)**

Afro-American History from 1468 until the writing of "*The Souls of Black Folk*." Three hours of lecture, one hour of group session, and two hours of field work.

### **346. Black History: N.A.A.C.P. to Black Power (4)**

A study of the 20th Century Negro in the United States.

### **356. Afro-American Folklore (5)**

A study of Negro folktales, myths and ethnic customs, legends and traditional beliefs throughout the United States with emphasis on their regional variations and historical importance. Three hours of lecture, two hours of lab.

### **360. Black Military History (3)**

A study of Black Americans and their contributions in the various wars from 1861 to the present.

### **380. Afro-American and African Dance (4)**

Exercises and direction in techniques of body movements needed to master Afro-American, Afro-Cuban and African dance. Students are expected to have laboratory work beyond the regular class meetings.

### **390. Contemporary Black Drama (5)**

A study of plays and characters of black writers and of skits designed to capture Negro expressions and characterizations. Play research, rehearsal and production.

### **400. Black Cultures in the Americas (4)**

A study of Afro-American cultures in the Western Hemisphere.

**405. The Black Family (5)**

An analysis of the Negro family in the United States from the 17th Century to the present. Three hours of lectures, two hours of field research.

**410. Contemporary Black Poetry (4)**

A study and analysis of black poets and poetry from 1940 to the present.

**415. African Art (4)**

An examination of the diverse art styles of sub-Sahara Africa. Pre-colonial to present. Group field trips.

**420. Seminar in Afro-American Art (4)**

An examination of the art works produced by Afro-Americans in the United States. Focus on original study in subject area. Individual scheduled conferences and field trips are required.

**425. The Black Entrepreneur (4)**

An introductory examination of the economic world of the Black community. The use of economic theory and empirical research as a basis for analyzing market barriers to Black economic development and the racial history of the Black population. Two hours of lecture, two hours field assignments.

**448. Black Reconstruction (3)**

A study of Negro thoughts, ideas, philosophies, organizations, etc. from 1865 to 1915. The course is recommended for history majors and social science teachers.

**465. Black Religion (5)**

A study of the church and the Negro preacher as forces within the black community and America. Two hours of lecture, three hours field research and church attendance.

**468. The History of Black Americans (4) (Also listed as History 468)**

The Negro in America from the beginning of the African slave trade in the 15th century to the present.

**470. Traditional Afro-American Literature (3)**

A survey of black literature by 19th and 20th Century Negro writers, until 1940.

**472. Contemporary Afro-American Literature (4)**

A study of Black writers and their works from Richard Wright to the most recent works of such writers as Ernest Gaines, Cecil Brown and Ronald Fair.

**475. Black Politics (4)**

The application of established tools of political science to the study of Blacks in the United States. Emphasis is placed on how Black Americans function and interact within the political system, with attention given to forms of direct action, political protest, and various political styles. The etiology and concomitant consequences of violence are also examined. Two hours lecture, two hours field work.

**476. Black Leaders (4)**

The study of the life styles and influences of W.E.B. Du Bois, Marcus Garvey, Malcolm X, Martin L. King, other 20th century black leaders in the United States and the Negro.

**480. Seminar in Afro-American Studies (5)**

The course is designed to examine contemporary problems confronting Blacks and the American society in the 20th century.

## American Ethnic Studies

### 485. The Black Press (4)

A study of Negro newspapers, magazines and mass media as to their impact and direct influences on the Black Community, past and present.

### 487. Afro-American Children's Literature (4)

Designed to examine, discuss and to evaluate books and stories for black children from childhood through the sixth grade.

### 495. Independent Study for Majors or Minors (1-3)

A course designed to direct a student's study in a particular area of interest.

### 499. Special Problems in Afro-American Studies (1-4)

A course designed to allow a student a wide latitude of work and study connected with the Afro-American experience.

## DEPARTMENT OF MEXICAN-AMERICAN STUDIES

Ernest Martinez, Chairman of Department

Esteban Blanco, Jesus Garcia, Manuel Hidalgo

The major in Mexican-American Studies is designed as an inter-disciplinary undergraduate academic program for students planning to do graduate work in any of the traditional disciplines and to serve as an academic major for the standard teaching credential. The program also serves as liberal education background for all individuals who will be working directly with public agencies and private business.

### MEXICAN-AMERICAN MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	40 units
Lower Division .....	15 units
Upper division .....	25 units
Supporting subjects .....	12 units
Language and/or Electives .....	32 units
Total .....	124 units

For both the B.A. degree in liberal arts and the B.A. degree leading to a teaching credential, a minimum of twenty-five (25) units must be upper division courses. The twelve (12) units of supporting courses must be selected in consultation with the major advisor.

### MEXICAN-AMERICAN MAJOR COURSE REQUIREMENTS

#### A. Lower Division

MAMS 210	Socio-Economics of the Mexican-American .....	4 units
MAMS 220	Mexican-American Culture .....	3 units
MAMS 250	Mexican-American Myth and Art .....	4 units
MAMS 251	Mexican-American Identity .....	4 units

Total units in excess of General Education .....

15 units

#### B. Upper Division

MAMS 345	Mexican-American History II .....	4 units
MAMS 351	Mexican-American Thought .....	4 units
MAMS 405	Mexican-American Family or	
	MAMS 475 Mexican-American Literature .....	4 units



## American Ethnic Studies

MAMS 480 Mexican-American Seminar I .....	5 units
AMES 320 Socio-Psychological Aspects of Racism .....	4 units
Electives in Afro-American, Asian-American, Euro-American or Native-American Studies .....	4 units
Minimum of upper division courses .....	25 units

### C. Additional Requirements

Supportive courses in other divisions .....	12 units
General Education .....	40 units
Language, Electives, or second major .....	32 units
Total units for B.A. ....	124 units

## MINOR IN MEXICAN-AMERICAN STUDIES

The minor is designed to meet the requirements for the Standard Teaching Credential for both elementary and secondary school specializations. The minor as designed below may be altered in consultation with the student's advisor.

### A. Lower Division

MAMS 210 Socio-Economics of the Mexican-American .....	4 units
MAMS 220 Mexican-American Culture (3 units) or MAMS 250 Mexican-American Myth and Art (4 units) .....	3-4 units

### B. Upper Division

MAMS 345 Mexican-American History II .....	4 units
MAMS 351 Mexican-American Thought I .....	4 units
MAMS 480 Mexican-American Seminar I .....	5 units
MAMS 405 Mexican-American Family or MAMS 475 Mexican-American Literature .....	4 units
Total .....	24-25 units

## MEXICAN-AMERICAN STUDIES

### 200. Conceptual Skills (5)

The development of academic skills relating to the study of the Mexican-American. Lab required.

### 210. Socio-Economics of the Mexican-American (4)

An analysis of Mexican-Americans in the Southwest and their contributions to the United States, with particular emphasis on the Mexican-Americans political, economic, educational, and sociological role in the United States today. Field trips.

### 220. Mexican-American Culture (3)

A survey of those institutions and beliefs which make up the Mexican-American culture and sub-cultures. Specifically, a close examination of the community, family, economy, religion, education and arts of the Mexican-American.

### 225. Language of the Barrio (5)

Systematic survey of the fundamentals of Calo, Pocho, and Barrio Spanish as legitimate vernacular. Practice will be given in understanding, speaking, reading and writing so that the student will be able to recognize it when used. Consent of instructor required. Field trips and language laboratory.

## **American Ethnic Studies**

### **250. Mexican-American Myth and Art (4)**

An analysis of the nature of art and myth as expressed in the historical culture of the Mexican-American, from ancient times to the present. A cultural art history approach. Field trip.

### **251. Mexican-American Identity (4)**

A study of cultural forces at work in creating the character of the present day Mexican-American.

### **301. Experimental Courses (3-5)**

### **330. The Mexican-American and the Law (4)**

A survey of the judicial institutions and the Mexican-American giving particular attention to the enforcement of laws and constitutional rights. Also, the make-up of penal institutions and its relationship to Mexican-Americans will be critically examined. Field trips.

### **340. Mexican-American Folklore (3)**

Study of the Indian folklore of Mexico and the Southwest; analysis of its fusion with Hispanic folklore.

### **344. Mexican-American History I (4)**

A study of Mexican-American History from Pre-Columbian times to 1848. The roots of cultural conflict.

### **345. Mexican-American History II (4)**

Analysis of the role of Mexican-Americans in the history of the U.S. from the Mexican-American War until the present.

### **351. Mexican-American Thought I (4)**

A survey of the ideas which have shaped Mexican-American thought. Emphasis will be given to those areas that have left an impression on the Mexican-American's social, economic, and political life.

### **352. Mexican-American Thought II (4)**

An in-depth analysis of contemporary Mexican-American thought and its relation to other intellectual sources relevant to the present society of the Mexican-American.

### **353. Contemporary Movements in Mexican-American Society (3)**

An in-depth analysis of contemporary Mexican-American movements like: UFWOC, La Alianza, Crusade for Justice, La Raza Unida, Brown Berets, etc. Also to include an analysis of their relationship to leftist and nationalistic movements in Latin America.

### **354. Politics and the Mexican-American (4)**

A critical evaluation of leading questions currently relating to Mexican-Americans in American Society. Includes a survey of social, cultural, and political organizations in the Southwest and in the local community. Field trips.

### **355. Urban Problems and the Mexican-American (4)**

Study of Mexican-American values and the conflicts which arise when some of these values are offset by urban institutions. Particular attention will be given to the erosion of these values and the accommodations Mexican-American culture has been forced to make.

**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 critical analysis of the social and psychological experience of Mexican-American in the Southwest. The role of the Chicana is examined as the frame of reference in the broader Mexican-American experience and within the specific context of the Mexican-American family.

**407. Mexican-American Youth (4)**

The roles and emerging influence of young people within the changing structure of the barrio, the schools, and the extended community. Field trips.

**425. El Ejido and El Vendido (4)**

An examination of the Psycho-social dynamics of the worker and the entrepreneur.

**429. Community Organizing (3)**

The relations between Chicano barrio and the larger Anglo society. To include an analysis of Mexican-American community group with an emphasis on development of community organizing techniques.

**430. Community Organizing Field Work (5)**

Supervised field experience in areas directly related to the Mexican-American Community. Community organizing, proposal writing, etc. Field trips required.

**450. Religion and the Mexican-American (4)**

A study of Protestantism and Catholicism and their relationship to the Mexican-American.

**451. Education (4)**

Will focus on methods, materials, and principles of learning and psychological factors in the teaching of Mexican-American children from birth through high school. Emphasis will be on early childhood education. Evaluation of current teaching materials dealing with the Mexican-American. Field trips, laboratory required.

**452. Education and the Mexican-American (Curriculum Workshop) (5)**

Exploration of ways to utilize and create curriculum for the teaching-learning environment that the Mexican-American youngsters experience. Field trips required.

**465. Mexican-American Theatre (5)**

The theatre as cultural expression. The Mexican-American playwright in the twentieth century. Laboratory required.

**466. Mexican-American Music and Dance (3)**

A cultural historical study of music and the dance in the Mexican-American society.

**471. Cultural Conflicts (4)**

A close study of those Mexican-American cultural values which are in apparent conflict with the values of the dominant society. Particular attention will be paid to the internal struggles which erupt within each Mexican-American as he attempts to resolve these cultural conflicts.

## **American Ethnic Studies**

### **475. Mexican-American Literature (4)**

A survey of Mexican-American and Mexican literature stressing Yanez, Rulfo, Fuentes and Azuela as contemporary Mexican authors and Garcia, Vasquez, Alurista, Romano, Villareal, among others, as contemporary Mexican-American authors and poets.

### **476. Workshop in Contemporary Mexican-American Literature (4)**

A workshop designed to further Mexican-American literature and Mexican-American creative writing through original essays, short stories other relevant expressions. Class presentations and discussion will be used intensively. Prerequisite: MAMS 475 or consent of instructor. Laboratory and field work required.

### **477. Mexican-American Art Workshop (4)**

Studio practices. Includes the technical and conceptual forms stemming from the art history of the Mexican-American.

### **478. Mexican-American Journalism (Includes Public Communication) (4)**

A study of Mexican-American newspapers, magazines and other public communication means; their past and present impact and influences on the Mexican-American community. Includes a workshop phase. Field trips required.

### **480. Seminar in Mexican-American Studies I (5)**

Topics from the Mexican-American movement will be selected for study in depth. Research methodology. Prerequisite: Consent of instructor.

### **481. Seminar in Mexican-American Studies II (5)**

Directed and individual study, discussion, and reports on selected topics related to the Mexican-American. Prerequisite: Consent of instructor.

### **490. Mexican-American Childrens Literature (4)**

Designed to examine, discuss, and evaluate books, stories, legends for Mexican-American children from birth through the sixth grade.

### **495. Independent Study (1-4)**

### **499. Special Problems (1-4)**

## **AMERICAN ETHNIC STUDIES MINOR**

The minor is designed to meet the requirements for the Standard Teaching Credential for both elementary and secondary education. The minor as designated below may be altered in consultation with the student's advisor.

### **CORE COURSES**

AMES 230 Social Psychology of Ethnic Groups .....	4
AMES 240 Ethnic Conflict in the United States .....	4
AMES 420 Theory in the Study of Ethnic Groups .....	4
AMES 435 Ethnic Interactions .....	4
AMES 450 Black, Brown, Red, Yellow Education in America .....	4
AMES 465 Ethnic Poverty and Survival .....	4

A student is required to take three (3) of the core courses listed above. In addition, he is required to take one of the following electives:

AMES 301 Ethnic Art in the United States .....	4
AMES 345 Comparative Ethnic Folklore .....	4
AMES 380 Third World Literature .....	4

and one course in any of the following departments and programs: Afro-American, Mexican-American, Euro-American, Native-American, and Asian-American.

Total number of units required..... 20

**AMERICAN ETHNIC STUDIES PROGRAM**

Herminia Menez, Coordinator of Program

Elaine Towns

The American Ethnic Studies program is an interdisciplinary and cross-cultural study of ethnic groups in America. Emphasis is placed on the major contributions made by ethnic and racial groups to American Culture. Analyses of the unique problems encountered by ethnic groups in American culture are detailed.

**AMERICAN ETHNIC STUDIES**

**210. Ethnic Groups in America (4)**

A study of non-European ethnic groups in the United States. The course will cover the achievements, contributions, and experiences of these segments of the American population. Field trips required.

**230. Social Psychology of Ethnic Groups (4)**

A study of the psychological environments of ethnic minorities in the context of the dominant society. Field trips and laboratory sessions required.

**240. Ethnic Conflicts in America (4)**

A historical study of conflicts between ethnic groups in the United States with emphasis on economic, political and social causes.

**301. Ethnic Art in the United States (4)**

A study of the aesthetic expression of American ethnic groups as represented in the fine arts. Field trips required.

**305. Music of Ethnic Groups in the United States (4)**

A historical study of the musical expression of major American ethnic groups. Required field trips and laboratory sessions in the phono-library.

**320. Socio-Psychological Aspects of Racism and Its Effects on Ethnic Groups (4)**

A study of racist thought and practice in the United States, the ways in which they affect members of ethnic minorities, and the responses of various ethnic groups. Field trips required.

**325. Economic Problems of American Ethnic Groups (4)**

A study of the economic relations within and among ethnic groups in the United States, and their integration into the American economy. Emphasis on employment, small business, consumer concerns, and public welfare.

**330. Religions of Ethnic Groups (4)**

Religious beliefs and institutions of minority peoples: Black Christianity and Muslimism; Catholicism of Italian, Polish, Irish, and Mexican Americans; Judaism; Russian and Greek Orthodoxy—in the context of a religious society dominated by white Protestantism. Field trips required.

**345. Comparative Ethnic Folklore (4)**

A survey of American Folklore of major ethnic groups in America.

**350. Third World Politics in the U.S. (4)**

Deals with the ideology, political organization, short-term tactics and long-term social, economic, political and cultural goals of groups or movements within the United States which consider themselves to be part of the "Third World." Includes examination of the ways in which such groups pose a challenge and offer alternatives to the present American political system.

## **American Ethnic Studies**

### **356. Language and Ethnicity (4)**

Language and ethnic identity; language retention; "foreign accents"; standard and non-standard dialects; bi-lingualism; influence of immigrant and non-standard speech on the American Language. Required field trips and laboratory exercises.

### **380. Third World Literature (4)**

A comparison of the traditional and contemporary literature and rhetoric of non-whites in the United States, Caribbean and Latin America.

### **420. Seminar: Theory in the Study of Ethnic Groups (4)**

Theoretical analysis of ethnic group identity and interaction in the United States; theories of ethnicity and models of "Americanization".

### **430. Seminar: Community Research and Community Service (4)**

Group studies; projects and institutional involvements which result in interchanges between the college students and members of ethnic groups in the community at large.

### **432. Health and Culture (4)**

Lecture, 3 hours; laboratory, 1 hour. This course, an analysis of ethnic attitudes toward nutrition, physical and mental health, and medical care; ethnic theories of disease and curing; special health problems of ethnic groups, is designed to improve communication between the medical profession and patients.

### **435. Seminar: Ethnic Interactions (4)**

The process of conflict and accommodation will be dealt with through discussion, disclosure, and confrontation of social myths and stereotypes held toward members of different ethnic and social groups. The course aims at increasing cultural and ethnic understanding and interchange through the use of music, dialogue, audio-visual aids, drama, and the cultivation of individual and group sensitivity.

Prerequisite: Consent of instructor.

### **445. Seminar: Ethnic Groups, Social Variables, and Language Behavior (4)**

Analysis of relationship between social variables and language behavior within the context of ethnic groups; investigation of such topics as verbal repertoires, social restraints on language choice, role behavior and speech behavior, formal and informal linguistic codes, bi-lingualism and bi-dialectism.

### **450. Black, Brown, Red, Yellow Education in America (4)**

Problems confronting Afro-Americans, Mexican-Americans, Native-Americans, and Asian-Americans within the traditional educational institutions of the United States. Methods and techniques for improving the teaching of non-European students.

### **465. Seminar: Ethnic Poverty and Survival in California (4)**

This course will study the way minority groups organize limited resources in order to survive. It will be a problem-solving course, developing models for implementation in minority communities.

### **470. Special Topics in Third World Politics (Research Seminar) (4)**

Explores the relationship between ideas and events in international Third World politics and the course of domestic Third World events. Includes a consideration of the influence of post World War II decolonization, African, Asian and Latin American radical ideologies and movements, and questions of neo-imperialism and neo-colonialism in the ideology of domestic Third World groups.

**ASIAN AMERICAN STUDIES**

Sucheng Chan, William Kwong

**200. Americans from Asia (4)**

An introductory course on the history and sociology of Asian immigrants. Patterns of immigration, settlement, occupational structure, ghetto life, modification of old world cultures and behavior patterns, and current political, social and economic status. Emphasizes Chinese and Japanese Americans, but also deals with Koreans, Filipinos and Indians. Field trips.

**300. Chinese Americans (4)**

Detailed examination of the Chinese American experience. Topics include economic contributions to the development of the United States, the nature of the Chinese exclusion movement, the aftermath of World War II, current political views, and problems of acculturation. Field trips.

**310. Japanese Americans (4)**

Detailed examination of the Japanese American experience. Topics include economic contributions, the anti-Japanese movement, the relocation of Japanese Americans during World War II, the effects of this experience on the current social and political attitudes of Japanese Americans, and the nature of Japanese American acculturation. Field trips.

**320. Filipino Americans (4)**

Patterns of immigration and settlement, occupational structure, problems of being the "little brown brother," current socio-economic and political status and attitudes towards the nature of the diplomatic and economic ties between the U.S.A. and the Philippines. Field trips.

**330. Americans From India (4)**

Patterns of immigration and settlement, occupational structure, the Ghadr movement of 1917, current socio-economic and political status and attitudes both towards the United States, and the Indo-Pakistani conflict and the question of American aid. Field trips.

**350. Identity Workshop (4)**

A practice session on Asian American identity.

**355. Asian American Identity (4)**

Explores the ways in which the general problems of identity experienced by youth are complicated by the Asian heritage and values of Asian-American young people. Discussions will focus on creative means through which Asian-Americans can deal with the social and psychic ambiguities of "belonging to two worlds."

**360. Asian American Social Institutions (4)**

Deals with the Chinese-American and Japanese-American family, patterns of interpersonal relationships, the nature of traditional associations and clubs, religious institutions, business and economic organization, modern community services, and language problems as a special facet of the general question of acculturation. Field trips and research projects (interviews, etc.)

**370. Asian American Culture (4)**

Covers the art, dance, music, drama, literature, food, and religious and secular festivals of Asian-Americans. Includes at least six field trips to attend performances.

## **America Ethnic Studies**

### **415. Asian American Folklore (4)**

The folklore of Asian ethnic groups, created within the United States or related to their American experience.

### **450. The Oriental Exclusion Movement (Research Seminar) (4)**

Examines the various facets of the Oriental Exclusion movement: ideology of anti-Oriental elements; nature of mass actions against Asians; debates in the legislature (state and federal) during the passage of the Chinese Exclusion Act of 1882 and the Immigration Act of 1924; the eventual repeal of these laws, and the responses of the Asian-Americans to such persecution.

### **460. The Japanese American Internment Experience (Research Seminar) (4)**

The evacuation, relocation and resettlement of Americans of Japanese ancestry during World War II. Justifications of the federal government, problems encountered by the administrative personnel, of the internees, the social and psychological effects of the experience today.

## **EURO-AMERICAN STUDIES PROGRAM**

Eli Katz

The Euro-American Studies Program offers courses dealing with the history and current status of American ethnic communities of European origin. Focusing on individual ethnic groups, the courses consider problems of acculturation and "Americanization" as well as the adaptation and transformation of specific aspects of the cultures of European immigrants in the United States.

## **EURO-AMERICAN STUDIES**

### **200. The Euro-American Immigrant Experience (4)**

A historical, sociological, and cultural study of immigrant groups from Europe, beginning with the pre-revolutionary period but emphasizing the "second wave" of immigration from 1880 to 1924. Field trips required.

### **300. Non-White Images of White Americans (4)**

Images and stereotypes held concerning white Americans of varying ethnic backgrounds by members of non-white American ethnic groups.

### **310. Yiddish Literature in Translation (4)**

Readings in English from Yiddish literature produced in the old and new worlds.

### **400. Jews in the United States (4)**

History of Jewish immigration and survey of the current cultural and institutional status of the Jewish community in the United States. Field Trips Required.

### **410. The Irish American (4)**

History of Irish immigration and survey of the role of Irish-Americans in the areas of labor, politics, religion, and culture. Field Trips Required.

### **420. The Italian in America (4)**

History of Italian immigration and survey of the occupational, political, cultural, and social status of Italian-Americans at the present time. Field Trips Required.

### **430. The W.A.S.P. in the United States (4)**

The "majority" culture of White Anglo-Saxon Protestant America. The WASP attitude toward ethnic minorities; pressures toward "anglo-conformity" and counter pressures toward cultural pluralism.



**450. The Eastern and Southern Europeans in the United States (4)**

A survey of the Slavic, Greek, Italian, and Portuguese immigrant groups which migrated to the United States primarily during the "second wave" of immigration. Problems of cultural and ethnic identity. Field Trips Required.

**499. Special Problems in Euro-American Studies (4)**

**NATIVE-AMERICAN STUDIES PROGRAM**

David W. Peri, Coordinator of Program

Shirley Silver

The program makes available the opportunity for the study and research of archaeological and historical developments of tribal groups or regional areas, as well as contemporary issues, problems, and prospects of Native-Americans. In addition, the Program offers courses which allow for specialization in various aspects of Native American culture both contemporary and historical. The Program provides a sound background for students in Anthropology and the other Social Science Fields and those intending to teach either on the elementary or secondary levels.

**NATIVE-AMERICAN STUDIES**

**200. Introduction to American Indians (4)**

A study of American-Indian tribes and nations from their origins until 1800.

**301. Native-Californian Cultures (4)**

A survey of the cultures, and histories of Native California from the time of contact to the present.

**317. Prehistory of California (4)**

A survey and analysis of the findings of archaeology contributing to the understanding of the evolution of Native Californian cultures.

**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, from the European Invasion to the Trail of Tears (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 change and disruptions from the arrival of De Soto to the Battle of Wounded Knee.

**333. Native-American Cultures of Western North America (4)**

An in-depth focus on the indigenous cultures of Western North America and their changes and disruptions from the period of Spanish Dominations to the 1890 Ghost Dance.

**335. Cultures of Northern North America (4)**

A survey of the cultures and histories of Native-American people of Canada and Alaska from contact to the present.

## **America Ethnic Studies**

### **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 the Hopi, Navaho, Apache, and the Rio Grande Pueblos.

### **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.

### **346. Cults and Sacred Movements in Native North America (4)**

Only by common participation in religious cults 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. 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. Native American Philosophic Systems (4)**

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.

### **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.

### **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.

### **353. Native American Systems of Kinship and Socialization (4)**

Diverse systems of family organization and child rearing; persistence of kinship organizations and kin values and traditional modes of enculturation.

### **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 Tales (4)**

Sample literary, psychological and anthropological studies of North American Indian myths and tales.

### **356. Musical and Visual Arts of Native-America (4)**

A survey and analysis of both traditional and contemporary musical and visual arts.

**410. Seminar in Individual Native-American Cultures (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 socioeconomic 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. Independent Study (1-4)**

**499. Special Problems (1-4)**

# ANTHROPOLOGY

## (Division of Social Sciences)

Shirley Silver, Chairman of Department

Sue Branscomb, Mildred Dickeman, David A. Fredrickson, William Payne,  
David W. Peri, R. Thomas Rosin, Albert L. Wahrhaftig

The major in anthropology is directed toward a cross-cultural understanding of human culture and biology, based on a world sample of past and present human populations. It provides a useful framework for a liberal education, as well as developing the skills and theoretical background necessary for graduate work in the field, or for careers in teaching or research.

### ANTHROPOLOGY MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Anthropology Courses .....	40 units
Supporting Subjects .....	8 units
Foreign Language and/or Electives .....	36 units
<b>Total</b> .....	<b>124 units</b>

### ANTHROPOLOGY MAJOR COURSE REQUIREMENTS

Anthropology 201—Introduction to Physical Anthropology .....	4 units
Anthropology 203—Introduction to Cultural Anthropology .....	4 units
Anthropology 301—Modern Human Variation .....	4 units
Any course in Archaeology .....	4 units
Any course in Cultural Anthropology .....	4 units
Ethnographic Areas (courses numbered 360–379) .....	4 units
Seminars .....	4 units
Other Anthropology courses .....	12 units
Supporting Subjects .....	8 units

Supporting subjects are to be chosen to enhance the breadth of the major or the depth of a particular area of specialization within the major. Consultation with the major advisor is required for approval of the program of supporting subjects. Consideration will be given to minors and second majors in certain subjects as meeting the supporting subjects requirement.

### Minor in Anthropology

The anthropology minor consists of 20 units with at least one course chosen from each of the following groups:

Introductory Courses;  
Physical Anthropology or Archaeology;  
Cultural Anthropology;  
Ethnographic Areas.

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

### ANTHROPOLOGY Introductory Courses

#### 201. Introduction to Physical Anthropology (4) I and II

An introduction to the evolutionary biology of man: his genetics, his adaptations, and the developmental history of man and his primate ancestors.

### **203. Introduction to Cultural Anthropology (4) I and II**

The comparative study of cultures; the basic components of cultural systems and their variations.

#### **Physical Anthropology**

### **301. Modern Human Variation (4) I and II**

Application of evolutionary theory to living and recent human populations, with special attention to the evidence for adaptations, the role of culture in human evolution, and analysis of the concept of race.

Prerequisite: Anthropology 201.

### **311. Primate Behavior (4) I**

Examination of the behavior of man's living primate relatives, with special attention to recent field studies; application of primate studies to an understanding of human psychosocial behavior.

Prerequisite: Anthropology 201 or any upper division Biology or Psychology course.

### **312. Human Paleontology (4) II**

Analysis of the fossil remains of man and the man-apes; discussion of the problems involved in reconstructing the direction of human evolution.

Prerequisite: Anthropology 201.

#### **Archaeology**

### **321. Archaeology and Society (4) II**

Survey of archaeological theory and method with emphasis on the development of inferences concerning social and economic activities of past peoples.

### **331. Archaeology of North America (4) II**

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) II**

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 Californian materials.

#### **Cultural Anthropology**

### **342. Social Structure (4) I**

Discussion of cultural systems as they relate to subsistence and technology, social groupings, and decision-making. Extensive use of cross-cultural comparisons.

### **343. Peasant Societies (4) I**

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.

### **\* 351. Culture Contact (4) II**

Discussion of the varieties of culture contact, and the roles of contact agents and institutions; special attention to Western and non-Western contacts, and the growth of revitalization movements.

Prerequisite: Anthropology 203 or consent of the instructor.

\* Not offered 1972-73.

## **Anthropology**

### **352. Culture Change (4) II**

Investigation of case studies and discussion of formal theories of culture change. Emphasis both on regularities of socio-cultural change and on the experience of rapid change in the structure of reality, from the viewpoint of the participant.

Prerequisite: Anthropology 203 or consent of the instructor.

### **353. Psychological Anthropology (4) I**

Examination and review of the psychological implications of alternate 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) II**

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.

Prerequisite: Anthropology 203 or consent of the instructor.

### **355. Urban Anthropology (4) II**

A cross-cultural study of urban forms in Europe, the United States, Africa and Latin America.

Prerequisite: Anthropology 203 or consent of the instructor.

### **\* 359. Art and Culture (4) II**

The forms and functions of plastic and graphic arts in relation to the rest of culture. Special attention to the arts of prehistory and of non-civilized societies; analysis of the concept of "primitive art."

## **Ethnographic Areas**

### **360. Indians of North America (4) I**

Discussion of the origins, history and cultures of the Indians of North America.

### **361. Indians of California (4) II**

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

### **363. Ethnography of Mesoamerica (4) II**

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.

Prerequisite: Anthropology 203 or consent of the instructor.

### **\* 364. Indians of the Southwest United States (4) II**

Examination of the relationship between Southwest Indian Cultures and the ecology of the Southwest; review of the history of occupation and its relation to present Southwest Indian cultures, with specific attention to differing forms of cultural adaptation and integration. Attention to processes of culture change in the area, and to the importance of the Southwest culture area in the history of anthropology.

Prerequisite: Anthropology 203 or consent of the instructor.

\* Not offered 1972-73.

**366. Ethnography of South America (4) I**

A survey of native cultural developments in South America in prehistoric and in modern times. There will be discussion of the social organization of the Incas of modern Andean Indian communities, of more isolated and "primitive" peoples of the jungles, of contemporary *mestizo* communities, and of the effects of culture contact, industrialization, and revolution.

Prerequisite: Anthro. 203.

**369. New World African Cultures (4) II**

The African experience in the New World from Nova Scotia to Argentina.

Prerequisite: Anthro. 203 or consent of the instructor.

**370. Cultures of Oceania (4) I**

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.

Prerequisites: Anthropology 203, Geography 440 or consent of the instructor.

**375. Cultures of South Asia (4) I**

An introduction to the urban and rural peoples of India, Pakistan and Ceylon, the institutions of family and caste, and the literate and non-literate traditions of the area.

**376. African Cultures—Past and Present (4) I**

A classification of the various sub-Saharan societies: the transition from the old to the new.

Prerequisite: Anthro. 203 or consent of the instructor.

**377. Ethnography of Southeast Asia (4)**

An introduction to the cultural complexities of Southeast Asia—their ecological foundations, their social, political, and religious configuration—presented within the historic framework of the impact of the ancient civilizations of India and China and the modern world.

**Language and Linguistics**

**380. Language and Culture (4) I**

The relation of language to cultural systems; the role of language in cognition and expression. Speech communities and the relation of language to social stratification; bilingualism, pidgins and creoles and the development of national languages.

**\* 381. Linguistic Analysis (4) I**

Introduction to synchronic linguistic theory and method; introduction to articulatory phonetics. Emphasis on analysis and description of the phonological and morphological aspects of language.

**382. Language Change (4) II**

Study of the genetic and diffusional nature of language change; attention to the relationship between language change and culture change.

**\* 389 The Ethnography of Speaking (4) II**

Study of the role of speech in human behavior; investigation of the ethnographic patterning of speech use within a community.

\* Not offered 1972–73.

## **Anthropology**

### **395. Community Involvement Project (1-4) I and II**

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.

### **Advanced Studies**

### **422. Archaeological Methods (4) II**

Examination of field and laboratory methods in archaeology, using primarily California materials, with an emphasis upon research design, hypothesis formation, and interpretation.

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

### **441. Ethnographic Field Methods (4) II**

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.

Prerequisite: Consent of the instructor.

### **491. Seminar in Human Biology (4) I and II**

Discussion of selected topics in human biology, with emphasis on the application of evolutionary theory to man.

Prerequisite: Consent of the instructor.

### **492. Seminar in Archaeology (4) I**

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: Consent of the instructor.

### **493. Seminar in Cultural Anthropology (4) I and II**

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

Prerequisite: Consent of the instructor.

### **° 494. Seminar in Anthropological Linguistics (4) I and II**

Selected topics in linguistic analysis from an anthropological perspective.

Prerequisite: Consent of the instructor.

### **495. Independent Study in Anthropology (1-4) I and II**

### **499. Special Problems in Anthropology (2-4) I and II**

° Not offered 1972-73.



# ART

## (Division of Humanities)

Mary Anderson, Kathryn Armstrong, Gerald Bol, Stephen Dubov, Leland Gralapp, Robert Gronendyke, George Gunter, Susan Gutting, Valerie Hardy, Phyllis Holup, Michael Howard, Walter Kuhlman, Gary Molitor, William Morehouse, Myron Ort, Sandra Roos, John Sandberg, Norma Schlesinger, William Sheets, Lynn Shelton, Harold Skinner, Shane Weare.

The following programs aim to assist the student in gaining insight into his cultural heritage and in clarifying his attitudes and values so that he may more fully realize his own potentialities. On the basis of these objectives, the program establishes a core of fundamental studies that leads to eventual concentration in the areas of art history or studio. From the latter a student may select an emphasis in painting, sculpture, graphic arts, or filmmaking. A key assumption is 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. The program likewise offers appropriate courses for the general education curriculum and provides the necessary foundation for those who intend to continue their studies at the graduate level.

### GENERAL DEPARTMENTAL REGULATIONS

Students desiring to major in art will be accepted only on the basis of their declared *and* demonstrated interest and ability in one of the following approved areas of concentration:

- Art History
- Filmmaking
- Art Studio
  - Painting
  - Sculpture
  - Graphics (not including drawing)
  - Multi-media (inter-disciplinary media projects in the upper division)

Entering freshmen or lower division transfer students will not 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 College will be accepted as art majors in accordance with established quotas in that category. Students desiring to change their majors to art must conform with regulations indicated below:

#### *Criteria for Acceptance as an Art Major*

Decisions upon eligibility for acceptance as a major student in art will be based upon the following factors:

1. Grade-Point-Average
2. Demonstrated ability to improve skills beyond a basic level of performance.
3. Creative and scholarly imagination.
4. Potential for contribution in the designated area of concentration.
5. Evidence satisfactory to the reviewing committee that the student will benefit from continued study in art.

#### *Specific Requirements*

##### *Entering Freshmen and Lower Division Students*

##### *Art Studio*

1. Successful completion of a minimum of 9 units of lower division art courses.
2. Evaluation by a committee of the faculty of a representative portfolio of creative work accomplished or in progress in one of the Art Studio areas.

## Art

### Art History

1. Successful completion of 9 units of lower division art courses, including Art 210 and Art 211.
2. Interview with the faculty to evaluate eligibility for acceptance as an art history major.

### Filmmaking

1. Successful completion of 9 units of lower division art courses, including Art 212 and Art 285A and B.
2. Interview with the faculty to review the student's record and his creative projects.

### Upper Division Students

1. Completion of required lower division art courses (or their equivalent) in the designated area of concentration.
2. Application to the Art Department for acceptance as an art major including:
  - 2.1 *Art Studio*: Portfolio of creative projects in the desired area of concentration. The portfolio will be evaluated on the basis of the student's ability to perform at the appropriate skill level and his ability to pursue self-generated individual projects commensurate with upper division college work. The application and portfolio must be submitted prior to the 12th week of the semester *preceding* the semester in which the student intends to enroll in upper division art courses.
  - 2.2 *Art History*: Interview with the *Upper Division Studies Committee in Art History* to determine eligibility for acceptance and to outline the prospective course of study. The Committee may require evidence of appropriate research and scholastic skills, and may prescribe additional courses contributing to the development of such skills.
  - 2.3 *Filmmaking*: Interview with the *Upper Division Study Committee in Filmmaking*. Requirements will include satisfactory performance in lower division art courses and evidence of imaginative and practical levels of achievement in filmmaking.

### General Regulations

1. All students will be on probationary status during their first semester as art majors.
2. Students with less than 2.75 grade point average in their first 9 units of lower division art courses will be expected to demonstrate compensating creative achievements in order to 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

### ART MAJOR WITH ART HISTORY CONCENTRATION FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	41 units
Foreign Language .....	14 units
	(or equivalent *)
Electives .....	29 units
Total .....	124 units

\* Determination to be made by the Foreign Language Department, or may be met by qualifying examination.

The Pro-seminar in Art Historical Method (Art 450A) is required and should be taken during the junior year.

*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 FOR ART MAJOR WITH CONCENTRATION IN HISTORY

### Freshman and Sophomore Years

202A—Drawing .....	2 units
210, 211—Introduction to Art History .....	6 units
250—Introduction to Art .....	3 units
220—Painting	
230–260—Sculpture	
240–242—Printmaking	
275—Multi-media Arts	
285AB—Basic Film Production	
A minimum of 3 courses selected from among these studio courses .....	
	6 units

### Junior and Senior Year

418AB—History of Modern Art .....	6 units
404, 407–417, 419—Upper Division Period Courses in History of Art .....	15 units
450A—Pro-seminar in Art Historical Method .....	3 units
<b>Total</b> .....	<b>41 units</b>

A maximum of 6 units of comparable courses in other departments (e.g., Anthropology, Ethnic Studies) may be accepted as part of the 15 units of upper division period courses in History of Art.

## ART MAJOR WITH STUDIO CONCENTRATION FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	42 units
Electives .....	42 units
<b>Total</b> .....	<b>124 units</b>

## COURSE REQUIREMENTS FOR ART MAJOR WITH STUDIO CONCENTRATION Freshman and Sophomore Years

202AB—Drawing .....	4 units
210, 211—Introduction to Art History .....	6 units
251—Introduction to Art Studio Practices .....	3 units
220—Painting	
230–260—Sculpture	
240–242—Printmaking	
275—Multi-media Arts	
285AB—Basic Film Production	
A minimum of 4 courses selected from among these studio courses * .....	
	8 units
<b>Sub-total</b> .....	<b>21 units</b>

\* May be repeated for elective credit up to 6 additional units in each subject area.

## Art

### Junior and Senior Years

302ABC—Advanced Drawing .....	5 units
418AB—History of Modern Art .....	6 units
A minimum total of 10 units is required in the area of emphasis; all courses in upper division advanced Studio areas. Subject areas for emphasis include Painting, Sculpture (metal, ceramic, general, synthetic), Printmaking, and Filmmaking .....	
	10 units
Subtotal .....	21 units
Total number of units required for major .....	42 units

The Art Department reserves the right to retain for its permanent collection representative examples of student work.

### ART MAJOR WITH FILMMAKING EMPHASIS IN THE STUDIO CONCENTRATION FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	46 units
Electives .....	38 units
Total .....	124 units

### COURSE REQUIREMENTS FOR ART MAJOR WITH FILMMAKING EMPHASIS IN THE STUDIO CONCENTRATION

#### Freshman and Sophomore Years

202AB—Drawing .....	4 units
210, 211—Introduction to Art History .....	6 units
212—Film History .....	3 units
251—Introduction to Art Studio Practices .....	3 units
220—Painting	A minimum of 4 courses selected from among these studio courses * which must include 285AB (4 units)
230–260—Sculpture	
240–242—Printmaking	
275—Multi-media Arts	
285AB—Basic Film Production	
Subtotal .....	24 units

#### Junior and Senior Years

418AB—History of Modern Art .....	6 units
452/453—Pro-seminars: Film Theory/Independent Filmmakers .....	3 units
485ABCD—Film Production † .....	12 units
Subtotal ‡ .....	21 units

## ART

### 200. Basic Arts and Crafts (2)

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

\* May be repeated for elective credit up to 6 additional units in each subject area.

† A minimum total of 12 units is required in the area of emphasis.

‡ Total number of units required for major .....

† Students completing the Bachelor's Degree with filmmaking emphasis who intend to enter the credential program should take an additional 3 upper division units in the major.

**202AB. Drawing (2-2)**

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

**208. Principles of Art Photography (2)**

An introductory course for art majors, particularly filmmaking, printmaking and painting majors interested in basic photographic processes. Assignments will deal with both technical and aesthetic aspects of the photographic image. Work with 35 mm. cameras, color and black and white positive film, commercially developed, with an emphasis on applicability of photo images to other fine art media.

Prerequisite or corequisite: Introductory art courses 250, 251, or 202A.

**210. Introduction to Art History (3)**

Painting, sculpture, and architecture of prehistoric and primitive cultures, ancient, classical, and medieval civilizations.

**211. Introduction to Art History (3)**

Painting, sculpture, and architecture from the Renaissance to the present.

**212. Film History (3)**

A chronological survey of historically representative and significant films tracing the evolution of the cinema as an art form.

**220. Painting (2)**

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

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

Corequisite for art studio majors only: Art 251.

**230. Sculpture (2)**

Studio course in three-dimensional media. Experience with basic sculptural materials and processes; directed problems. Group and individual criticism.

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

Corequisite for art studio majors only: Art 251.

**\* 240. Printmaking (2)**

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

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

Corequisite for art studio majors only: Art 251.

**\* 242. Printmaking, Lithography (2)**

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. Prerequisite: 202A or consent of instructor.

**250. Introduction to Art (3)**

An introductory course dealing with the creative processes in the visual arts. The artist's role in perception, expression, appreciation and criticism is discussed and illustrated. Not an art history survey course.

**251. Introduction to Art Studio Practices (3)**

Lecture, demonstration and directed studio projects designed to precede and/or accompany enrollment in studio courses. An introduction to art as an activity and a practice. Basic experience in the tools, crafts and practices in art studios.

\* Laboratory fee may be charged in connection with this course.

## Art

Emphasis is placed on the art media and their applications as the means of self-expression. Two lectures and one 3-hour studio weekly. Open only to art studio majors. Required of all beginning or transfer art studio majors.

### \* 260. Clay Sculpture (2)

Introduction to sculptural form and color through the ceramic process. Directed problems. Lectures, demonstrations and laboratory work.

Corequisite for art studio majors only: Art 251.

### 275. Multi-media Arts (2)

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.

Corequisite for art studio majors only: Art 251.

### 285AB. Basic Film Production (2-2)

Experience in the use of 8mm motion picture film as a creative medium. Directed problems and individual projects. Shooting, editing, scripting, and sound.

Corequisite: Art 212.

Corequisite for art studio majors only: Art 251.

### 295. Community Involvement Project (1-4)

Involves students in basic community problems. 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. Assistance Projects (1-2)

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.

### † ‡ 302AC. Advanced Drawing (2-1)

Directed problems in drawing for the advanced student. Work from imagination or nature. Can be arranged as correlative drawing problems done in conjunction with advanced studio projects in area of emphasis, or independent study.

### † ‡ 302B. Life Drawing (2)

The human figure, drawn from living models from a variety of approaches. Anatomy, proportion, form and mastery in execution will be stressed through a performance-critique classroom method.

### 320. Watercolor Painting (3)

Intermediate course in two dimensional color. Media—watercolor. Emphasis in concepts related to the media.

Prerequisite: Art 202 or 220.

### 395. Community Involvement Project (1-4)

Involves students in basic community problems. 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.

\* Laboratory fee may be charged in connection with this course.

† The A, B, (or C) semester of advanced studio courses may be repeated twice subject to the approval of the departmental advisor and the instructor.

‡ The five units to fulfill upper division requirements in Drawing may be assembled from any combination of 302 classes.

**400. Curriculum of the Elementary School (Art) (2)**

Consideration of the child's changing needs for artistic expression; methods for organizing and presentation for different age levels and classroom situations. Laboratory work, lectures, reading, and general discussion of current problems in art education.

Enrollment limited to students admitted to Elementary Education Curriculum, or by consent of instructor.

For Secondary School Curriculum and Instruction see course 522I in the Education Curriculum.

**404AB. History of Printmaking (3-3)**

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

Prerequisite: Art 211 or equivalent.

**407. Pre-Classical Art (3)**

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

**408. Greek Art (3)**

History of ancient Mycenaean and Greek art and architecture.

**409. Roman Art (3)**

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

**410. Early Christian and Byzantine Art (3)**

Christian art and architecture through the eighth century in the West and the end of Byzantine dominance in the East.

**411. Carolingian, Ottonian, and Romanesque Art (3)**

Western European art and architecture from the late eighth through the mid twelfth centuries.

**412. Gothic Art (3)**

The art and architecture of Western Europe from the twelfth through the fifteenth centuries.

**413. Northern Renaissance Art (3)**

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

**414. Northern Baroque Art (3)**

Non-Italian art of Europe and Colonial America during the Seventeenth Century.

**415AB. Italian Renaissance Art (3-3)**

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

**415C. Italian Baroque Art (3)**

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

**416. Eighteenth Century Art (3)**

Rococo and contemporary developments in the arts and architecture of Europe and Colonial America to the time of the French Revolution.

**417AB. Oriental Art (3-3)**

The arts of India and Indonesia, of China and Japan from their origins to modern times.

## Art

### 418AB. History of Modern Art (3-3)

Painting, sculpture, and architecture of the Western World from the French Revolution to the present time: Neo-Classicism, Romanticism, Realism and Naturalism, Impressionism and Pointillism, Post-Impressionism. Fauvism and Expressionism, Dada and Surrealism, Cubism, Futurism, Abstraction, Abstract Expressionism, The New Realism and other recent developments.

Prerequisite: For art majors or consent of instructor. Art 418A must precede Art 418B.

### 419. Modern Architecture (3)

Architectural developments from ca. 1750 to 1950 in relation to the thought of the period and to currents of expression in the other artistic media.

### † 420AB. Advanced Painting (3-3)

Prerequisite: Art 220 or equivalent.

### 425A. Materials and Techniques of the Artist (3)

The materials and methods of the visual arts. Historical survey of materials and techniques and an exploration of new media and their applications. Lecture and demonstration. Limited to Art Majors with prerequisite of 2 units of Drawing and 2 units of Painting or Sculpture, or with consent of instructor.

### 425B. Materials and Techniques of the Artist (Sculpture) (3)

Materials, tools and techniques of the artist working in three dimensional media. Lecture, demonstration and directed projects in understanding and manipulation of traditional and experimental sculptural methods. Limited to enrollment as in 425A.

### 425C. Materials and Techniques of the Artist (Ceramics) (3)

Exploration into the techniques of the ceramicist covering extensive glaze calculation and testing, differing clay bodies, casting clays, mold making clay preparation and kiln construction.

(Note: 425AB&C to be offered alternate years).

### †° 430AB. Advanced Sculpture (3-3)

Studio work in metal as a sculptural material; brazing, welding, and founding.

Prerequisite: Art 230 or equivalent.

### †° 440AB. Advanced Printmaking (3-3)

Advanced problems in relief and intaglio methods.

Prerequisite: Art 240 or equivalent.

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

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)

Required of all Art History honors candidates.

Prerequisite: Art 450A or consent of instructor.

° Laboratory fee may be charged in connection with this course.

† The B semester of advanced studio courses may be repeated twice (for a total of 9 units) subject to the approval of the departmental advisor and the instructor.



**452. Pro-seminar: Film Theory (3)**

Theories about film and film aesthetics as they apply to the work of Bergman, Renoir, Godard, Truffaut, and others, with special attention to elements of style and construction.

Prerequisite: Art 212 and consent of instructor.

**453. Pro-Seminar: Independent Filmmakers (3)**

An examination of "Abstract", "Surrealist", "Avante-garde", "Experimental", and "Underground" traditions. Historical sources and development of "New American Cinema". Modern trends. Lectures, directed readings, and film screenings.

Prerequisite: Art 212 and consent of instructor.

**\* 460A. Intermediate Clay Sculpture (3)**

Intermediate studio course in sculpture using clay. Emphasis in experimentation.

Prerequisite: Art 260 or consent of instructor.

**† 460B. Advanced Clay Sculpture (3)**

Clay as a material for sculpture.

Prerequisite: 460A.

**475AB. Advanced Multi-Media Arts (3-3)**

Studio work, or individual projects, in any of a variety of media. Course may explore kinetics, light, sound, electronics, computers, and a broad spectrum of unrelated media as possible forms for artistic expression.

**485A. Film Form (3)**

Conceiving and organizing the film material. Plot structure and dynamics. Experimental forms. Intended to help the student design his film project for Art 485D.

Prerequisite: Consent of instructor.

**485B. Motion Picture Sound (3)**

Theory and practice of recording motion picture sound tracks. Studio and field recording techniques, sound transfer, experimental projects.

Prerequisite: Consent of instructor.

**485C. Intermediate Film Production (3)**

The filming of an original 16mm sound project. Each week another director shoots on location and the rest of the class crews. Camera, sound recording and editing equipment plus film and processing will be supplied.

Prerequisite: Consent of instructor.

**485D. Advanced Film Production (3)**

Application of advanced methods to individual projects including optical effects, creative montage, experimental devices, stylistic development.

Prerequisite: 285AB and consent of instructor.

**485E. Experimental Television (3)**

Exploration of T.V. as an art form, utilizing professional equipment at a T.V. studio during operational hours. Work with camera, audio operation and color video control board. Course may be repeated for credit. Class size will be limited due to station facilities and programming.

Prerequisites: Consent of the instructor and station manager.

**495. Independent Study for Majors or Minors (1 to 3)**
**499. Special Problems (1 or 2)**

\* Laboratory fee may be charged in connection with this course.

† The B semester of advanced studio courses may be repeated twice (for a total of 9 units) subject to the approval of the departmental advisor and the instructor.

# ASTRONOMY

(Division of Natural Sciences)

Samuel L. Greene, George L. Johnston, Joseph S. Tenn

Completion of a minimum of 20 units in Astronomy and physical science courses, at least 12 of which must be in Astronomy, will constitute a minor in Astronomy. Interested students should consult with an advisor in the Department of Physics regarding their programs.

## 100. Descriptive Astronomy (3) I and II

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 nonscience 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) I and II

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 215A, or equivalent; or consent of instructor.

## 231. Astronomical Measurements (2) I

Laboratory, 6 hours.

Field and laboratory studies of astronomical objects. Identification of constellations, astronomical coordinates, use of the telescope, simple techniques in spectroscopy and photography.

Prerequisite: Astronomy 100 or consent of instructor.

## 300. Cosmology and Extraterrestrial Intelligence (3) II

Lecture, 3 hours.

A largely descriptive survey. Theories of the universe, as advocated by the Greeks, Newton, Einstein, Lemaitre, Gamow, Hoyle, etc. Cosmological implications of recent discoveries. Theories of the origin of life; conditions for extraterrestrial intelligence; problems of communication.

Prerequisite: Astronomy 100 or equivalent.

## 310AB. Introductory Astrophysics (3-3)

Lecture, 3 hours.

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

Prerequisite: Physics 210B or Physics 215C; Math 190 or Math 212.

## 320. Space and Planetary Physics (3) I

Lecture, 3 hours.

The Earth's environment in space. The solar wind; interplanetary magnetic phenomena; meteors; dust and gas. Planetary formation; the surfaces and atmospheres of the planets; theories of planetary interiors.

Prerequisite: Astronomy 310AB; Math 262 or 312; or consent of instructor.

**410. Stellar Structure and Evolution (3) II**

Lecture, 3 hours.

The theoretical history of a star is followed from its condensation from a gas cloud to its ending as a white dwarf or neutron star. Structural equations are derived and studied for the various stages of the process.

Prerequisite: Astronomy 310AB or consent of instructor.

**431. Astrophysical Measurement Techniques (3) I**

Laboratory, 9 hours.

A study of those experimental techniques in physics which are particularly applicable to astrophysics.

Prerequisite: Astronomy 231 or consent of instructor.

**480. Recent Developments in Astronomy (3) II**

Lecture, 3 hours.

Selected research papers and review articles on rapidly developing areas of astronomy will be read and discussed. Examples of possible topics: quasars, pulsars, gamma ray, x-ray and infrared astronomy; cosmology.

Prerequisite: Consent of instructor.

**495. Independent Study (1-3) I and II****499. Special Problems in Astronomy (1-2) I and II**

# BIOLOGY

(Division of Natural Sciences)

Wesley W. Ebert, Chairman of Department

John Arnold, Ronald Baker, Ruth Blitz, Joe Brumbaugh, Ralph Bushnell, Galen Clothier, David Hanes, Colin Hermans, John Hopkirk, Donald Isaac, Chris Kjeldsen, Ching Liu, F. Russell Lockner, Thomas Porter, Joe Powell, Charles Quibell, Robert Sherman

The major in biology is recognized as the basis for B.A., M.A., and Ph.D. degree in biology, botany, and zoology.

The Department of Biology offers the undergraduate a broadly-based major in the biological sciences. This does not preclude the possibility of electing areas of specialization within the broader major.

## BIOLOGY MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Foreign Language .....	0- 8 units
Physical science (15-18 units, 5 applied in G.E.) .....	10-13 units
Biological sciences (40 units, 4 applied in G.E.) .....	36 units
Electives .....	38-27 units
	<hr/>
	124 units

## BIOLOGY MAJOR COURSE REQUIREMENTS

### Lower Division

Knowledge of the fundamentals of biology	
Biology 115—Principles of Life Science (4 units, applied in G.E.) .....	0 unit
Biology 116—Plant Science .....	4 units
Biology 117—Animal Science .....	4 units

### Upper Division

A minimum of 28 units of upper division courses, to include one course from each of the following groups:

- A. (4 units)
  - Biology 300 Ecology
  - Biology 330 Plant Taxonomy
  - Biology 350 Natural History of Invertebrates
  - Biology 355 Entomology
  - Biology 360 Natural History of Vertebrates
  - Biology 438 Phycology
- B. (3-4 units)
  - Biology 320 General Genetics
  - Biology 321 General Genetics Lab
  - Biology 322 Genetics and Human Heredity
- C. (4 units)
  - Biology 315 General Physiology
  - Biology 324 Animal Physiology
  - Biology 334 Plant Physiology
- D. (3-5 units)
  - Biology 335 Plant Morphology I
  - Biology 336 Plant Morphology II
  - Biology 337 Plant Anatomy
  - Biology 340 General Bacteriology
  - Biology 345 Cell Structure
  - Biology 370 Comparative Anatomy of Vertebrates
  - Biology 372 Vertebrate Embryology
  - Biology 451 Functional Morphology of Marine Invertebrates I
  - Biology 452 Functional Morphology of Marine Invertebrates II

E. Other courses in upper division biology to reflect students' interests, areas of specialization, or career objectives. Courses selected in consultation with departmental advisor and/or from suggested plans.

Students seeking recommendation for a teaching credential with a major in biology must include a course covering the biological techniques. It is recommended that they have a balance of courses emphasizing the broad aspects of both plant and animal systematics and a course in the history of biology.

## ADVISORY PLANS FOR THE BIOLOGY MAJOR

The following are three broad plans, which are designed to provide guidelines, for majors who wish to advance toward a specific goal in the biology major.

Consultation with your departmental advisor regarding specific course patterns within this program is strongly recommended. Careful note should be made of prerequisites for advanced courses or other particular requirements of specific goal objectives.

### Plan I

This plan within the biology major is designed as a guide for students planning careers in fields such as elementary teaching, national park service, state park, junior museums or similar programs.

General Education .....	40 units
Physical Science (15-18 units, 5 in G.E.) .....	10-13 units

The student is advised to consult with a departmental advisor regarding applicability of particular courses. Courses in the following areas are recommended:

Fundamentals of Chemistry, Physics, and Geology

#### Biology

<i>Lower Division Biology (required)</i> .....	8 units
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Biology 115, 116, and 117 (12 units, of which 4 units apply to G.E. and 8 units to major) or equivalent.

<i>Upper Division Biology (required)</i> .....	14-17 units
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One course each from Group A, B, C, and D. (Note specific prerequisites if Biology 324 or 334 is selected from Group C.)

<i>Upper Division Biology (electives)</i> .....	14-11 units
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It is recommended that a broad spectrum of field courses be included. Students should consult with departmental advisor.

<i>Additional Electives</i> .....	38-35 units
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The following non-science courses other than General Education are recommended for students following this plan.

History 473—Contemporary California

English 461—American Folklore

### Plan II

This program is designed for students interested in entering fields such as secondary education, marine biology, agricultural research, dentistry, medicine, pharmacy, veterinary medicine or as an academic major preparatory to continued work at the post-graduate level in such disciplines as genetics, physiology, developmental biology, marine biology, animal behavior, or similar programs.

General Education .....	40 units
Physical Science (15-18 units, 5 in G.E.) .....	10-13 units

The following or their equivalents are recommended:

Chem. 115AB or Chem. 125AB

General Chemistry (10 units)

Chem. 232 or 340

Introductory Organic or Introductory

Biochemistry (4-3 units)

Physics 212 or Physics 210AB or Geology 303

A survey of Introductory Physics or

General Physics or Principles of Geology

(3-8 units)

## Biology

Biology	
Lower Division Biology (required)	8 units
Biology 115, 116, and 117 (12 units, of which 4 units apply to G.E. and 8 units to major) or equivalent.	
Upper Division Biology (required)	14-17 units
One course each from Group A, B, C, and D. Biology 324 or 334 is recommended from Group C.	
Upper Division Biology (electives)	14-11 units
Courses chosen will reflect areas of specialization and/or career objectives. Students should consult with a departmental advisor and are advised to investigate requirements of other institutions if transfer to graduate or professional schools is anticipated.	
Additional Electives	38-35 units
The following courses are highly recommended:	
Chem. 310—Introductory Physical Chemistry	
Chem. 440AB—Biochemistry	
Chem. 441—Biochemical Methods	
Math. 165—Elementary Statistics I	
Math. 162, 212—Calculus with Applications I and II	
A reading knowledge in French, German, or Russian is recommended for students planning on graduate work.	

### Plan III

This program is designed for students interested in entering fields such as clinical laboratory technology, public health microbiology, related paramedical and research laboratories, or an academic major preparatory to continued work at the postgraduate level in such disciplines as microbiology, cellular biology, or similar programs.

General Education	40 units
Physical Science (15-18 units, 5 in G.E.)	10-13 units
The following or their equivalents are recommended:	
Chem. 115AB or Chem. 125AB	
General Chemistry (10 units)	
(Chem. 255—Analytical Chemistry or equivalent is recommended if Chem. 115AB is taken)	
Chem. 232—Introductory Organic Chemistry (4 units)	
Physics 210A—General Physics (4 units)	
Biology	
Lower Division Biology (required)	8 units
Biology 115, 116, and 117 (12 units, of which 4 units apply to G.E. and 8 units to major) or equivalent.	
Upper Division Biology (required)	14-17 units
One course each from Group A, B, C, and D. Biology 324 or 334 is recommended from Group C.	
Upper Division Biology (required)	14-11 units
Students should consult with a departmental advisor regarding electives chosen from the following:	
Biology 323	Radiation Biology
Biology 340	Bacteriology
Biology 345	Cell Structure
Biology 355	Entomology
Biology 424	Cell Physiology
Biology 439	Mycology
Biology 480	Immunology
Biology 481	Infection and Disease I

Biology 482 Infection and Disease II

Biology 484 Hematology

*Additional Electives* ..... 38-35 units

The following are essential supporting courses for this plan:

Chem. 340 and 441—Introductory Biochemistry and Biochemical Methods

or

Chem. 440AB and 441—Biochemistry and Biochemical Methods

Physics 210B—General Physics

Math. 165—Elementary Statistics I

or

Math. 162, 212—Calculus with Applications I and II

Strongly recommended: Additional applicable courses when offered as Biol. 496, 497 or in the graduate level listing. A reading knowledge of French, German, or Russian is highly recommended.

### **MEDICAL TECHNOLOGY**

It is recommended that students interested in becoming Medical Technologists choose the following upper division biology courses: Group A, Biol. 360; Group B, Biol. 322; Group C, Biol. 324; Group D, Biol. 340; Electives, Biol. 480, 481, 482, 484, and 439. Students following these recommendations for the B.A. in Biology will be eligible for a 12-month traineeship in an approved clinical laboratory.

### **MINOR IN BIOLOGY**

(A minimum of 20 units with a GPA of 2.0 or above.)

Biology 115 Principles of Life Science..... 4 units

Biology 116 Plant Science..... 4 units

Biology 117 Animal Science..... 4 units

Upper Division to include one laboratory and one field oriented course... 8 units

20 units

In addition, the candidate for the teaching credential with a minor in Biology will be required to take Education 403, Curriculum in Elementary School Science, or Education 522B Secondary School Curriculum and Instruction (Biological Science). The teaching minor program must be approved by the Chairman of the Department of Biology or his representative. Students are urged to seek this approval not later than the junior year.

### **BIOLOGY AND MATHEMATICS\***

#### **A DIVERSIFIED MAJOR FOR THE B.A. DEGREE**

This diversified major is designed for students who want a broad background in the biological sciences and mathematics. The major consists of 24 upper division units to be taken in mathematics and biological sciences. It is an appropriate major for, but not limited to, students preparing for the elementary school credential. The general unit breakdown is as follows:

General Education ..... 40 units

Mathematics ..... 16 units

Biological Sciences ..... 18 units

Electives ..... 50 units

\* For course descriptions in Math., see page 207.

## Biology

### COURSE REQUIREMENTS

#### A. *Mathematics*

A 3 unit course satisfying the General Education requirement.....	0 units
Math. 140—Calculus I .....	4 units
Math. 300—Elementary School Math.....	3 units
Math. 301—Secondary School Math. or 308 College Geometry.....	3 units
Math. 165—Elementary Statistics I.....	3 units
Math. 306—Number Theory or Math. 410 History of Math. ....	3 units

#### B. *Biology*

Biol. 115—Principles of Biol. (4 units, all Gen. Ed.).....	0 units
Biol. 116—Plant Science (4 units, 2 Gen. Ed.).....	2 units
Biol. 117—Animal Science .....	4 units
Additional courses (all upper division) selected from Biol. 300, 302, 314, 320, 321, 322, 415, 490 with at least one lab and one field course, with Biol. 314 strongly recommended.....	12 units

### MASTER OF ARTS DEGREE IN BIOLOGY

Since the fall of 1966, Sonoma State College has offered a program leading to the Master of Arts in Biology. The Master of Arts in Biology embodies the objectives of increasing the candidate's knowledge and expertise in the area of his thesis and expanding his understanding and ability to communicate the concepts of biology.

#### I. Admission to Graduate Study as an Unclassified Graduate Student

Unclassified Graduate students are those who have been accepted by the department for graduate course work in the department. They may or may not have a specific goal objective. A maximum of 24 (excluding summer session and extension) semester units may be taken in the unclassified status. Continuance of a student in the unclassified status beyond 24 units is subject to review by the department graduate committee.

##### A. Admission Requirements

For admission to graduate course work in the Department of Biology an applicant must:

1. Apply for admission to the college at the Office of Admissions and Records.
2. Submit the following additional information to the Department of Biology.
  - a. Results of the aptitude test (verbal and quantitative) of the Graduate Record Examination. (May be waived if the applicant is not seeking an M.A. degree, but must be taken prior to advancement to classified standing).
  - b. Two letters of recommendation which indicate a potential for successful pursuit of graduate studies. (This requirement may be waived for students not seeking an M.A. degree; however, the letters must be on file if the student seeks admission to classified status or undergraduate GPA is below 2.5).
3. Be accepted by the Departmental Graduate Committee which will make the final determination of eligibility.

The Departmental Graduate Coordinator will serve as advisor to all unclassified graduate students.

##### B. Application Dates

Application for graduate study in the Department of Biology must be submitted to the Office of Admissions and Records during the month of November for admission for the fall semester and during the month of August for the spring semester. Supplemental information (GRE and letters of recommendation) must be filed with



the Department by March 1 for admission for the fall semester. Applicants will be notified of Departmental action by April 1. Corresponding dates for the spring semester are November 15 and December 15. Students seeking assistantships should indicate this on their applications. A new student who is eligible for classified status may register as an unclassified graduate or as a classified graduate if all requirements of advancement to classified standing are met at the time of registration.

## **II. Admission to Classified Status**

Classified Graduate students are those students who have been accepted by the department to work towards completion of the degree of Master of Arts. Normally an M.A. candidate will be admitted as an unclassified graduate student. In exceptional cases a student may apply directly for classified graduate standing. In unusual circumstances, it is possible to complete the requirements for the M.A. degree in two semesters, however, most students require three or four semesters. Only those students who meet the requirements set forth below and whose research interest is compatible with that of the biology graduate program and departmental facilities will be advanced to classified status. [Departmental policy limits the number of candidates per advisor to the equivalent of two full-time students].

### **A. Advancement Requirements**

For advancement to classified status the candidate must:

1. Have on file with the graduate committee a request for advancement to classified standing.
2. Have on file certification of Bachelor's Degree in Biology, its equivalent, or evidence of a level of comprehension of the concepts of biology expected of a holder of a B.A. in Biology.
3. Have a high standard of scholarship in his undergraduate major and a grade point average of 3.0 in upper division. A student with an undergraduate deficiency may be considered for classified status after demonstrating a high standard of scholarship as an unclassified graduate student.
4. Have on file the results of the aptitude test of the Graduate Record Examination.
5. Have the acceptance of a thesis advisor, in writing.

### **B. Advancement Procedures**

An unclassified graduate student should apply for classified status in the M.A. program as soon as the requirements for advancement have been met. The following procedures will be followed after submitting the request for advancement to classified standing (Form A, Part 1).

1. The candidate will confer with the Departmental Graduate Coordinator for referral to a thesis advisor and to obtain the required forms.
2. The candidate will confer with the thesis advisor suggested by the department Graduate Coordinator and determine by mutual agreement that the research area of interest is compatible with the interest of the advisor and departmental facilities.
3. The department graduate committee will review the application for advancement to classified status and determine the eligibility of the candidate.
4. Candidates, who have submitted their requests by November 15 during the fall semester and by March 1 during the spring semester, will be notified of the committee's decision by December 15 and April 1, respectively.
5. After notification of advancement to classified status, it is the CANDIDATE'S RESPONSIBILITY to file all additional required forms (SSC mimeographed instructions "Steps Toward the Master's Degree").

## **Biology**

### **III. Requirements for the Completion of the M.A.**

- A. Completion of 30 units of approved graduate study, 18 of which must be in Biology, with a cumulative GPA of at least 3.0.
- B. Completion of at least 12 non-thesis units in 500 level Biology courses.
- C. Fifteen units must be taken after a student is admitted to classified standing for the M.A. degree. Students are urged to apply for classified standing as early as possible. Course work taken during the semester in which the student is admitted to classified standing may be counted.
- D. A maximum of 6 units of extension or transfer credit, or combination of the two, may be allowed, subject to approval of the candidate's thesis committee.
- E. A maximum of 6 units credit may be granted for the thesis towards graduation.
- F. A maximum of 6 units of 595, Special Studies in Biology, may be counted toward the 12 non-thesis 500 level units.
- G. Completion of acceptable course work as determined by the thesis committee.
- H. Additional requirements will be established by the thesis committee to facilitate the research and writing of the thesis. Traditionally these requirements have been satisfied by demonstration of proficiency in a foreign language. However, it is recognized that in many instances facilitation of the research will be more appropriately provided with proficiency in such areas as computer science, statistics, etc.
- I. Acceptance of the thesis by the candidate's thesis committee.
- J. Passage of a comprehensive examination before the thesis is submitted. The examination, oral or written, will be administered by the candidate's thesis committee. The candidate will be examined in areas related to his research and in the concepts of Biology.
- K. Consultation with the thesis committee to determine the content of the thesis seminar.
- L. Final presentation of the thesis in a seminar open to all faculty and students.

## **BIOLOGY**

### **110. The Evolution of Life on Earth (3)**

Lecture, 2 hours; laboratory, 3 hours.

A General Education course in which living beings, including man, are examined and interpreted from an evolutionary viewpoint. Meets college general education requirements, not applicable to Biology major.

Prerequisites: None.

### **111. Man and His Environment (3)**

Lecture, 2 hours; laboratory or field, 3 hours.

A General Education course in which man and other living beings are studied in their relationships with each other and with the earth which they share. Meets college general education requirements, not applicable to Biology major.

Prerequisites: None.

### **112. Introduction to Oceanology (3)**

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. Meets college general education requirements, not applicable to Biology major.

Prerequisites: High school biology and chemistry.

**113. Molecules and Man (3)**

Lecture, 2 hours; demonstration, 2 hours.

Basic principles of Human Biology with emphasis on physiology and the effects of environmental agents such as drugs, medicines, poisons, and disease organisms. Meets college general education requirements, not applicable to Biology major.

Prerequisites: None.

**114. Introduction to Behavioral Biology (3)**

Lecture, 2 hours; laboratory 3 hours.

The nature and evolution of behavior of animals (including man) with particular emphasis on vertebrate animals. Meets college general education requirements, not applicable to Biology major.

Prerequisite: None.

**115. Principles of Life Science (4)**

Lecture, 2 hours; laboratory, 6 hours.

Basic concepts and principles of molecular and cellular biology, cellular physiology, systematics, cell division, reproduction, heredity, and evolution. Meets college general education requirements.

Prerequisites: High school chemistry or equivalent.

**116. Plant Science (4)**

Lecture, 2 hours; laboratory, 6 hours.

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

Prerequisites: Biology 115 strongly recommended.

**117. Animal Science (4)**

Lecture, 2 hours; laboratory, 6 hours.

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

Prerequisite: Biology 115 strongly recommended.

**200. Trees and Shrubs (3)**

Lecture, 2 hours; laboratory or field, 3 hours.

The ecology, evolutionary relationships, and identification of native and exotic woody plants. Meets college general education requirements, not applicable to Biology major.

Prerequisites: None.

**220. Human Anatomy (3)**

Lecture, 2 hours; laboratory, 3 hours.

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

Prerequisites: None.

**224. Human Physiology (5)**

Lecture, 3 hours; Laboratory, 6 hours.

An introductory course in the principles of physiology as they relate to the processes, activities, and phenomena of the living human body.

Prerequisites: Chemistry 102 or equivalent, Biology 115, or consent of instructor.

**300. Ecology (4) (Formerly Biology 400)**

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

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

Prerequisites: Biology 115, 116 and 117, or consent of instructor.

## **Biology**

### **302. Biological Techniques (3)**

Lecture, 1 hour; laboratory, 6 hours.

A course designed to teach the more common field and laboratory techniques used by biologists in the preparation of specimens both microscopic and macroscopic.

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

### **305. Environmental Conservation (3)**

Lecture, 3 hours.

Study of the biological resources and means of their intelligent use and preservation. Meets college general education requirements.

Prerequisites: None.

### **314. Field Biology (3)**

Lecture, 2 hours; laboratory, or field, 3 hours. Meets college general education requirements.

Prerequisite: A minimum of three units in biological science, or permission of instructor.

### **315. General Physiology (4)**

Lecture, 2 hours; laboratory 6 hours.

A general survey of plant, animal, and cellular function designed as a terminal course in physiology. Topics include nutrition, metabolism, water balance, regulation, respiration, transport, excretion, integration and photosynthesis.

Prerequisites: Biology 115, 116, and 117 and Chemistry 102 or equivalent.

### **320. General Genetics (3)**

Lecture, 3 hours.

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 man.

Prerequisites: Knowledge of basic biology, and chemical and physical principles.

### **321. General Genetics Laboratory (1)**

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. Genetics and Human Heredity (3)**

Lecture, 3 hours.

An introduction to basic principles of genetics and their application to human heredity.

Prerequisites: Knowledge of basic biology, and chemical and physical principles.

### **323. Radiation Biology (3) (Formerly Biology 423)**

Lecture, 2 hours; laboratory 3 hours.

A course concerned with effects of natural and artificial radioactive isotopes on life processes. Ultraviolet and cosmic rays are also considered. Effects of radiations on reproduction, chromosome, and gene replication, cell permeability and length of life are considered.

Prerequisites: Biology 115, 116 and 117 and Chemistry 232 or equivalent.

**324. Animal Physiology (4)**

Lecture, 2 hours; laboratory, 6 hours.

Basic principles and concepts of general animal function.

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

**330. Plant Taxonomy (4) (Formerly Biology 430)**

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

An introductory course in biosystematics and nomenclature with emphasis on field work with the California flora.

Prerequisites: Biology 115 and 116, or consent of instructor.

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

Lecture, 3 hours; field trips.

Plants and their characteristics which have uniquely influenced economics, sociology, history, art and literature. Meets college general education requirements.

Prerequisite: Upper division standing.

**334. Plant Physiology (4)**

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 115 and 116 and Chemistry 115AB or Chemistry 125AB.

**335. Plant Morphology I (3) (Formerly Biology 440)**

Lecture, 2 hours; laboratory, 3 hours.

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

Prerequisites: Biology 115 and 116.

**336. Plant Morphology II (3) (Formerly Biology 441)**

Lecture, 2 hours; laboratory, 3 hours.

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

Prerequisites: Biology 115 and 116. Biology 335 strongly recommended.

**337. Plant Anatomy (4) (Formerly Biology 437)**

Lecture, 2 hours; laboratory, 6 hours.

The ontogenetic development of the structural features of the vascular plants are studied. This involves the study of individual cell types, tissues, and tissue systems.

Prerequisites: Biology 115 and 116.

**340. General Bacteriology (5)**

Lecture, 3 hours; laboratory, 6 hours.

A survey of the fundamental principles and techniques of bacteriology.

Prerequisites: Biology 115 and 116 and Chemistry 115AB or Chemistry 125AB.

**345. Cell Structure (4) (Formerly Biology 425)**

Lecture 3 hours; laboratory 3 hours.

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

Prerequisites: Biology 115 or equivalent.

## **Biology**

### **350. Natural History of the Invertebrates (4) (Formerly Biology 450)**

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 115, 116, and 117.

### **355. Entomology (4) (Formerly Biology 455)**

Lecture, 2 hours; laboratory, 6 hours.

Basic concepts and fundamental principles to the study of insects. Major areas investigated include the taxonomy, morphology, development, ecology, and physiology of insects.

Prerequisites: Biology 115, 116, and 117.

### **360. Natural History of the Vertebrates (4) (Formerly Biology 458)**

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 115 and 117, or consent of instructor.

### **370. Comparative Anatomy of Vertebrates (4) (Formerly Biology 470)**

Lecture, 2 hours; laboratory, 6 hours.

Morphogenesis and evolutionary development of vertebrate structure.

Prerequisites: Biology 115 and 117.

### **372. Vertebrate Embryology (4) (Formerly Biology 472)**

Lecture, 2 hours; laboratory, 6 hours.

Developmental morphology and physiology of the vertebrates.

Prerequisites: Biology 115 and 117.

### **395. Community Involvement Project (1-4)**

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: None.

### **401. Marine Ecology (4)**

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 a course in marine fauna or flora.

### **402. Plant Ecology (4)**

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.

### **413. Paleontology (4)**

Lecture, 3 hours; laboratory and/or field, 3 hours.

An introduction to the morphology, taxonomy and evolution of invertebrate and vertebrate fossil faunas and of fossil plants.

Prerequisites: Biology 115, 116, and 117 and an Introductory Geology course or consent of instructor.

**415. Evolution (3)**

Lecture, 3 hours.

A study of the organic processes of evolution with major emphasis on the "how" and "why" of evolution.

Prerequisites: Biology 115, 116 and 117, or consent of instructor. Biology 320 or 322 strongly recommended.

**416. Biogeography (4)**

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: Advanced upper division standing. A course in field biology, such as Biology 300, 330, 335, 350, or 360; and a course in earth science, such as Geography 302 or Geology 303.

**424. Cellular Physiology (4)**

Lecture, 2 hours; laboratory, 6 hours.

Basic principles and concepts of physiological and biochemical function at the cellular level.

Prerequisites: Biology 324 or 334; Chemistry 232, or equivalent.

**438. Phycology (4)**

Lecture, 2 hours; laboratory, 6 hours.

The study of marine and freshwater algae, their structure, reproduction, ecology, taxonomy, physiology, and economic importance.

Prerequisites: Biology 115 and 116, Biology 335 and/or 350 strongly recommended.

**439. Mycology (4)**

Lecture, 2 hours; laboratory, 6 hours.

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

Prerequisites: Biology 340 or may be taken concurrently.

**451. Functional Morphology of Marine Invertebrates I (4)**

Lecture, 2 hours; laboratory, 6 hours.

Study of the evolutionary relationships of the Lower Phyla, Echinoderms, and Protochordates with evidences 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)**

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.

**456. Insect Taxonomy (4)**

Lecture and/or discussion, 3 hours; laboratory, 3 hours.

An examination of insects and their classification. Some field work.

Prerequisite: Biology 355.

**460. Ichthyology (4)**

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

An introduction to systematic and ecological ichthyology.

Prerequisites: Biology 360 or 370 or consent of the instructor.

## **Biology**

### **462. Herpetology (4)**

Lecture, 2 hours; laboratory, 6 hours; plus two weekend field trips.

The biology of amphibians and reptiles; a survey of the amphibians and reptiles in terms of comparative morphology, classification, distribution, ecology, and evolutionary history.

Prerequisites: Biology 360 or 370 or consent of the instructor.

### **465. Ornithology (4)**

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)**

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 (3)**

Lecture, 3 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.

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

### **476. Animal Behavior Laboratory (2)**

Laboratory, 6 hours.

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

Prerequisites: Biology 475 or concurrent enrollment.

### **480. Immunology (5)**

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 115 and 117; Chemistry 232. Biology 340 strongly recommended.

### **481. Infection and Disease I (5)**

Lecture, 3 hours; laboratory, 6 hours.

Principles of host-parasite relationships. Etiology, immunology, and epidemiology of infections of major importance to man. Laboratory technics for the isolation and identification of pathogens. Pathogens studied: helminths, protozoa, fungi, and bacteria.

Prerequisites: Biology 340 or consent of the instructor.

### **482. Infection and Disease II (5)**

Lecture, 3 hours; laboratory, 6 hours.

Continuation of Infection and Disease I. Pathogens studied: mycoplasma, rickettsiae, chlamydiae, and viruses. While the two courses form a continuous sequence, either may be taken separately.

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



**484. Hematology (3)**

Lecture, 2 hours; laboratory, 3 hours.

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

Prerequisites: Chemistry 232, Physics 210A, and Biology 115 or equivalent.

**490. History of Biology (2)**

Lecture, 2 hours.

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

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

**491. Environmental Interdisciplinary Seminars (1)**

Interdisciplinary seminars on topics currently of interest in Environmental Science. This course is the same as Chemistry 491, Geology 491 and Physics 491. May be repeated for up to 4 units of credit.

Prerequisite: Biology 300.

**493. Special Problems in Environmental Science (2-4)**

Individual students will participate in independent investigation of various aspects of environmental problems. The major projects will be interdisciplinary in scope involving multi-disciplinary groups of students and faculty who will participate primarily as a biologist, chemist, geologist, physicist, etc. This course is the same as Chemistry 493, Geology 493, and Physics 493. May be repeated for up to 8 units of credit.

Prerequisites: Biology 300 and college level courses in two of the following areas: Chemistry, Physics and Geology.

**495. Independent Study for Majors or Minors (1-3)**

Prerequisites: A major or minor in biology with upper division standing and consent of instructor and department chairman.

**496. Senior Seminar in Biology (1)**

A seminar dealing with a particular biological topic for biology majors with advanced standing. The seminar may be repeated for credit and may be applicable to the requirements for a major in biology.

Prerequisites: Biology majors with advanced standing by consent of instructor.

**497. Topics in Biology (2-4)**

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: Biology majors with advanced standing by consent of instructor.

**499. Biology—Special Problems (1-2)**

Prerequisites: Approval of advisor, Department Chairman, and Provost of Old School.

**500. Graduate Seminar in Biology (1-2)**

A master's degree candidate may take from one to four seminars including no more than one in each of the following subject areas of biology: Molecular, Cellular, Developmental, Genetic, Structural, Systematic, and Environmental Biology.

Prerequisites: Graduate standing or last semester senior with consent of instructor.

**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.

## **Biology**

### **511. Selected Topics in Physiology (2-4)**

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

### **512. Selected Topics in Systematics, Genetics and Evolution (2-4)**

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

### **513. Selected Topics in Ecology (2-4)**

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

### **514. Selected Topics in Morphology and Development (2-4)**

Prerequisites: Adequate undergraduate preparation in the topic under consideration and graduate standing or last semester senior with consent of instructor.

### **523. Radioactive Tracers in Biology (2)**

Discussion, 1 hour; laboratory, 3 hours.

An examination of methods of using radioactive precursors and liquid scintillation counting as well as radioautography in biological research.

Prerequisites: Biology 323 or Biology 424 or Biology 340 or Chemistry 340 or consent of instructor.

### **525. Biological Electron Microscopy (4)**

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 345 (Cell Structure) or strong background in biochemistry or biophysics and consent of instructor.

### **595. Special Studies in Biology (1-3)**

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

### **599. M.A. Thesis (1-3)**

Prerequisites: See Master's Degree requirements.

# CHEMISTRY

## (Division of Natural Sciences)

Marvin Kientz, Chairman of Department

F. Leslie Brooks, David Eck, Vincent Hoagland, Robert Holmes, Donald Marshall, Ambrose Nichols, Jr., Douglas Rustad, Gene Schaumberg,\* Dale Trowbridge.

Variations in the basic curriculum provide suitable preparation for advanced degrees in chemistry; industrial positions; environmental sciences; teaching credential, or pre-professional curricula. The Bachelor of Science and Bachelor of Arts degrees are both offered.

### CHEMISTRY MAJOR FOR THE B.S. DEGREE

The B.S. degree is a four-year program 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 an advanced degree.

General Education .....	40 units
Major .....	40 units
Supporting Subjects .....	17-19 units
Electives or Minor .....	31-29 units
	128 units

### CHEMISTRY MAJOR COURSE REQUIREMENTS FOR THE B.S. DEGREE

#### *Chemistry Courses:*

{ 115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in Major) .....	5 units
and	
{ 255—Chemical Analysis .....	3 units
OR in place of 115AB and 255	
{ 125AB—General Chemistry (10 units—5 in Gen. Ed., 5 in Major) .....	5 units
and	
{ Upper Division Chemistry Electives ° .....	3 units
335AB, 336AB—Organic Chemistry .....	10 units
375AB, 376AB—Physical Chemistry .....	10 units
381—Computer Programming .....	2 units
425—Advanced Inorganic Chemistry .....	3 units
494—Undergraduate Research .....	1 unit
497—Seminar .....	1 unit
Upper Division Chemistry Electives ° .....	5 units
	40 units

### SUPPORTING COURSES FOR B.S. DEGREE

#### *Mathematics*

162, 212, 262, 312—Calculus with Applications I, II, III, IV (3 units in Gen. Ed., 9 units in major) (Recommended sequence) .....	9 units
OR	
140, 190, 240, 317—Calculus I, II, III, IV (3 units in Gen. Ed., 11 units in major) (Optional sequence) .....	11 units

\* On leave 1971-72.

\* 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, or biochemistry.

## Chemistry

### Physics

114, 116, 214, 216—Introduction to Physics and Laboratories .....	8 units
314, 316 strongly recommended (4 units)	

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17–19 units

### CHEMISTRY MAJOR FOR THE B.A. DEGREE

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, electronics, food processing, chemical sales, patent, safety, library, or supervisory work in the chemical industries. While this degree would provide minimal preparation for graduate study should the degree holder consider continuing education toward an advanced degree in chemistry, it would provide more than adequate preparation for graduate work in biochemistry.

General Education .....	40 units
Major .....	33 units
Supporting Subjects .....	11–13 units
Electives or Minor .....	40–38 units
	<hr/> 124 units

### CHEMISTRY MAJOR COURSE REQUIREMENTS FOR B.A. DEGREE

#### Chemistry Courses:

115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major) .....	5 units
255—Chemical Analysis .....	3 units
310AB—Fundamentals of Physical Chemistry .....	6 units
335AB, 336A—Organic Chemistry .....	8 units
Upper Division Chemistry Electives .....	11 units
	<hr/> 33 units

### SUPPORTING COURSES FOR B.A. DEGREE

#### Mathematics:

162, 212—Calculus with Applications I and II (3 units in Gen. Ed., 3 units in major) (Recommended sequence) .....	3 units
OR	
140, 190—Calculus I and II (3 units in Gen. Ed., 5 units in major) (Optional sequence) .....	5 units

#### Physics:

210AB—General Physics .....	8 units
OR	
114, 116, 214, 216—Introduction to Physics and Laboratories .....	8 units
	<hr/> 11–13 units

### 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.

**B.A. Advisory Pattern: Biochemistry**
**Chemistry Courses:**

115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major).....	5 units
255—Chemical Analysis .....	3 units
310AB—Fundamentals of Physical Chemistry.....	6 units
335AB, 336AB—Organic Chemistry .....	10 units
440AB—Biochemistry .....	6 units
441—Biochemical Methods .....	3 units

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 33 units

**Supporting Courses:**

 Same as the *Supporting Courses for B.A. Degree*
**Strongly Recommended Courses:**

Chemistry 355—Instrumental Measurements (2)

Chemistry 497—Seminar (1)

At least two courses from the following:

Biology 115—Principles of Life Science (4)

Biology 116—Plant Science (4)

Biology 117—Animal Science (4)

Biology 315—General Physiology (4)

Biology 320—General Genetics (3)

Biology 334—Plant Physiology (4)

Biology 340—General Bacteriology (5)

**B.A. Advisory Pattern: Environmental Studies**
**Chemistry Courses:**

115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major).....	5 units
255—Chemical Analysis .....	3 units
310AB—Fundamentals of Physical Chemistry.....	6 units
335AB, 336A—Organic Chemistry .....	8 units
355—Instrumental Measurements .....	2 units
457—Pollution and the Environment.....	3 units
491—Environmental Interdisciplinary Seminars .....	4 units
493—Special Problems in Environmental Science .....	2 units

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 33 units

**Supporting Courses:**

 Same as the *Supporting Courses for B.A. Degree*
**Strongly Recommended Courses:**

Chemistry 340—Introductor Biochemistry (3)

Choice of three of the following subject areas:

 Geology 303—Principles of Geology (4) and Geology 304—Principles of Geology  
Field Course (1)

 Biology 115—Principles of Life Science (4), and Biology 116—Plant Science  
(4), OR Biology 115 and Biology 117—Animal Science (4)

Economics 322—City and Regional Planning—Current Practice (3)

 Physics 354—Problems in Environmental Physics (3), and Physics 355—Environ-  
mental Physics Laboratory

 Other environmentally related courses in Psychology, Anthropology, Sociology and  
Economics.

## Chemistry

### B.A. Advisory Pattern: Pre-professional Preparation

The preparation in this plan is especially designed for students intending to do graduate work in dentistry, medicine, clinical chemistry, medical technology, pharmacy, veterinary medicine or other para-medical work.

#### Chemistry Courses:

115AB—General Chemistry (10 units—5 in Gen. Ed., 5 in major)	5 units
255—Chemical Analysis	3 units
310AB—Fundamentals of Physical Chemistry	6 units
335AB, 336AB—Organic Chemistry	10 units
Upper Division Chemistry Electives	9 units
	<hr/>
	33 units

#### Supporting Courses:

Same as the *Supporting Courses for B.A. Degree*

#### Strongly Recommended Courses:

In consultation with an advisor, students should develop a pattern designed to meet the requirements of his chosen profession or the entrance requirements of graduate or professional schools to which they intend to apply.

Biology 115—Principles of Life Science (4)

Biology 116—Plant Science (4)

Biology 117—Animal Science (4)

Biology 320—General Genetics (3)

Biology 370—Comparative Anatomy of Vertebrates (4)

Biology 372—Vertebrate Embryology (4)

Chemistry 355—Instrumental Measurements (2)

Chemistry 440AB—Biochemistry (3-3)

Chemistry 441—Biochemical Methods (3)

#### Teaching Credential Minor in Chemistry

Completion of a minimum of 20 units in chemistry courses will constitute a minor in chemistry. Students should consult with an advisor in the Department of Chemistry regarding course requirements.

#### Academic Minor in Chemistry

Completion of a minimum of 6 lower division units and 6 upper division units in chemistry courses is required. Students should consult with an advisor in the Department of Chemistry regarding course requirements.

## CHEMISTRY

### 100. Chemical Mathematics (1)

Lecture, 1 hour.

A survey of the basic mathematics necessary for satisfactory understanding of Chemistry 115AB: elementary algebra, exponents, powers of ten, fractions, products, quotients, quadratic formula, simultaneous equations, proportionality, logarithms, and slide rule. Pass/No credit.

### 102. Fundamentals of Chemistry (3)

Lecture; 3 hours.

A descriptive survey of some aspects of chemistry. An approach designed for the General Education requirement; not suitable for science majors. Chemistry 102 not open to students with credit in Chemistry 115A or 125A.

**103. Fundamentals of Chemistry Laboratory (1)**

Laboratory, 3 hours.

A laboratory-demonstration course designed to acquaint the student with chemical principles 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.

**115AB. General Chemistry (5-5)**

Lecture, 3 hours; laboratory lecture, 1 hour; laboratory, 3 hours.

General principles of chemistry from a physical approach. This course is designed for science majors and pre-professional curricula. Can also be used to satisfy the General Education requirement.

**125AB. General Chemistry (5-5)**

Lecture, 3 hours; laboratory, 6 hours.

An accelerated course in general chemistry designed for the chemistry and physics major. 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.

**200. Glassblowing (1)**

Laboratory, 3 hours.

Elementary training in glass manipulation and apparatus fabrication.

Prerequisite: Declared science majors given preference.

**203. Science and Religion (3)**

Lecture, 2 hours.

A study of the relationship between science and the major religions; the importance of this relationship today and in the future. Not acceptable for Gen. Educ. requirement.

**232. Introductory Organic Chemistry (4)**

Lecture, 3 hours; laboratory, 3 hours.

An introduction to the important principles, compounds and reactions of organic chemistry. Particular emphasis on compounds of biological significance. Laboratory includes an introduction to basic techniques of organic chemistry with emphasis on their application to natural products. Course designed for students not majoring in chemistry.

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

**255. Chemical Analysis (3)**

Lecture, 2 hours; laboratory, 3 hours.

Theory and practice of methods of analysis, including volumetric, gravimetric, and select instrumental techniques.

Prerequisite: Chemistry 115B.

**295. Community Involvement Project (1-4)**

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.

## **Chemistry**

### **302. Chemistry and the Environment (3)**

Lecture, 3 hours.

Survey and analysis of the effect of various chemicals such as insecticides, phosphate detergents; mercury and lead compounds on the ecology of North America and the earth, including the conflict over economic advantage versus ecological effects. The effect of chemicals on other species, pollution of the environment, and depletion of natural resources will be dealt with.

Prerequisite: Chemistry 102 or consent of instructor.

### **310AB. Fundamentals of Physical Chemistry (3-3)**

Lecture, 2 hours; laboratory, 3 hours.

The 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.) Laboratory work is designed to reinforce the lecture material.

Prerequisites: Chemistry 255 or equivalent; Mathematics 212 or 190 or concurrent registration; Physics 210AB or equivalent. Or consent of instructor.

### **311. Elements of Electronics (3)**

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.

### **335AB. Organic Chemistry (3-3)**

Lecture, 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.

### **336AB. Organic Chemistry Laboratory (2-2)**

Laboratory, 6 hours.

Fundamental techniques of organic chemistry including an introduction to modern instrumental methods. Includes an introduction to qualitative organic analysis. Designed to complement 335AB.

Prerequisite: Chemistry 335A or concurrent registration.

### **340. Introductory Biochemistry (3)**

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.

### **355. Instrumental Measurements (2)**

Lecture, 1 hour; laboratory, 3 hours.

Theory and practice of selected modern methods of instrumental analysis. Topics such as gas chromatography, liquid column chromatography, spectrophotometry, electrochemical methods, acid-base theory, and radiochemistry will be discussed.

Prerequisite: Chemistry 310B, or concurrent registration.

### **375AB. Physical Chemistry (3-3)**

Lecture, 3 hours.

Theoretical principles of quantum mechanics, statistical mechanics, thermodynamics, and kinetics relevant to chemical structure, chemical equilibrium and chemical reactions.



Prerequisites: Chemistry 255 or 125B; Physics 214 and 216; Mathematics 240 or 262, concurrent registration or consent of instructor. Physics 314 and 316 strongly recommended.

**376AB. Physical Chemistry Laboratory (2-2)**

Lecture, 1 hour; laboratory, 3 hours.

Physico-chemical measurements with emphasis on instrumental techniques and report writing.

Prerequisite: Chemistry 375A or concurrent registration.

**381. Computer Programming for Scientists (1-3)**

Basic FORTRAN programing with emphasis on applications in chemistry and physics.

Prerequisites: Chemistry 115B or 125B; Physics 114; Mathematics 190 or 212.

**385. Molecular Spectroscopy (2)**

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 Project (1-4)**

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.

**400. History of Physical Science (2) (Formerly Chemistry 390)**

Lecture, 2 hours.

A survey of the historical development of the physical sciences. This course is the same as Geology 400 and Physics 390.

Prerequisite: Major in the physical sciences or consent of the instructor.

**425. Advanced Inorganic Chemistry (3)**

Lecture, 3 hours.

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

Prerequisite: Chemistry 310B or 375B or concurrent registration.

**436. Modern Techniques of Organic Chemistry (3)**

Lecture, 1 hour; laboratory, 6 hours.

Preparation and characterization of organic compounds by modern methods; includes special techniques of synthesis and interpretation of spectral data.

Prerequisites: Chemistry 335B, 336B.

**437. Advanced Organic Chemistry (2)**

Lecture, 2 hours.

Physical and physiochemical consideration of organic chemistry with emphasis on reaction mechanisms, reactivity and structure, and recent developments from current literature.

Prerequisite: Chemistry 335B.

## **Chemistry**

### **440AB. Biochemistry (3-3)**

Lecture, 3 hours.

A study of proteins, lipids, nucleic acids, enzymes, hormones, vitamins and carbohydrates considering their composition, structure, and properties in relation to biological phenomena and metabolism. Chemistry 440B may be taken before Chemistry 440A.

Prerequisite: Chemistry 335B.

### **441. Biochemical Methods (3)**

Lecture, 1 hour; laboratory, 6 hours.

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

Prerequisites: Chemistry 232 or 336A; 340 or 440A or 440B.

### **455. Advanced Analytical Chemistry (4)**

Lecture, 2 hours; laboratory, 6 hours.

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

Prerequisites: Chemistry 310B or 375B or concurrent registration.

### **457. Pollution and the Environment (3)**

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; 336A; minimum of junior standing or consent of instructor.

### **481. Applied Nuclear Chemistry and Physics (2)**

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 consent of instructor.

### **482. Applied Nuclear Chemistry and Physics Laboratory (2)**

Lab Lecture, 1 hour; laboratory, 3 hours.

The use and production of radioactive sources and nuclear reactor problems using a neutron howitzer. Applications to detection of trace elements; nuclear chemical phenomena; radiological safety; state of the art instrumentation, and laboratory practices. This course is the same as Physics 482.

Prerequisite: Physics 481 or Chemistry 481 (concurrent enrollment suggested).

### **491. Environmental Interdisciplinary Seminars (1)**

Interdisciplinary seminars on topics currently of interest in Environmental Science. This course is the same as Biology 491, Geology 491 and Physics 491. May be repeated up to 4 units of credit.

Prerequisites: Chemistry 310A, 335A, 336A or equivalents, or consent of instructor.

### **493. Special Problems in Environmental Science (2-4)**

Individual students will participate in independent investigation of various aspects of environmental problems. The major projects will be interdisciplinary in scope involving multi-disciplinary groups of students and faculty who will participate primarily as a biologist, chemist, geologist, physicist, etc. This course is the same as

Biology 493, Geology 493, and Physics 493. May be repeated for up to 8 units of credit.

Prerequisites: Chemistry 310A, 335A, 336A, or equivalents, or consent of instructors.

**494. Undergraduate Research (1-6)**

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; or consent of instructor.

**495. Independent Study for Majors or Minors (1-3)**

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)**

A study of an advanced topic in chemistry. May be repeated for additional credit with new subject matter. Topics such as: solid state; proteins; enzymes; chemical evolution; inorganic and organic syntheses; heterocyclic organic compounds; structure and drug action; thermodynamics, kinetics, quantum chemistry, bonding theories, molecular spectra.

**497. Seminar (1)**

Presentation and discussions of current topics in chemistry based upon a paper or papers selected from the recent chemical literature. A student taking the course for credit will be required to give a talk. 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. Special Problems (1-2)**

# ECONOMICS

## (Division of Social Sciences)

Richard Van Gieson, Chairman

Gerald Egerer, Barry Ben-Zion, Victor Garlin, Ted Robbins

The Economics Major emphasizes the issues and problems of the economies of the cities, the nation, and the world, and is designed to provide a sound liberal arts background for undergraduates. It also serves the needs of students seeking a career in government, business, and the professions, such as law or teaching.

### ECONOMICS MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Economics Courses .....	40-42 units
Electives .....	44-42 units
<b>Total .....</b>	<b>124 units</b>

### ECONOMICS MAJOR COURSE REQUIREMENTS \*

1. All majors are required to take the following courses ..... 22-24 units
  - Econ. 201—Introduction to Economics ..... 4 units
  - Econ. 304—Macroeconomic Theory ..... 4 units
  - Econ. 305—Microeconomic Theory ..... 4 units
  - Econ. or Management 315—Statistics ..... 4 units
  - Any two other upper division economics courses not taken to satisfy the field requirements below ..... 6-8 units
2. In addition majors will take two of the following fields ..... 18 units
  - A) International Economics
    - Econ. 302—Theory of International Trade ..... 4 units
    - Econ. 402—Seminar in International Monetary Policy ..... 3 units
    - Econ. 442—Research Seminar in International Economics ..... 2 units
  - B) Economic Development
    - Econ. 303—Theory of Economic Development ..... 4 units
    - Econ. 403—Seminar in Economic Development ..... 3 units
    - Econ. 443—Research Seminar in Development ..... 2 units
  - C) Urban Economics
    - Econ. 320—Theory of Urban Economics ..... 4 units
    - Econ. 420—Seminar in Urban Economics ..... 3 units
    - Econ. 444—Research Seminar in Urban Economics ..... 2 units
  - D) The Public Economy
    - Econ. 323—Public Needs and Public Spending ..... 4 units
    - Econ. 423—Seminar in Public Economics ..... 3 units
    - Econ. 445—Research Seminar in Public Economics ..... 2 units
  - E) Applied Economics for Business and Government
    - Econ. 333—Applied Economics ..... 4 units
    - Econ. 433—Seminar in Applied Economics ..... 3 units
    - Econ. 446—Research Seminar in Applied Economics ..... 2 units

\* Upper division Economics courses may not be taken P/NC for credit in the major.

**3. Supporting fields**

Majors are advised to consult with the Economics Department advisor if they wish to strengthen their major by using elective units to plan a supplementary field in political science, public administration, management, or other appropriate fields.

Those students planning to teach at the secondary level should supplement the major with an appropriate field in history, geography or political science.

**4. Graduate School**

Majors planning to work in economics at the graduate school level are advised to take the following courses:

Econ. 484—Seminar in Advanced Macroeconomics

Econ. 485—Seminar in Advanced Microeconomics

Math. 140 and 190—Calculus

**MINOR IN ECONOMICS**

Students desiring to minor in Economics are advised to see a major advisor in order to plan a suitable minor.

**ECONOMICS**

NOTE: Non-majors are encouraged to enroll in all courses without prerequisites on the 200 and 300 level.

**201. Introduction to Economics (4)**

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 elective requirement.

**203. The Third World: Problems and Prospects (4)**

Is there any hope for the poor nations of the world in view of population explosion, food shortages, trade deficits, rising expectation, and diminishing aid from the West? The course will utilize simulation techniques to provide students with realistic insights into the growing conflict between the poor nations and the rich. Satisfies the general education social science elective requirement.

**208. The Economics of War and Peace (4)**

Cross-listed with Management 208. See Management Department course description.

**220. The Urban Crisis (3-4)**

Alternative views of the solution to pressing urban problems such as poverty, the growing welfare problem, the tax crisis, housing, transportation, education, and urban sprawl. Satisfies the GE social science elective requirement.

**301. Power and Freedom in the United States Economy (4)**

A study of the impact on personal freedom of the exercise of economic power by major institutions such as the large corporation, 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. Theory of International Trade and Finance (4) II**

An examination of the development of the modern theory of international trade, of the concepts and theory of the balance-of-payments, 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.

## Economics

### 303. Theory of Economic Development (4) II

Theories of economic development and underdevelopment. Examination of problems and policies for achieving growth in both poor and rich countries.

Prerequisites: Econ 201 or its equivalent.

### 304. Macroeconomic Theory (4)

A study of theories that attempt to explain the causes of fluctuations in employment, income, interest rates, credit availability, and business activity.

Prerequisites: Econ 201 or its equivalent.

### 305. Microeconomic Theory (4)

A study of theories that attempt to explain consumer behavior and decision-making by business firms in areas such as demand, pricing, output, and costs.

Prerequisites: Econ 201 or its equivalent.

### 310. Comparative Economic Systems (4)

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

### 313. Classical Studies (2-4)

An intensive study of one of the classics in economics, such as Adam Smith's *Wealth of Nations*. Satisfies the GE social science elective requirement.

### 314. Economic Utopias (4)

An exploration of the range of economic ideas and systems proposed by thinkers as diverse as St. Simon, Fourier, Owen, Blanc, Proud'hon, Rodbertus, and Bakunin, and the relevance of these earlier ideas to today's search for an ideal society.

### 315. Social Science Statistics (4)

Cross-listed as Management 315. See Management Department course description.

### 320. Theory of Urban Economics (4) I

An examination of alternative theories accounting for the growth and decline of the economies of the cities.

Prerequisites: Econ. 201 or its equivalent.

### 322. City and Regional Planning—Current Practice (3)

An overview of current planning efforts to deal with the problems of growth and urbanization.

### 323. Public Needs and Public Spending (4) I

This course looks at the determination of priorities in the public sector and their expression in public expenditure and taxation. Topics discussed include: public versus private goods, the incidence of taxation, the impact of government fiscal policy on the level of private economic activity, and defense and welfare spending.

Prerequisites: Econ 201 or its equivalent.

### 330. The Two Germanies: A Case Study in Economic Systems (3)

An examination and comparison of the economic structure, performance, and ideology of East and West Germany, with some reference to the making of modern (post-1870) Germany and to the roles of the BRD and the DDR in the current political and economic reorganization of Europe.

**331. Neo-Colonialism, Myth and Reality (3)**

An objective examination of the charge that the less developed countries that need foreign investment to aid their development are exploited by Western corporations that undertake investment projects in these countries in pursuit of profits. Simulations are used to provide students with realistic insights of the inevitable conflicts between these interests.

**333. Applied Economics for Business and Government (4)**

Application of tools developed from microtheory, such as programmed budgeting and cost-benefit analysis, to the solution of practical problems in business and government.

Prerequisite: Econ. 201.

**341. People Without Jobs (3-4)**

A probe into the economic and psychological problems facing groups currently afflicted with chronic joblessness and underemployment, such as the unskilled, engineers and scientists, older persons, social deviants, racial minorities, and women.

**342. The Environmental Crisis (3-4)**

A review of the thinking of leading economists and other experts on the problem of environmental deterioration and ways to effectively deal with it. Emphasis will also be given to studies of environmental problems in Northern California, including field trips to environmental problem areas.

**343. The Economics of the Performing Arts (3)**

A study of the problems facing new and old artistic and cultural enterprises in today's competitive marketplace. Case studies of the experience of Bay Area art, theatre, and music organizations will be utilized.

**344. Advertising, Government, and the Consumer (2-4)**

An examination of recent controversies over the proper role of advertising in our economy and society. Topics will include: the economics of advertising, the role of advertising in the economy, advertising effectiveness, truth in advertising, its effects on American culture, and the issues of governmental regulation.

**345. The Economics of Leisure (3)**

A study of ways in which diverse groups in our society deal with the changing pattern of work-leisure and implications for the future in areas such as education, housing, employment, and recreation. Attention will be given to the so-called "Leisure Industries" of the future.

**347. Energy Needs and Environmental Demands (2-4)**

A discussion of the problems and issues behind the growing energy crisis in America. Issues such as off-shore drilling, location of nuclear power plants, exploiting arctic oil, and further burning of fossil fuels will be discussed in light of future energy needs and the demands of conservationist groups for curtailed exploitation of many energy sources.

**348. Economic Encounters and Humanistic Values (3)**

This course examines the effects of participation in the economic process on people's sense of well-being. It draws on theory, literature, research, and the experience of guest lecturers. The course is designed to increase the student's awareness of the psychological impact of the modern economy.

**349. Technology and the Future (3-4)**

A review of futurist writings on directions in technology and their impact on the economic and social framework of our society. Simulation techniques will be used to give the student insight into current issues over the social control of technology.

## **Economics**

### **402. Seminar in International Monetary Policy (3) I**

The theoretical conditions necessary for achieving internal and external equilibrium simultaneously; the policies available to the U.S. government in practice; the Bernstein Report; recent reports by, and memoranda submitted to, the Joint Economic Committee of Congress.

Prerequisites: Econ. 302, 304, and 305.

### **403. Seminar in Economic Development (3) I**

Studies of the evolving pattern of development in terms of basic institutions and growth problems.

Prerequisites: Econ. 303, 304, and 305.

### **420. Seminar in Urban Economics (3) II**

Advanced topics in urban growth problems with attention to functional areas such as education, employment, transportation, and housing.

Prerequisite: Econ. 320.

### **423. Seminar in Public Economics (3) II**

Advanced topics in the theory and practice of public finance and public investment.

Prerequisites: Econ. 323, 304, and 305.

### **433. Seminar in Applied Economics (3)**

Prerequisite: Econ. 333.

### **442. Research in International Economics (2) I**

Prerequisite: Econ. 302.

### **443. Research Seminar in Development (2) I**

Prerequisite: Econ. 303.

### **444. Research Seminar in Urban Economics (2) II**

Prerequisite: Econ. 320.

### **445. Research Seminar in the Public Economy (2) II**

Prerequisite: Econ. 323.

### **446. Research Seminar in Applied Economics (2)**

Prerequisite: Econ. 333.

### **447. The Individual and the Work World (3-4) (Formerly Economics 346)**

An investigation of the information systems and complex institutional arrangements facing the individual trying to effectively plan a career in today's changing economy. Topics will include: future job market demands, counseling, education and training requirements, the changing work environment, forming of career preferences, and alternatives to traditional work choices.

### **484. Seminar in Advanced Macroeconomics (4)**

Prerequisites: Econ. 304 and 305.

### **485. Seminar in Advanced Microeconomics (4)**

Prerequisites: Econ. 304 and 305.

### **486. Internship (3-4)**

### **49I. Supervised Field Research (2-4)**

### **495. Independent Study for Majors or Minors (2-4)**

### **499. Special Problems (2-4)**



# EDUCATION

(Division of Psychology, Education, Health Sciences and Physical Education)

John D. Lawrence, Chairman of Department

F. Lynn Bills, Russell Broadhead, Libby Byers, Thorsten Carlson, George Elliott, James B. Enochs, Robert Fletcher, Herbert Fougner, Robert Fuchigami, Evangeline Geiger, Duncan Gillies, Bernice Goldmark, Betty Halpern, Bjorn Karlsen, Duncan MacInnes, George McCabe, O. Virginia Mitchell, Carroll Mjelde, Deborah Robyn Priddy, Charles Rhinehart, Violet Robinson, Brian Shears, Thalia Silverman, Harold Skinner, David Thatcher, Charles Wallace, Eva Washington, Jean Young.

## CREDENTIAL AND PERMIT PROGRAMS

Programs leading to the Standard Elementary, Secondary, Special Education, and Early Childhood Credentials, and to the Instructional Permit for pre-school centers are described on page 82.

## MASTER OF ARTS IN EDUCATION

The Master of Arts program in Education offers courses of graduate study to prepare teachers for specialized teaching and curriculum and instructional leadership responsibilities in the schools. The present program provides for an area of concentration in reading or special education.

### Admission Requirements

- A. B.A. degree from an accredited institution.
- B. Twenty semester units in education.
- C. Regular teaching credential.
- D. 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.
- E. Part-time students must obtain the favorable recommendation of the department after having completed two courses in the program and prior to admission to classified graduate status.

### Required Courses

- A. Core Courses (reading, special education options)
  - Educ. 516—Advanced Educational Psychology..... 3 units
  - Educ. 574AB—Research Seminar in Education..... 6 units
  - Educ. 575AB—Master of Arts Thesis ..... 0 units
  - and one course chosen from:
  - Educ. 510—Seminar: Educational Sociology (3)
  - Educ. 511—Seminar: Comparative Education (3)
  - Educ. 512—Seminar: History of Education (3) ..... 3 units
  - Educ. 513—Seminar: Philosophy of Education (3)
- B. Area of Concentration
  - I. Reading Option
    - Educ. 507—Seminar: Curriculum and Research in Reading..... 3 units
    - Educ. 560AB—Diagnosis and Remediation of Learning Difficulties  
in Reading ..... 6 units
  - II. Special Education Option
    - Educ. 562—Advanced Problems in Special Education..... 3 units
    - Educ. 563—Administration and Supervision in Special Education .. 3 units
    - Educ. 564—Seminar: Research in Special Education..... 3 units

## **Education**

### **C. Supporting Courses**

#### **I. Reading Option**

Twelve units chosen with the advisor's approval from 400 or 500 level courses having an appropriate bearing on the student's objectives.

#### **II. Special Education Option**

Twelve units chosen with the advisor's approval from 400 or 500 level courses having an appropriate bearing on the student's objectives.

## **EDUCATION**

### **200. Introduction to Education (3)**

Opportunities and challenges in exploring public school service. The teaching-learning process and current problems. Open to sophomores, juniors, seniors who have not decided definitely to enter the credential program. Weekly observations required.

### **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 Project (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.

### **395. Community Involvement Project (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: Admission to Elementary Education Curriculum.

### **401. Conservation Education in the Public Schools (3)**

A course for pre and inservice teachers. Includes a definition of terms, a history of conservation, current problems and utilizes a practical interdisciplinary approach to conservation education. The course requires implementation or participation in some 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, including Audio-Visual.

Prerequisite: Admission to Elementary Education Curriculum and Math. 300.

### **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: Admission to Elementary Education Curriculum.

**405AB. Student Teaching (Elementary School) (4-5)**

Teaching experience in an elementary school under the guidance of a supervising teacher. Pass-no credit grades only. 405B also meets the requirements for the second semester of early childhood specialization.

Prerequisite: Admission to Teacher Education Program. Approval of Education Department.

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

Principles, methods and materials of instruction in the teaching of reading in the elementary school, including Audio-Visual.

Prerequisite: Admission to Elementary Education Curriculum and English 400.

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

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

Prerequisite: Admission to Elementary Education Curriculum and English 400.

**409AB. Intern Teaching (4-4)**

Limited to credential candidates who have been employed as elementary teachers in a school district which has an intern program and which has contracted with the college for cooperative supervision. Includes teaching experiences under supervision with weekly seminars conducted by a college faculty member.

**410. Social Foundations (3)**

Brief survey of history and philosophy of education as background for contemporary educational problems. Influence of social structure on schools, school systems; American cultural values and their influence on education.

**417. Seminar in Psychological Foundations of Education (4)**

The teaching-learning process studied from both the teachers' and learners' points of view. Includes principles of growth and development, learning theory and evaluation of learning applicable to the classroom situation.

Prerequisite: Admission to Teacher Education Program. Approval of Education Department.

**418. Arts in Elementary Education (3)**

Prerequisite: Admission to Teacher Education Program. Approval of Education Department.

**420. Child Development (4)**

The growth and development of the child.

Prerequisite: Admission to Teacher Education Program. Approval of Education Department.

**425. Student Teaching (Secondary) (Phase I) (2)**

Teaching experience in a secondary school under the guidance of a supervising teacher. Each Music or Art major must complete two semesters of student teaching. (Both semesters will be in the major field.) Phase I will be exploratory and will include a variety of experiences. Two hours daily of student teaching is required. Pass-no credit grades only.

Prerequisite: Admission to Secondary Education Curriculum. Approval of Education Department.

**425A,B,C,D,E,F,G,J,K. Student Teaching (Secondary) (9)**

Teaching experience in a secondary school under the guidance of a supervising teacher. Full-day student teaching daily is required. Pass-no credit grades only.

## Education

- 425A. English
- 425B. Biological Sciences
- 425C. Physical Sciences
- 425D. Mathematics
- 425E. Social Sciences
- 425F. Physical Education
- 425G. Foreign Language
- 425H. Music (Phase II) 8 units (3 hours daily)
- 425I. Art (Phase II) 8 units (3 hours daily)
- 425J. Psychology
- 425K. Drama

Prerequisites: Admission to Secondary Education Curriculum. Approval of Education Department.

### 426. Seminar Accompanying Student Teaching (Secondary) (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—Phase II. Pass-no credit grades only.

Prerequisite: Approval of Education Department.

### 430. Exceptional Children (3)

Survey of programs and services involving the education and habilitation of exceptional children.

### 431. 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.

Prerequisite: Admission to Pre-School Education Curriculum or consent of instructor.

### 432. Nursery School Curriculum (3)

Materials and methods of instruction for children from 2–5.

Prerequisite: Admission to Pre-School Education Curriculum or consent of instructor.

### \* 433. Student Teaching in Pre-School Programs (4)

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.

Prerequisite: Admission to Pre-School Education Curriculum or consent of instructor.

### \* 433A. Student Teaching in Pre-School Programs (5)

Meets requirements of first semester early childhood education specialization.

Prerequisite: Admission to early childhood specialization program.

### 434. Supervision of Pre-School Educational Programs (3)

Principles and methods of supervision and administration with a focus on the goals of a program in the light of current child development theories. Examination of procedures for establishing schools and meeting statutory requirements.

Prerequisite: Admission to Pre-School Education Curriculum or consent of instructor.

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\* Can be taken only on P/NC basis.

**435. Organization of Pre-School Programs (3)**

A study of the diversity of models with emphasis on cultural patterns, social structure and community resources. The importance of team teaching, instructional aides, parents and volunteers will be explored. Specific programs that are now in operation will be used as examples.

Prerequisite: Admission to Pre-School Education Curriculum or consent of instructor.

**436. Kindergarten Curriculum (3)**

Principles, methods and materials of instruction in the kindergarten.

**437AB. Integrated Curriculum in Early Childhood Education (4) (4)**

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, ages 3-8, from a diverse school population.

Prerequisite: Admission to early childhood specialization program.

**437C. Developmental Approach to Reading (2)**

A study of various systems of teaching reading to young children, ages 3-8. 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 specialization program.

**438. Supervision, Management and Evaluation of Early Childhood Programs (2)**

An overview of schools for young children, ages 3-8; public, private, compensatory; licensing and certification requirements; school administrative management; personnel and program development.

Prerequisite: Admission to early childhood specialization program.

**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.

**440. Methods and Materials for Underachievers (3)**

Methods of identifying children with learning difficulties. Means of adjusting learning experiences to meet various kinds of difficulties.

**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.

**442. Mental Retardation (3)**

Intensive study of problems and issues related to mental retardation.

Prerequisite: Admission to Special Education Program.

**443. Instruction Strategies in Special Education (3)**

Intensive study of the instructional process. Simulation presentations required.

Prerequisite: Educ. 488 and admission to Special Education Program.

**444. Language Disorders and Development (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.

## **Education**

### **445. Counseling and Rehabilitation of the Handicapped (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.

### **446. Education of the Severely Retarded (3)**

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

Prerequisite: Educ. 442 and admission to Special Education program.

### **447. Educational Assessment of Exceptional Children (3)**

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

Prerequisite: Educ. 430.

### **448. Learning Disabilities (3)**

Introduction to various theories, issues, and problems related to learning disabilities in children.

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

### **449. Educationally Handicapped (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.

### **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)**

Student teaching with at least two groups of exceptional children.

Prerequisite: Consent of Special Education Coordinator.

### **\* 453. Seminar in Student Teaching (2)**

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

### **454. Education of the Emotionally Disturbed (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.

### **455. The Guidance Process (3)**

Study of guidance as an interpersonal process with particular attention to the pupil-teacher relationship. Role of guidance. Study of guidance tools and techniques.

### **456. Precision Teaching (3)**

Behavior modification principles and application. Field work required.

\* Can Be taken only on P/NC basis.

**468. 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.

**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.

**488. Curriculum and Materials Modification in Special Education (3)**

Analysis of curriculum and materials modifications. Emphasis is on the educable level retarded.

Prerequisite: Educ. 442.

**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. An Interdisciplinary Approach to the Learning Environment (4)**

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. Independent Study for Majors or Minors (1-3)****499. Special Problems (1-2)****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 (Elementary School) (2)**

Problems arising from work with student teachers. Coordination of college and classroom supervision of student teachers in kindergarten and elementary grades. Open to teachers supervising student teachers or to those having prior approval of instructor. May be taken twice for credit.

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

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

Prerequisite: Educ. 408 or equivalent. Approval of Education Department.

## Education

### 509. Organization, Administration and Supervision of Reading Instruction (3)

Principles and procedures in administration and supervision of instruction in reading, including surveys of current practices.

Prerequisite: Approval of 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.

### 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.

### 522. Secondary School Curriculum and Instruction (3)

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.

Each section limited to majors concurrently enrolled in student teaching.

522A. English

522B. Biological Sciences

522C. Physical Sciences

522D. Mathematics

522E. Social Sciences

522F. Physical Education (Semester I, 1 unit; Semester II, 2 units)

522G. Foreign Language

522H. Music (2 units)

522I. Art (2 units)

522J. Psychology

522K. Drama

Prerequisite: Admission to Secondary Education Curriculum. Approval of Education Department.



**532. Reading in the Secondary School (3)**

Techniques and procedures for improving reading habits and skills and stimulating reading interests of secondary students.

Prerequisite: Approval of Education Department.

**560AB. Diagnosis and Remediation of Learning Difficulties in Reading and Language Arts (3) (3)**

Education 560B may be taken twice for credit. Approval of Education Department.

Prerequisite: Approval of Education Department.

**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.

**574AB. Research Seminar in Education (3) (3)**

Principles of research in education; methods of organization and presentation of research data; selection, design and reporting of original investigations.

Prerequisite: Approval of Education Department.

**575AB. Master of Arts Thesis (0) (0)**

Pass-no credit grades only.

Prerequisite: Approval of Education Department.

# ENGLISH

(Division of Humanities)

John S. Bullen, Chairman of Department

Martin Blaze, David Bromige, Robert Clayton, Nirmal Dhesi, Sally Ewen, Gerald Haslam, Richard Hendrickson, James Kormier, Hector Lee, William Lee, Dorothy Overly, Don Patterson, Mary Rich, Alan Sandy, Anatol Schlosser, Eugene Soules, Lionel Williams, Janice Wilson, Caroline Zainer.

The major in English is designed both as a liberal education and as a sound undergraduate foundation for work toward the Ph.D. in English. It can also serve as an academic major for the standard teaching credential.

## ENGLISH MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Foreign Language: see advisor .....	0-14 units
Major .....	36 units
Electives .....	34-48 units
<hr/>	
Total .....	124 units

## ENGLISH MAJOR COURSE REQUIREMENTS

<i>Survey Courses</i> .....	6 units
To be selected from English 230, 231, 250, 251, 260, 261.	
<i>Junior Seminar</i> (English 301) .....	3 units
<i>Shakespeare</i> (English 450 or 451) .....	3 units
<i>Course in Writing</i> .....	3 units
To be selected from English 325, 326, 327, 328, 375, 413, 414, 415, 416.	
<i>Study of Language</i> (English 400) .....	3 units
<i>Area of Concentration</i> .....	15 units
See model programs in English office and consult advisor.	
<i>Senior Seminar</i> (English 497) .....	3 units

## TEACHING MINOR IN ENGLISH 20 UNITS

Students may complete a minor in English by taking 20 units, of which 14 must be in upper division courses. The units in the lower division may not include courses taken for the General Education requirement. The units should be distributed as follows: (a) either English 400, Study of Language or English 403, Structure of English; (b) English 375, Advanced Composition; (c) 6 units of survey courses; (d) 8 units of electives.

## MASTER OF ARTS DEGREE IN ENGLISH

### Objectives

The Master of Arts in English at Sonoma State College serves either as a terminal degree for teachers or as a preparatory degree for the Ph.D. It embodies the double objectives of increasing the candidate's knowledge of literature and of preparing him to deal with critical, linguistic, and interdisciplinary aspects of literature.

### Program

The candidate has a maximum of freedom in the pursuit of his interests. After completing an introductory course, he selects one of three categories—Language and Criticism, Comparative Literature, or English and American Literature—as his area of specialization. He then develops his thesis through nine units of additional support courses and supervised reading. After submitting his thesis, he takes an oral examination.

**Admission Requirements**

To be admitted to the program, the candidate must:

- A. Have a bachelor's degree with an undergraduate major in English from an accredited institution;
- B. Have maintained a 3.0 (B) grade point average in his major and an overall grade point average of 2.75;
- C. Have a reading knowledge of a foreign language;
- D. Have earned a grade of B or better in a comprehensive examination administered by the English Department or have scored above the sixty-fifth percentile in the Graduate Record Examination in Literature;
- E. Have been assigned to and accepted by an advisor.

**Degree Requirements (Also see general College Requirements)**

To complete the program, the candidate must:

- A. Maintain a grade point average of 3.0 or better;
- B. Complete thirty units of approved graduate study, in conformity with the options described above;
- C. Complete a thesis acceptable to the candidate's committee;
- D. Pass an oral examination on his special field of study to be administered by a designated committee of the department.

**Course Pattern**

English 500	Introduction to Graduate Study.....	3 units
English 599	Master's Thesis and accompanying directed reading.....	6 units
	Specialized studies and support courses.....	21 units
		<hr/> 30 units

**ENGLISH**

(Course titles followed by I are offered in the fall semester; those followed by II in the spring.)

**101AB. Basic Composition (3-3) Yr**

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.

**230-231. Survey of World Literature (3-3) Yr.**

Major writers will be considered.

**250-251. Survey of English Literature (3-3) Yr.**

Major writers will be considered.

**260-261. Survey of American Literature (3-3) Yr.**

Major writers will be considered.

**\* 295. Community Involvement Project (1-4) I and II**

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.

\* Can be taken only on P/NC basis.

## **English**

### **296. Problems of Communication in Mass Media (1-3) I and II**

Provides opportunity for writing various types of news stories. May be repeated for a maximum of six units. Does not count for credit toward the English major. Prerequisite: Consent of instructor.

### **301. Junior Seminar (3) I and II**

The art of critical writing in 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.

### **305. Children's Literature (3) I**

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.

### **306. Youth and Literature (3) II**

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

### **311. Explorations in Literature (3) I and II**

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.

### **312. Poetry (3) I**

Form and function.

### **313. Classical Studies (3)**

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

### **314. The Novel (3) II**

Themes, ideas, and techniques in the novel.

### **315. Drama (3) I**

Themes, ideas, and techniques in the drama.

### **316. The Short Story (3) II**

The short story as a distinctive literary form. Critical analysis of representative modern stories.

### **317. Biography (3) II**

Development of biography and biographical forms from Plutarch through Malcolm X.

### **325-326-327-328. Creative Writing (3-3-3-3) I and II**

Seminars involving criticism and discussion of students' works. Enrollment is limited to 15 and requires the consent of the instructor. The following prerequisites (or their equivalents) are advised:

#### **325. Fiction Writing**

Prerequisite: English 314 or 316.

#### **326. Poetry Writing**

Prerequisite: English 312.

#### **327. Playwriting**

Prerequisite: English 315.

**328. Personal Essay****375. Advanced Composition (3) I and II**

Purposeful writing for individual needs of students beyond the first year. Emphasis on effective organization, sentence structure, diction, and clarity of expression.

**392. Introduction to Library Research (2-3) I and II**

Introduction to general reference materials. Practice in using bibliographies, periodical indexes, microforms, government documents and library materials in specific subject areas. Designed to assist future research. Open to all students.

**\* 395. Community Involvement Project (1-4) I and II**

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.

**396. Problems of Communication in Mass Media (1-3) I and II**

Provides opportunity for writing various types of news stories. May be repeated for a maximum of six units. Does not count for credit toward the English major. Prerequisite: Consent of instructor.

**400. The Study of Language (3) I and II**

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

**403. Structure of English (3) I**

Examination of syntactic structure, including phonological and morphological considerations of traditional, structural and transformational models of English Grammar.

Prerequisite: English 400 or consent of instructor.

**405. Social Functions of Language (3) II**

The study of communication as it is carried on through regional and social dialects and a concern with the problems of judgment and authority which ensue.

Prerequisite: English 400 or consent of instructor.

**408. Special Studies in Language (3) I**

Detailed study of major areas of linguistics science. Such a subject as History of the English language, Semantics, or Traditional Grammar will be examined. Consult class schedule for current offering. May be taken twice for credit.

Prerequisite: English 400 or consent of instructor.

**410. Studies in Communication (1-3) I**

Analysis of the use, implications, and characteristics of contemporary media. Consult class schedule for current offering. May be taken twice for credit.

**412. Studies in Modern Literature (3) II**

A consideration of various genres and national literatures written in modern times. Consult class schedule for current topic.

**413-414-415-416. Advanced Creative Writing (3-3-3-3) I and II**

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:

\* Can be taken only on P/NC basis.

## **English**

### **413. Advanced Fiction Writing**

Prerequisite: English 325.

### **414. Advanced Poetry Writing**

Prerequisite: English 326.

### **415. Advanced Playwriting**

Prerequisite: English 327.

### **416. Advanced Writing: Personal Essay**

Prerequisite: English 328 or English 375.

### **419. The Political Novel (3) I**

Offered jointly with the Department of Political Sciences. An analysis of selected American and European political novels from the nineteenth and twentieth centuries.

### **420. Development of English Drama (3) I**

A study of representative plays of literary value chosen from medieval, renaissance, and neoclassical drama.

### **421A. Development of Modern Drama (3) I**

Study of representative plays of British, American and European dramatists, from Ibsen to O'Neill.

### **421B. Development of Modern Drama (3) II**

Study of representative plays of British, American and European dramatists from Odets to Ionesco.

421A is not a prerequisite for 421B.

### **422. Development of Modern British Poetry (3) II**

Themes, modes, and techniques of 20th century poetry of England and America.

### **423. Development of Modern American Poetry (3) II**

Themes, modes, and techniques of twentieth century poetry of America.

### **424. Development of the English Novel (3) I**

The 18th-century English novel.

### **425. Development of the English Novel (3) II**

The 19th-century English novel. 424 is not a prerequisite for 425.

### **430. Modes of Literature (3) II**

Each semester, a single literary mode (Tragedy, Comedy, Satire, etc.) will be selected for study in depth. Consult class schedule for current offering. Course may be repeated for credit.

### **431. Classical Asian Literature (3) I**

A study of the literary classics of China, India, Japan or the Middle East in English translation. May be repeated for credit.

### **432. Modern Asian Literature (3)**

A study of the literatures of China, Japan, or India-Pakistan in English translation or written primarily in English. Period covered: about 1910 to the 1960's. Not open to freshmen. May be repeated for credit.

### **435. Studies in World Literature (3) II**

Studies of literature in translation. Consult class schedule for current offering. May be repeated for credit.

## 445. Chaucer (3) I

Critical reading of Chaucer's *Canterbury Tales* with individual studies in cultural and biographical background.

## 446. Chaucer (3) II

Critical reading of the works of Chaucer and his contemporaries, not including *Canterbury Tales*. 445 is not a prerequisite for 446.

## 450-451. Shakespeare (3) I and II

Various comedy, tragedy, and history plays in each course. 450 is not prerequisite for 451. Either course fulfills Shakespeare requirement for majors.

## 453. Studies in Early American Literature (3) II

Close study of topics unique to American Literature before 1850. Consult class schedule for current offering. Course may be repeated for credit.

## 455. American Transcendentalists (3) I

A study of the major writings of the Transcendentalists and the most important New England poets of the Nineteenth Century.

## 456. Hawthorne and Melville (3) I

A study in depth of the major short stories and novels.

## 457-458-459. The Twentieth Century American Novel (3) I and II

Covers (1) Early 20th century novels; (2) Novels between World Wars I and II; (3) Novels since World War II.

## 460. Western American Literature (3) II

A regional approach to the literature of the trans-Mississippi West. Readings selected from nineteenth and twentieth century writers.

## 461. American Folklore (3)

Types and forms of folklore in America, with emphasis on California historical, literary, and traditional materials. Teachers may relate folklore to teaching units. Students will be encouraged to follow special interests, such as the ballad, tale, folk speech, customs, or local history.

## 462. American Drama (3) II

Survey of the development of drama in America, from the Colonial period to the present.

## 463. Middle English Literature (3)

Critical readings in the literature of England from 1200-1500 with emphasis on the non-Chaucerian tradition.

## 465. Literature of the Renaissance (3)

Non-Dramatic English literature (1485-1600).

## 467. English Literature of the 17th Century (3)

Nondramatic poetry and prose from Donne to Dryden, including Milton.

## 469. Restoration and 18th Century Literature

English literature (1660-1800).

## 475. English Literature of the Romantic Period (3)

Significant writers of the early nineteenth century including Wordsworth, Coleridge, Byron, Shelley, Keats, Scott, and Lamb.

## 476. English Literature of the Victorian Period (3)

## **English**

### **478. English Literature of the 20th Century (3)**

### **485. Individual Author (3) I and II**

Each semester one or more authors will be selected for study in depth. Consult class schedule for the author to be studied. Course may be repeated for credit.

### **486. Studies in Later American Literature (3) II**

Close study of topics unique to American Literature since 1850. Consult class schedule for current offering. Course may be repeated for credit.

### **490. Literary Criticism (3) II**

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

### **491. Studies in Criticism (3) II**

Courses in aesthetics and special problems designed to introduce students to the interests of criticism, enabling them to concentrate in areas relevant to their broader studies in literature.

### **495. Independent Study for Majors or Minors (1-3) I and II**

### **497. Senior Seminar (3) I and II**

As a final experience for the English major, this course will allow the student to perform an individual project within his area of concentration. Recommended for the final semester of the senior year.

### **498. Special Studies (3)**

Specialized studies currently needed or requested by students but which may not justify a permanent place in the curriculum. May be taken more than once.

### **499. Special Problems (1-3) I and II**

### **500. Introduction to Graduate Study in English (3) I and II**

Provides training in the use of reference materials and library resources, introduces the student to a variety of critical approaches and techniques, and encourages the formulation of individual goals in graduate study. Required of all students during the first semester of graduate study.

### **508. Seminar in Language Study (3) II**

An intense examination of primary linguistic material, stressing depth reading and original research.

Prerequisite: Consent of Instructor.

### **511. Seminar for Studies in Comparative Literature (3) I**

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.

### **\* 522. Seminar in Teaching College English (2) I and II**

Discussions in methods and materials of teaching English in junior colleges and four-year colleges.

Prerequisite: Consent of instructor.

### **\* 523. Practicum: Teaching College English (2) I and II**

Practical experience of supervised teaching in a college English classroom.

Prerequisite: Consent of instructor.

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\* Can be taken only on P/NC basis.



**525. Seminar in Genre (3)**

A single topic in a specific genre will be selected for study in depth. Consult class schedule for current offering. May be repeated for credit.

**550. Shakespeare Seminar (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.

**560. Seminar for Studies in English Literature (3)**

A single topic of English literature will be selected for study in depth. Consult class schedule for current offering. May be repeated for credit.

**586. Seminar for Studies in American Literature (3)**

A single topic of American Literature will be selected for study in depth. Consult class schedule for current offering. Course may be repeated for credit.

**595. Independent Study (1-3)****598. Special Studies Seminar (3) II****\* 599. Thesis and Accompanying Directed Reading (6)**

Prerequisite: English 500 and admission to candidacy.

\* Can be taken only on P/NC basis.

# FOREIGN LANGUAGES AND LITERATURES

(Division of Humanities)

(French, German, Russian, Spanish)

Marion L. Nielsen (German), Chairman of Department

Mary Arnold (Russian), Philip Beard (German), Sterling Bennett (German), Aaron Berman (Teacher Education), William O. Cord (Spanish), Yvette Fallandy (French), Adele Friedman (French), Francisco Gaona (Spanish), William Guynn (French), Raymond Lemieux (French), Howard Limoli (French), Giovanni Previtali (Spanish), Pablo Ronquillo (Spanish), Rosa Vargas-Arandia (Spanish).

## INTERNATIONAL PROGRAMS

Students of Sonoma State College who participate in the International Programs of the California State Colleges may undertake a full academic year at certain designated major institutions of higher learning.

For additional information see page 67 under Special Features.

## PLACEMENT IN FOREIGN LANGUAGE COURSES

A student who has studied a foreign language in high school *only* may begin study for credit of that language in the lower-division course (courses numbered 100-299) of his choice. Once a student has completed successfully a lower-division course, he may continue study of the same language for credit only in those lower-division courses whose number and/or letter succeed that of the course originally studied at Sonoma State College.

The staff of the Department of Foreign Languages will assist students in the matter of placement although the following schedule is *recommended*:

	Courses Numbered
1. Less than 2 years of high school study.....	101
2. Two years of high school study.....	102
3. Three years of high school study.....	201
	or
any other 200 course except	202
4. Four years of high school study.....	202
	or
any other 200 course except	201

Transfer students with college credit in a foreign language will not receive credit for work in the same language which duplicates that done at another college or university. Exceptions may be made by the Chairman of the Department when the following conditions are met:

1. The courses involved are of lower-division classification.
2. The original study was accomplished three or more years prior to enrollment in the language course at Sonoma State College.

## Intensive Courses in French and German

By taking the intensive course in French or German instead of the traditional two-year sequence, the student becomes eligible after only one year of study to participate in the California State College International Program in France or Germany. The one year also satisfies the foreign language requirement of the European Studies Program and the foreign language requirement of the Comparative Literature option for English majors and is a good preparation for the graduate reading examination in a foreign language. These courses are also appropriate for students interested in Management with a career in foreign trade.

### Credit by Special Examination

Students may challenge any course in a foreign language listed in the catalog, provided they conform to the regulations on "Credit Based on Examination" on page 47 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.

### FRENCH

The major in French is fully acceptable to the Education Department for any credential offered at Sonoma State College.

#### MAJOR IN FRENCH

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.

#### FRENCH MAJOR COURSE REQUIREMENTS

##### Upper Division

301AB—Advanced Grammar and Composition .....	6 units
310, 311—Survey of French Literature .....	6 units
425—Applied Linguistics .....	3 units
445—The Seventeenth Century .....	3 units
496—Seminar in French Literature .....	3 units
Nine units selected from French 435 through 490, except 445 (see above) .....	9 units

#### MINOR IN FRENCH

Students wishing to minor in French must complete a minimum of 20 units in French, including French 301AB, or its equivalent, and French 425.

*Unless stated otherwise, all courses are conducted in French.*

**100X–200X. Intensive French (9–9) or (4 for first ½ semester, 5 for second ½ semester)**

Covers equivalent of 101–102, 220A in 100X; 201–202, 220B in 200X. Team taught, field trips, laboratory (2½ hours weekly). Meets 3 times weekly, 3 hours per class. See department for details.

Prerequisite for 200X: 100X or equivalent.

**101–102. Elementary French (4–4)**

Systematic study of spoken French with practice in understanding, speaking, reading, and writing. A minimum of 2½ hours per week of practice sessions in the language laboratory are required in addition to class-meetings. No prerequisite for 101.

Prerequisite for 102: 101 or equivalent.

**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. A minimum of 1½ hours per week of practice sessions in the language laboratory are required in addition to the class meetings.

Prerequisite for 201: French 102 or equivalent.

Prerequisite for 202: French 201 or equivalent.

## French

### 220AB. Introduction to the Reading of French Literature (2-2) Yr

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.

### 295. Community Involvement Project (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.

### 301AB. Advanced Grammar and Composition (3-3) Yr

Written composition; style and idiom; oral analysis of literary texts. Prerequisite: French 202 or equivalent.

### 310. Survey of French Literature (Middle Ages through 17th Century) (3)

*Chanson de Roland*, medieval narrative and lyric poetry; the *Pléiade*; humanism; classicism. Prerequisites: French 202 or equivalent; French 220AB highly recommended.

### 311. Survey of French Literature (18th and 19th Centuries) (3)

The Enlightenment, the development of poetry and the novel in the 19th century. Prerequisites: French 202 or equivalent; French 220AB highly recommended.

### 313AB. Classical Studies in French (3-3)

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.

### 315. The Contemporary French Novel in Translation (3) I

Gide, F. and C. Mauriac, Robbe-Grillet, Duras, Simon, Butor. No prerequisite. Does not provide credit toward the major. Class discussion will be in English.

### 316. The Contemporary French Theater in Translation (3) II

Claudel, Sartre, Anouilh, Becket, Ionesco, Adamov, Genêt. No prerequisite. Does not provide credit toward the major. Class discussion will be in English.

### 395. Community Involvement Project (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.

### 425. Applied Linguistics (3)

Perfection of pronunciation and intonation through intensive study of phonetics; laboratory practice, individual work, audition of recorded French literature. Prerequisite: French 301AB or equivalent.

**435. Medieval French Literature (3)**

The *chansons de geste*, the *roman médiéval*, Marie de France, Chrétien de Troyes, literature of the bourgeoisie, religious drama, comedy, lyric poetry, François Villon. Prerequisite: French 301AB or equivalent; 310 highly recommended.

**440. The 16th Century (3)**

Marot, Rabelais, the *Pléiade*, Calvin, the romanesque drama, Montaigne. Prerequisite: French 301AB or equivalent; 310 highly recommended.

**445. The 17th Century (3)**

Corneille, Racine, Molière, La Fontaine. Prerequisite: French 301AB or equivalent; 310 highly recommended.

**446. The 17th Century (3)**

Descartes, Pascal, Mme de Lafayette, Mme de Sévigné, La Rochefoucauld, Bossuet, Fénelon, La Bruyère. Prerequisite: French 301AB or equivalent; 310 highly recommended.

**450. The 18th Century (3)**

Saint-Simon; rationalism: Lesage, Fontenelle, Montesquieu, *l'Encyclopédie*, Voltaire. Prerequisite: French 301AB or equivalent; 311 highly recommended.

**451. The 18th Century (3)**

*Sensibilité*: Marivaux, the salons, Prévost, St-Pierre, Rousseau; Sade. Prerequisite: French 301AB or equivalent; 311 highly recommended.

**455. The 19th Century (3)**

The romantic poets, Hugo, Stendhal, Balzac, Flaubert, Maupassant. Prerequisite: French 301AB or equivalent; 310 highly recommended.

**456. The 19th Century (3)**

The realistic novel, naturalism, the Parnassians, symbolism. Prerequisite: French 301AB or equivalent; 311 highly recommended.

**460. The 20th Century (3)**

Proust, Gide, the Catholic writers, surrealism. Prerequisite: French 301AB or equivalent; 311 highly recommended.

**461. The 20th Century (3)**

The Existentialists, *le nouveau roman*, contemporary theater including *le théâtre de l'absurde*. Prerequisite: French 301AB or equivalent; 311 highly recommended.

**465. French Literature and the Arts (3)**

The interrelationships between French literature and the arts as suggested by Hatzfeld and Souriau. Limited in any semester to a particular period, theme or art form compared with French literature.

Prerequisite: French 301AB. French 310 or 311 recommended.

**470. Individual Author or Movement (3)**

Intensive study of a single French literary figure or movement of international significance through lectures, discussion, and individual topics. Prerequisite: French 301AB or equivalent. French 311 highly recommended.

**480. Third-World Literature in French (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 301AB. French 310 or 311 recommended.

## German

### 482. French Literature and Politics (3)

Analysis of the hidden political assumptions latent in various literary theories and works. Includes the study of the political context within which works of literature are created.

Prerequisite: French 301AB. French 310 or 311 recommended.

### 490. Explication de textes (2)

Techniques of textual analysis. Prerequisite: French 301AB or equivalent. French 311 highly recommended.

### 495. Independent Study for Majors or Minors (1-3)

Directed and individual study, discussions, and reports on selected topics. Prerequisite: French 301AB and French 310-311 or equivalent.

### 496. Seminar in French Literature (3)

Intensive study of a series of specific problems, including their bibliography, historical and/or biographical aspects, literary criticism and analysis.

Prerequisite: French 301AB or equivalent; French 310-311 highly recommended.

### 499. Special Problems (1-2)

Prerequisite: French 301AB and French 310-311 or equivalent.

## GERMAN

The major in German is fully acceptable to the Education Department for any credential offered at Sonoma State College.

### MAJOR IN GERMAN

The major in German for the B.A. degree shall include a minimum of 26 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.

### GERMAN MAJOR COURSE REQUIREMENTS

#### Lower Division

250—Phonetics and Conversation ..... 2 units\*

#### Upper Division

301AB—Advanced Grammar and Composition .... 4 units

414—The Young Goethe and *Sturm und Drang* or

415—The Age of Goethe or 430—Faust ..... 3 units

425—Applied Linguistics ..... 3 units

490—Senior Tutorial for Majors ..... 3 units

496—Seminar for Majors ..... 3 units

Electives from 300-400 courses ..... 10 units

### 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.

The German language will be used extensively in all German courses except where noted "taught in English". In upper division literature courses, primary emphasis will be placed on the students' expression of ideas, not on the external form which this expression might take.

\* Transfer students only may take German 250 concurrently with upper division courses during the first and/or second semester of study at Sonoma State College.

**100X–200X. Intensive German. (9–9) or (4 for first ½ semester, 5 for second ½ semester)**

Covers equivalent of 101–102, 220A in 100X; 201–202, 220B in 200X. Team taught, field trips, laboratory (2½ hours weekly). Meets 3 times weekly, 3 hours per class. See department for details.

Prerequisite for 200X: 100X or equivalent.

**101–102. Elementary German (4–4) Yr**

Systematic study of the fundamentals of German grammar, with practice in understanding, speaking, reading, and writing. Daily laboratory work required. No prerequisite for 101.

Prerequisite for 102: German 101 or equivalent.

**201–202. Intermediate German (3–3) Yr**

Review of fundamentals and study of more advanced aspects of grammar with further practice, on an intermediate level, in understanding, speaking, reading, and writing. Daily laboratory work required. Prerequisite for 201: German 102 or equivalent.

Prerequisite for 202: German 201, or equivalent.

**210–211. German for Reading Knowledge (2–2)**

Primarily for non-majors interested in developing a reading knowledge of German for graduate school or other purposes. Reading of prose texts from a variety of fields.

Prerequisite: German 102 or equivalent.

**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.

Prerequisite for either semester: German 202. Strongly recommended for majors.

**250. Phonetics and Conversation (2)**

A systematic study of the German sound system; drills for perfecting pronunciation; practice in conversation.

Prerequisite: German 102 or equivalent.

**251. Conversation (2)**

Systematic improvement of fluency, pronunciation, and modern idiomatic usage in both free and directed conversation.

Prerequisite: German 102 or equivalent.

**295. Community Involvement Project (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.

**301AB. Advanced Grammar and Composition (2–2)**

Study of German grammar on an advanced level; written composition; style and idiom.

Prerequisite: German 202 or equivalent.

**306. German Culture and Civilization (2)**

From the earliest times to the 18th century. Conducted in English.

No prerequisite.

## German

### 307. German Culture and Civilization (2)

From the 18th century to the present. Conducted in English.

No prerequisite.

### 313. Classical Studies in German (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.

### 320. German Lyric Poetry (3)

From the Middle Ages to 1832.

Prerequisite: German 202 or equivalent.

### 321. German Lyric Poetry (3)

From 1832 to the present.

Prerequisite: German 202 or equivalent.

### 325. Narrative Prose of the 19th Century (3)

With special emphasis on the *Novelle*.

Prerequisite: German 202 or equivalent.

### 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.

### 340. German Literature in Translation (3)

Not a survey course. Emphasis as to period, genre, author, or authors will vary from semester to semester. Does not count toward the major. Conducted in English.

No prerequisite.

### 341. Individual Author in Translation (3)

A course conducted in English with all readings in English. No knowledge of German required.

No prerequisite. May be taken more than once for credit. (Does not count toward the German major.)

### 395. Community Involvement Project (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.

### 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 1775; Schiller.

Prerequisite: German 202 or equivalent.



418. The Modern Novel (3)

A study of representative novels by German authors in the 20th century.

Prerequisite: German 202 or equivalent.

419. The Modern Drama (3)

A study of representative plays 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.

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.

435. Individual Author (3)

May be repeated for credit for different authors.

Prerequisite: German 202 or equivalent.

490. Senior Tutorial for Majors (3)

To be taken by each German major during one of the semesters of his senior year. Students will meet individually or in pairs on a regular schedule with the professor assigned to the tutorial to discuss German literary works on the "German B.A. Reading List."

Prerequisite: Student must have senior standing as a German major.

495. Independent Study (1-3)

Directed individual study; discussions and reports on selected topics.

Prerequisite: German 202 or equivalent.

496. Seminar for German Majors (3)

Study in depth of a topic related to a specific writer, period, or literary movement; preparation of a paper for discussion in the seminar.

Prerequisite: Student must have senior standing as a German major.

499. Special Problems (1-2)

Prerequisite: German 202 or equivalent.

## RUSSIAN

The minor in Russian is designed to broaden the liberal education of undergraduates, to provide a basis for graduate work in any field where the Russian language is a necessary tool, and to serve as a teaching minor for a credential. The objective of the minor in Russian is to ensure competency in the language and a general knowledge of Russian literature.

Students wishing to take a minor in Russian must complete a minimum of 9 semester units in upper division courses consistent with the pattern of course requirements. Students are cautioned to study carefully the prerequisites for upper division courses.

**RUSSIAN MINOR COURSE REQUIREMENTS**

301-302—Advanced Russian .....	6 units
425—Applied Linguistics .....	3 units

*Unless stated otherwise, all courses are conducted in Russian.*

**101-102. Elementary Russian (5-5) Yr**

Systematic study of the fundamentals of Russian grammar with practice in the four basic skills of understanding, speaking, reading and writing. A minimum of five (one daily) ½ hour practice sessions in the language laboratory is required. No prerequisite for 101.

Prerequisite for 102: Russian 101 or equivalent.

**201-202. Intermediate Russian (5-5) Yr**

Continuation of the study of the fundamentals of Russian grammar, with emphasis on advanced problems and practice on an intermediate level in the basic skills. A minimum of five (one daily) ½ hour practice sessions in the language laboratory is required.

Prerequisite for 201: Russian 102 or equivalent.

Prerequisite for 202: Russian 201 or equivalent.

**295. Community Involvement Project (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 minor.

**301-302. Advanced Russian (3-3) Yr**

Selected problems in the Russian language; written and oral composition, both controlled and free.

Prerequisite for 301: Russian 202 or equivalent.

Prerequisite for 302: Russian 301 or equivalent.

**310. Survey of Classic Russian Literature in English (3)**

Survey of major authors and literary trends in the 19th century, from Pushkin to Chekhov.

Prerequisite: Upper division standing. Does not count toward the minor.

**311. Survey of Soviet Russian Literature in English (3)**

Survey of major authors and literary trends beginning with the pre-Revolutionary period to the present day.

Prerequisite: Upper division standing. Does not count toward the minor.

**312. Tolstoy and Dostoevsky in English (3)**

Prerequisite: Upper-division standing; Russian 310 highly recommended. Does not count toward the minor.

**313. Classical Studies in Russian (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 minor.

**320-321. Reading of Literature in Russian (2-2) Yr**

Selected readings in Russian of an intermediate to advanced degree of difficulty designed to serve as an introduction to the reading of literary works in Russian with emphasis on vocabulary building and analysis of literary works.

Prerequisite: 202 or equivalent; Russian 310 highly recommended.

**395. Community Involvement Project (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 minor.

**425. Applied Linguistics (3)**

Systematic study of the phonology, morphology and syntax of the Russian language with emphasis on pronunciation.

Prerequisite: Russian 302 or equivalent.

**495. Independent Study (1-3)**

Directed and individual study, discussions, and reports on selected topics.

Prerequisite: Russian 302 or Russian 321 or equivalent.

**499. Special Problems (1-2)**

Prerequisite: Russian 302 or equivalent.

**SPANISH**

The major in Spanish is fully acceptable to the Education Department for any credential offered at Sonoma State College.

**MAJOR IN SPANISH**

The major in Spanish for the B.A. degree shall include a minimum of 29 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.

**SPANISH MAJOR COURSE REQUIREMENTS**

**Upper Division**

301-302—Composition and Literary Analysis .....	3-3 units*
305 or 306—Survey of Spanish American Literature or 311 Survey of Spanish Literature 18th Century to 20th Century.....	3 units
310—Survey of Spanish Literature 12th Century to 17th Century.....	3 units
400—Spanish Medieval Literature or 405 Spanish Renaissance Literature or 410 Spanish-American Colonial Literature or 420 Spanish Baroque Literature .....	3 units
425—Descriptive Linguistics .....	3 units
430—19th Century Spanish-American Literature or 440 Spanish Neo-Classical and Romantic Literature or 450 Spanish Literature from 1850 to 1898 .....	3 units
460—20th Century Spanish American Literature or 470—Spanish Literature, 1898-1927 or 475—Spanish Literature since 1927 or 480A or B— <i>Don Quijote</i> .....	3 units
496—Seminar in Spanish American Literature or 497—Seminar in Spanish Literature .....	3 units

**MINOR IN SPANISH**

A minor in Spanish shall consist of eleven units of upper-division unit courses and shall include 425.

\* Transfer students only may take Spanish 301 and Spanish 302 concurrently with upper division courses during the first and/or second semester of study at Sonoma State College.

## Spanish

### MASTER OF ARTS DEGREE IN SPANISH \*

The Master of Arts Degree in Spanish is designed to provide qualified students with a program of advanced studies in the literatures and linguistics of the Spanish-speaking cultures.

The program is flexible in that it accommodates the candidate's special interests or needs and incorporates all fundamental work in bibliographical research, linguistics, and in the external influences which have helped to mold the cultures. It attempts to prepare the candidate to deal with critical and linguistic analyses of literature and language and to relate these studies to the culture and civilization of their origin. Students may concentrate their efforts in either Peninsular or Latin American areas, or both.

Elementary and secondary teachers may regard the degree as terminal, but it also serves as a preparation for those continuing study for the Ph.D.

#### *Admission Requirements*

To be admitted to the program, the candidate must:

1. Have a bachelor's degree and an undergraduate major in Spanish (minimum of 24 semester units of upper-division work) from an accredited institution.
2. Have maintained a 3.0 (B) under-graduate grade point average in the major.
3. Have maintained an overall grade point average of 3.0 (B) at the time of the bachelor's degree or, with the approval of the advisor, have maintained a 3.0 (B) grade point average during a semester of full-time graduate work.

#### *Admission to Classified Status*

To be admitted to Classified Status (Candidacy), the candidate must:

1. Complete a diagnostic oral interview in Spanish to the satisfaction of the faculty.

#### *Requirements for the Degree*

1. Maintain a grade point average of 3.0 (B).
2. Complete a series of courses as described below in Course Pattern.
3. Pass a reading examination in a language approved by the major advisor and other than that of the major field and English.
4. Pass a written and an oral Comprehensive Examination.
5. Complete a thesis acceptable to the candidate's committee.

#### *Course Pattern*

The minimum course requirements (30 units) for the degree are as follows:

- |   |          |
|---|----------|
| 1. 500 Bibliography and Research Methods.....   | 3 units  |
| 2. 501 Diachronic Linguistics .....   | 3 units  |
| 3. 502 Classical Influences on European Literature, or<br>503 European Literature and the Italian Renaissance.....  | 3 units  |
| 4. 590 Thesis .....   | 3 units  |
| 5. 595 Comprehensive Examination Tutorial.....  | 3 units  |
| 6. A minimum of 15 units of electives at the 500 course level. (A maximum of 6 units taken at the 400 level—except 425—beyond the requirements of the under-graduate major may, on approval by the Department, be included in this requirement.)..... | 15 units |

*Unless stated otherwise, all courses are conducted in Spanish.*

\* Will not be offered 1972-74.

**101-102. Elementary Spanish (5-5) Yr**

Systematic study of the fundamentals of Spanish grammar with practice in pronunciation, understanding, speaking, reading, and writing. A minimum of five (one daily) ¼ hour practice sessions in the language laboratory is required. No prerequisite for 101.

Prerequisite for Spanish 102: Spanish 101 or equivalent.

**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. A minimum of three ½ hour practice sessions per week in the language laboratory is required.

Prerequisite for 201: Spanish 102 or equivalent.

Prerequisite for 202: Spanish 201 or equivalent.

**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.

Prerequisite for 251: Spanish 250 or equivalent.

**295. Community Involvement Project (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.

**301-302. Composition and Literary Analysis (3-3) Yr**

Weekly compositions to improve writing skills accompanied by an introduction to literary analysis. Spanish 302; continuation of 301 with emphasis on literary analysis.

Prerequisite for Spanish 301: Spanish 202 or equivalent.

Prerequisite for Spanish 302: Spanish 301.

**303. Introduction to Phonetics (2)**

The sound system of Spanish. Theory and practice.

No prerequisite.

**304. Introduction to Civilization of Spain (3)**

Readings and discussions of the culture of Spain including its history, literature and arts.

Prerequisite: Spanish 202 or equivalent.

**309. Introduction to Civilization of Spanish-America (3)**

Readings and discussions of the culture of Spanish-America including its history, literature and arts.

Prerequisite: Spanish 202 or equivalent.

**313. Classical Studies in Spanish (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.

**315. Spanish Literature in Translation (3)**

Peninsular literature in English. Conducted in English. No prerequisites. Does not count toward the major or minor in Spanish.

## Spanish

### 316. Spanish-American Literature in Translation (3)

The literature of the Spanish-speaking countries of the Western Hemisphere in English. Conducted in English. No prerequisites. Does not count toward the major or minor in Spanish.

### 395. Community Involvement Project (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 Literature (3)

The major Spanish literary works between 1140 and 1492. The *Poema de Mio Cid*, *Berceo*, *Libro de Buen Amor*, D. Juan Manuel, M. de Santillana, the *Roman-cero*, Manrique, *La Celestina*.

Prerequisite: Spanish 301AB.

### 405. Spanish Renaissance Literature (3)

Spanish literature of the 16th Century. Italian and Classical influences.

Prerequisite: Spanish 301AB.

### 410. Spanish-American Colonial Literature (3)

A study of the principal literary works produced in Spanish-America between 1521 and 1821.

Prerequisite: Spanish 301AB.

### 420. Spanish Baroque Literature (3)

Cervantes, Góngora, Quevedo, Gracián, Calderón.

Prerequisite: Spanish 301AB.

### 425. Descriptive Linguistics (3)

Systematic study of syntax, articulatory phonetics and phonemics of the Spanish language with emphasis on pronunciation, linking, stress, and intonation. Conducted in English.

Prerequisite: Spanish 301AB.

### 430. 19th Century Spanish-American Literature (3)

The poetry and prose of the independent Spanish-American nations. *Gauche* poetry; *Modernismo*.

Prerequisite: Spanish 301AB.

### 440. Spanish Neo-Classical and Romantic Literature (3)

The theater of Moratín and the fables of Iriarte and Samaniego, *Costumbrismo*, Larra, the Romantic Theater, Zorrilla, Espronceda and Bécquer.

Prerequisite: Spanish 301AB.

### 445. Spanish Picaresque Literature (3)

The study of picaresque literature in Spain.

Prerequisite: Spanish 302.

### 450. Spanish Literature from 1850 to 1898 (3)

The Spanish novel and short story of Galdós, Valera, Pardo Bazán and others.

Prerequisite: Spanish 301AB.

### 460. 20th Century Spanish-American Literature (3)

Main currents of contemporary literature in Spanish-America.

Prerequisite: Spanish 301AB.

- 470. Spanish Literature 1898–1927 (3)**  
 Poetry, drama, novel, and essay.  
 Prerequisite: Spanish 301AB.
- 475. Spanish Literature Since 1927 (3)**  
 Poetry, drama, novel, and essay.  
 Prerequisite: Spanish 301AB.
- 480AB. Don Quijote (3–3)**  
 An intensive study of Cervantes' masterpiece, of the influences it reflects and its relation to Cervantes' other works.  
 Prerequisite: Spanish 301AB.
- 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. Independent Study for Majors or Minors (1–3)**  
 Directed and individual study, discussions, and reports on selected topics.  
 Prerequisite: Spanish 301AB.
- 496. Seminar in Spanish American-American Literature (3)**  
 Directed and individual study, discussion, and reports on selected topics directly related to aspects of Spanish-American language, literature, and/or civilization.  
 Prerequisite: Spanish 301AB.
- 497. Seminar in Spanish Literature (3)**  
 Directed and individual study, discussions, and reports on selected topics, directly related to aspects of Spanish and Hispanic language, literature, and/or civilization.  
 Prerequisite: Spanish 301AB.
- 499. Special Problems (1–2)**  
 Prerequisite: Spanish 301AB.
- 500. Bibliography and Research Methods (3)**
- 501. Diachronic Linguistics (3)**
- 502. Classical Influences on European Literature (3)**
- 503. European Literature and the Italian Renaissance (3)**

**Spanish Literature**

- 505. Medieval and Renaissance Poetry (3)**
- 506. Medieval and Renaissance Prose (3)**
- 507. Golden Age Drama (3)**
- 508. Golden Age Poetry (3)**
- 509. Golden Age Prose (3)**
- 510. Cervantes (3)**
- 511. Spanish Literature 1700–1850 (3)**
- 512. 19th Century Spanish Novel and Short Story (3)**
- 513. The Generation of '98, Precursors and Influences (3)**
- 514. 20th Century Novel (3)**
- 515. 20th Century Essay (3)**

## **Spanish**

- 516. 20th Century Poetry (3)
- 517. 20th Century Theater (3)
- 518. Structural Linguistics (3)

### **Spanish American Literature**

- 519. The Literature of the Conquest (3)
- 520. Colonial Literature (3)
- 521. Literatura Gauchesca (3)
- 522. 19th Century Prose (3)
- 523. El Modernismo (3)
- 524. Theater in Latin America (3)
- 525. 20th Century Novel (3)
- 526. 20th Century Poetry (3)
- 527. 20th Century Essay (3)
- 590. Thesis (3)
- 591. Special Studies in Spanish Literature (3)
- 592. Special Studies in Spanish American Literature (3)
- 595. Comprehensive Examination Tutorial (3)



# GEOGRAPHY

(Division of Social Sciences)

William Frazer, Chairman of Department

Leigh Anderson, Timothy Bell, William Crowley, Leon Hunsaker, Claude Minard, Jr.

## GEOGRAPHY MAJOR

The Geography Major is designed to serve a dual purpose. Geographic study of both the natural and cultural environment and the relationships between the two, forms a broad-based area of knowledge for the student desirous of a liberal arts education. For a student who wishes to pursue graduate study in geography, the major provides the necessary technical skills, methodological viewpoints, and fields of knowledge. It serves as an academic major for those who contemplate a career in teaching.

### GEOGRAPHY MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Geography Courses .....	42 units
Supporting Subjects .....	8 units
Foreign Language and/or electives.....	34 units
<b>Total .....</b>	<b>124 units</b>

### GEOGRAPHY MAJOR COURSE REQUIREMENTS

The geography course requirements (42 units) are divided into four groups, as listed below. In addition, the geography major is required to complete eight (8) units in supporting subjects. Supporting subjects are to be chosen to enhance the breadth of the major or of a particular area of specialization within the major. Consultation with the major advisor is required for approval of the program of supporting subjects.

- I. Basic: Geography 302, 303..... 8 units
- II. Systematic: The student must complete twenty-four (24) units from the following list—no more than sixteen (16) units may be taken from any one category (A, B, C)..... 24 units
  - A. Geography 310, 325, 360, 370, 405, 416, 425.
  - B. Geography 320, 330, 340, 350, 403, 433, 443, 453, 465, 466.
  - C. Geography 380, 385, 480, 486.
- III. Regional: to be chosen from Geography 390, 400, 410, 415, 420, 430, 440, 460..... 6 units
- IV. Geographic Thought: Geography 490..... 4 units

### GEOGRAPHY MINOR

The Geography Minor (20 units) is divided into the following groupings and the number of units required for each group.

- I. Basic .....
- II. Systematic .....
- III. Regional .....

#### 201. Introduction to Physical and Cultural Geography (3)

A survey of the elements of physical geography: weather and climate, soils, vegetation landforms; population, patterns of settlement, resources and manufacturing.

(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. With the consent of the advisor, it may be substituted for certain courses in the Basic group.

## I. Basic

### 302. Physical Geography (4)

Lecture, 3 hours; laboratory, 3 hours

A systematic exploration of the physical elements of geography. Atmospheric elements, meteorological, and climatological patterns; their effect on soil and vegetation distribution. Landforms: geomorphological structures and the erosive processes through which they have been formed. Laboratory period will include field trips and work with weather and topographic maps.

### 303. Cultural Geography (4)

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.

## II. Systematic

### A.

### 310. Elementary Meteorology (3)

Importance of temperature, pressure, humidity, visibility, radiation, sky conditions, precipitation and wind in the study of meteorology. Atmospheric stability and types of fronts and air masses associated with storm activity. Detailed study of hydrologic cycle.

### 325. Elementary Weather Analysis (4)

Lecture, 2 hours; laboratory, 6 hours.

Introduction to application of basic meteorological principles to weather analysis and forecasting through construction and interpretation of surface and upper air weather maps, preparation and analysis of stability diagrams, and familiarization with weather reports and codes. Emphasis will be placed on examination of historical case studies.

Prerequisites: Geography 310 or consent of instructor.

### 360. Geomorphology (4)

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 201; 302; Geology 102; 303 or consent of instructor.

### 370. Climatology (3)

Climatic regions of the earth as classified according to distribution of temperature, pressure and precipitation. Includes study of paleoclimates and the climatic anomalies of microclimates and macroclimates.

Prerequisite: Geography 201; 302; 310 or consent of instructor.

### 405. Geography. *Man and Weather* (4)

Lecture, 3 hours; laboratory 3 hours.

Man's use and abuse of the atmosphere. Meteorological and climatological aspects of resource utilization, industrial location, and related economic activities. Legal and economic consideration of weather modification, environmental deterioration, and related topics.

Prerequisites: Geography 310 or consent of instructor.

### 416. Biogeography (4)

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: Advanced upper division standing. A course in field biology, such as Biology 400; 430; 440; 450; 451; or 458; and a course in earth science such as Geography 302 or Geology 115.

### **425. Advanced Weather Analysis and Forecasting (4)**

Lecture 2 hours; laboratory 6 hours.

The study and application of static and dynamic properties of the atmosphere to everyday problems in weather forecasting.

Prerequisites: Geography 325 or consent of instructor.

## **B.**

### **320. Political Geography (3)**

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 (3)**

Sequential analysis of the settlement and economy in the changing environment and resource pattern of Anglo-America.

### **340. Economic Geography (3)**

A study of the distribution, production, and utilization of the world's basic resources.

### **350. Urban Geography (3)**

The origin and growth of cities, with emphasis on the site and locational factors. Interrelations of urban functions, internal structure, and the distribution of cities and their territories.

### **403. Seminar in Cultural Geography (4)**

Advanced investigations and inquiries into the many facets of cultural geography with emphasis on such sub-groupings as: agricultural geography, cultural ecology, settlement geography, and other man-environment relationships.

Prerequisite: Geography 303 or equivalent, or consent of instructor.

### **433. Seminar in Historical Geography (4)**

Investigations and discussions will vary over a wide variety of topics including the geographic landscapes of particular historical periods and areas; the origins, spread and legacy of specific forms of the landscape and cultural traits; and the sequent occupancy of selected regions.

Prerequisite: Geography 330 or equivalent, or consent of instructor.

### **443. Seminar in Economic Geography (4)**

Offerings will vary; topics such as economic development, regional economic organizations; transportation networks; agricultural classification; geography of energy; or industrial location theory may be considered.

Prerequisite: Geography 340 or consent of instructor.

### **453. Seminar in Urban Geography (4)**

Discussions and investigations of urban problems within the realm of geographic inquiry. Spatial organization, function, growth, historical development and other subjects will be treated. Field investigation will be included when possible.

Prerequisite: Geography 350 or equivalent, or consent of instructor.

### **465. Seminar in Conservation, Resources and Men (4)**

Geography of resources in relationship to man in terms of demographic trends and adequacy of food, mineral and energy resources. Special emphasis on conservation and resources of California.

Prerequisite: Geography 390 or consent of instructor.

## **Geography**

### **466. Seminar in Population and Social Geography (4)**

The demographic variables of birth, death, and migration will be examined in relation to the spatial differentiation, organization and growth of human populations, societies, and cultures at world, national, and local levels.

Prerequisites: Geography 303; 340; or consent of instructor.

### **C.**

### **380. Map and Air Photo Interpretation (4)**

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. Fundamentals of Cartography (4)**

Lecture 2 hours; laboratory 6 hours.

The study of the theory of map projections and instruction in the technical cartographical techniques necessary for map construction. Emphasis is on the qualities of map projections and on the maximization of the utility of cartographical tools in geographic studies.

### **480. Field Methods and Techniques (3)**

Lecture 1 hour; field work 6 hours.

Instruction and field experience in mapping and data collection and analysis, including a consideration of both natural and cultural features, with preparation of reports based on field data.

Prerequisite: One course in Geography.

### **486. Advanced Cartography (4)**

Lecture 2 hours; laboratory 6 hours.

Prerequisite: Geography 385.

## **III. Regional**

### **390. Geography of California (2)**

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.

### **400. Seminar in the Regional Geography of Anglo-America (4)**

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.

### **410. Seminar in the Regional Geography of South America (4)**

Offerings will vary and will focus upon special topics of interest, such as problems of developing countries and regionalism in the Western Hemisphere.

### **415. Mexico, Central America, and Caribbean (4)**

Offerings will vary and will focus upon special topics of interest, such as problems of development and accomplishments and future of developing countries.

### **420. Seminar in the Regional Geography of Europe (4)**

Offerings will vary and will focus upon special topics of interest, such as the European Common Market and its geographic basis and regionalism in Europe.

**430. Seminar in the Regional Geography of Asia (4)**

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)**

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)**

This course will provide offerings in area studies—for example; China and South East Asia, arid lands and underdeveloped lands.

**IV. Geographic Thought****490. Seminar in the Development of Geographic Thought from Ancient to Modern Times (4)**

Prerequisite: Senior year Geography Majors; open to others with permission of instructor.

**495. Independent Study for Majors or Minors (1-4)****499. Special Problems (2-4)**

# GEOLOGY

(Division of Natural Sciences)

Thomas Anderson, Chairman of Department

Rolfe Erickson, Walter Vennum, G. Davidson Woodard, William Wright

The geology major program is designed to give the student three different paths, all leading to a B.A. degree. The particular plan which an individual chooses should depend on his interests and goals in the general field of geology and should be chosen only after consultation with a departmental advisor. These different paths are described below and all are based around a core of geology courses which are required for each of the various plans.

## GEOLOGY CORE COURSES

### Core Courses:

Geology 303—Principles of Geology .....	4 units
Geology 304—Principles of Geology Field .....	1 unit
Geology 305—Mineralogy—Optics .....	4 units
Geology 307—Igneous and Metamorphic Petrology .....	4 units
Geology 308—Igneous and Metamorphic Field .....	1 unit
Geology 311—Stratigraphy and Sedimentation .....	4 units
Geology 312—Stratigraphy and Sedimentation Field .....	1 unit
Geology 317—Structural Geology .....	4 units
Geology 318—Structural Geology Field .....	1 unit
	<hr/>
	24 units

### Pre-Professional Advisory Plan: (Plan I)

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.

#### GEOLOGY MAJOR FOR THE B.A. DEGREE (Pre-Professional Plan)

Major Courses .....	48 units
General Education .....	40 units
Supporting Courses (6 in Gen. Ed.) .....	21 units
Electives .....	15 units
	<hr/>
	124 units

## PLAN I. REQUIRED GEOLOGY COURSES

Geology Core Courses .....	24 units
Geology 320—Field Geology .....	3 units
*Geology 325—Advanced Field Geology .....	4 units
Geology 413—Paleontology .....	4 units
Geology 414—Paleontology Field .....	1 unit
Geology 450—Senior Seminar .....	3 units
Upper Division Geology Electives .....	9 units
	<hr/>
	48 units

### Required Supporting Courses, Plan I

Chemistry 115AB—General Chemistry .....	10 units
Physics 210AB—General Physics or Physics 114, 116—Introduction to Physics I, (Lecture and Laboratory) (4) and Physics 214, 216—Introduction to Physics II (Lecture and Laboratory) (4) .....	8 units
Mathematics 162—Calculus with Applications .....	3 units
	<hr/>
	21 units

\* The Sonoma State College Geology Department is not presently able to offer this course. Many colleges and universities in the west run summer field camps in geology, and it is recommended that students consult their geology advisor regarding application to one of these.

**Earth Science Advisory Plan: (Plan II)**

This plan is designed to give students a broad background in earth science and is intended to be a terminal degree in geology. Students planning on entering a teacher credential program and those wishing to study geology as a general interest are advised to take this plan. It is *not* for students intending to enter graduate school in geology.

**GEOLOGY MAJOR FOR THE B.A. DEGREE (Earth Science Plan)**

Major Courses .....	42 units
General Education .....	40 units
Supporting Courses (9 in Gen. Ed.) .....	32-37 units
Electives .....	10-5 units
	<hr/> 124 units

**PLAN II. REQUIRED GEOLOGY COURSES**

Geology Core Courses .....	24 units
Geology 202—Rocks, Time, and Evolution .....	3 units
Geology 302—Marine Geology .....	3 units
Upper Division Geology Electives .....	12 units
	<hr/> 42 units

**Required Supporting Courses, Plan II**

Biology 112—Oceanology .....	3 units	
Biology 110—Evolution of Life on Earth .....	3 units	} any 6 units
Biology 111—Man and His Environment .....	3 units	
Biology 305—Conservation of Natural Resources .....	3 units	
Chemistry 102—Fundamentals of Chemistry (3) and Physics 210AB—General Physics (8) Or Physics 100—Descriptive Physics (3) and Chemistry 115AB—General Chemistry (10) .....	11-13 units	
Astronomy 100—Descriptive Astronomy (3) or Astronomy 200—Introductory Astronomy (3) .....	3 units	
Geography 310—Elementary Meteorology (3); Geography 325—Elementary Weather Analysis (4); Geography 370—Climatology (3); Geography 405— Man and Weather (4) .....	6-8 units	
Mathematics 107—Algebra and Trigonometry (4) or Mathematics 114—Mathematical Elements for Freshmen Science Courses (3) .....	3-4 units	
	<hr/> 32-37 units	

**Environmental Science Advisory Plan: (Plan III)**

This plan is intended for students interested in applying geological principles to the solving of environmental problems. Students taking this plan will participate in interdisciplinary seminars dealing with environmental science.

**GEOLOGY MAJOR FOR THE B.A. DEGREE (Environmental Science Plan)**

Major Courses .....	42 units
General Education .....	40 units
Supporting Courses (6 in Gen. Ed.) .....	29 units
Electives .....	13 units
	<hr/> 124 units

## Geology

### PLAN III. REQUIRED GEOLOGY COURSES

Geology Core Courses .....	24 units
Geology 306—Environmental Geology .....	3 units
Geology 491—Environmental Interdisciplinary Seminar .....	2 units
Geology 493—Special Problems in Environmental Science .....	4 units
Upper Division Geology Electives .....	9 units

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42 units

#### Required Supporting Courses, Plan III

Same supporting courses as "Required Supporting Courses, Plan I" .....	21 units
Biology 115—Principles of Life Science (4) and Biology 116—Plant Science (4) or 117—Animal Science (4) .....	8 units

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29 units

#### Strongly Recommended:

Geology 380—Map and Aerial Photograph Interpretation  
Geology 430—Engineering Geology  
Environmentally oriented courses in Physics, Chemistry, Political  
Science, Economics, and others.

### 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

#### 102. General Geology (3)

Lecture, 2 hours; laboratory, 3 hours.

A course to satisfy the General Education requirement in science. 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 such as earthquakes and associated hazards, coastline geology, and the geology and geologic history of Sonoma County will be emphasized. Numerous field trips will be taken. Not intended for geology majors.

#### 120. Regional Field Geology (3)

Lecture, 1 hour; 10-day field trip.

A study of rocks and minerals as they are found in the earth as well as the history of their present distribution in the western United States. The field aspects of geology will be emphasized. A 10-day field trip will be taken during spring vacation to study geology in classical localities such as Yosemite and Grand Canyon National Parks. Not intended for geology majors.

Prerequisites: Geology 102 or consent of instructor.

#### 202. Rocks, Time and Evolution (3)

Lecture, 2 hours plus one discussion-demonstration section per week.

An introduction to the chronologic sequence of life throughout the earth's geologic past emphasizing the applications of the study of fossils in understanding the historical development of the earth's crust. The course is designed for general educational interest and is not intended for majors in geology.



**300. Advanced Regional Field Geology (3)**

Lecture, 1 hour; 10-day field trip.

Advanced study of the field aspects of geology in the western United States. A 10-day field trip will be taken during spring vacation to study geology in classical localities such as Yosemite and Grand Canyon National Parks. Intended for geology majors.

Prerequisites: Geology 102 and consent of instructor.

**302. Marine Geology (3)**

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. Principles of Geology (4)**

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.

**304. Principles of Geology Field Course (1)**

Field studies done in conjunction with Geology 303. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 303.

**305. Mineralogy—Optics (4)**

Lecture, 2 hours; laboratory, 6 hours.

Study of minerals in hand specimen; crystal structure and chemistry; crystallography; introduction to optical theory and optical examination of minerals.

Prerequisite: Geology 303 or Geology 102.

**306. Environmental Geology (3)**

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)**

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. Extensive use of the petrographic microscope.

Prerequisite: Geology 305 or equivalent.

**308. Igneous and Metamorphic Petrology Field Course (1)**

Field studies done in conjunction with Geology 307. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 307.

## **Geology**

### **311. Stratigraphy and Sedimentation (4)**

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 the petrographic microscope.

Prerequisite: Geology 307, Chemistry 115AB.

### **312. Stratigraphy and Sedimentation Field Course (1)**

Field studies done in conjunction with Geology 311. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 311.

### **317. Structural Geology (4)**

Lecture, 3 hours; laboratory, 3 hours.

Introduction to theoretical and experimental rock deformation; description and genesis of folds, faults and related minor structures; study of the field occurrence of folds, faults, mountain ranges, continents and the crust and interior of the earth. Laboratory and field study of structural problems using geological maps.

Prerequisites: Geology 303, Math 107 or equivalent.

### **318. Structural Geology Field Course (1)**

Field studies done in conjunction with Geology 317. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 317.

### **320. Field Geology (3)**

Lecture-laboratory, 1-3 hours. 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 307 or equivalent.

### **360. Geomorphology (4)**

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, 302, Geology 303, or consent of instructor.

### **380. Map and Air Photo Interpretation (4)**

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 Project (1-4)**

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.

### **400. History of Physical Science (2)**

Lecture, 2 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.

**401. Geotectonics (3)**

Lecture, 3 hours.

A synthesis of geophysics, structural geology, stratigraphy, and petrology as applied to the history of formation and distribution of large-scale geologic features of the earth. Specific problems to be considered will include continental drift, sea-floor spreading and the origin of mountain ranges.

Prerequisites: Geology 317, or consent of instructor.

**406. X-ray Analysis of Geologic Materials (2)**

Laboratory, 4 hours.

Introduction to the use of x-ray diffraction techniques in the geological sciences.

Prerequisite: Consent of instructor.

**410. Geophysics (3) (Formerly Geology 301)**

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 to geological problems such as oil exploration and continental drift.

Prerequisites: Geology 102 or 303, Math 162, or consent of instructor.

**413. Paleontology (4)**

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.

**414. Paleontology Field Course (1)**

Field studies done in conjunction with Geology 413. Required weekend field trips.

Prerequisite: Must be taken concurrently with Geology 413.

**418. Stratigraphic Paleontology (4)**

Lecture, 3 hours; laboratory, 3 hours.

Elements of physical and biostratigraphy and the stratigraphic sequence of fossils; interpretation of sequence, relationship, and correlation of time-rock units with special emphasis on the Tertiary.

Prerequisite: Geology 413.

**422. Geochemistry (3)**

Lecture, 3 hours.

Introductory cosmochemistry and origin of the elements; the earth as a chemical system; chemistry and environments of crustal rocks; mineral phase and crystal chemistry; introduction to geochronology and stable isotope variations in nature.

Prerequisite: Chemistry 102A, 115A, or 125, or consent of instructor.

**430. Engineering Geology (3)**

Lecture, 3 hours.

The study of geological materials (rock and soil) and their mechanical behavior. Methods of field, laboratory and theoretical investigation of the stability of natural materials under induced stress will be used to approach problems in foundation engineering and slope stability.

Prerequisites: Geology 102 or 303. Physics 210AB or equivalent.

**445. Geology of the United States (3)**

Lecture, 3 hours.

The stratigraphic and structural development of the North American continent.

## Geology

Theories concerning the origin of continents and their tectonic elements. **Special emphasis on California.**

Prerequisite: Geology 303, or consent of instructor.

### 450. Senior Seminar in Geology (3)

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.

### 475. Advanced Structural Geology Seminar (1-3)

Lecture-discussion, 1-3 hours.

Individual presentation and discussion of specific problems in structural geology. The literature of structural geology as well as field investigations by the class will be used as a basis for discussion.

Prerequisites: Geology 317, or consent of instructor.

### 478. Topics in Stratigraphy (2)

An advanced seminar dealing with classical and modern problems in the areas of stratigraphy and sedimentation. Emphasis will be placed on individual presentation and discussion of pertinent literature with required class and individual field investigations.

Prerequisite: Consent of instructor.

### 491. Environmental Interdisciplinary Seminars (1)

Interdisciplinary seminars on topics currently of interest in Environmental Science. This course is the same as Chemistry 491, Biology 491 and Physics 491. May be repeated for up to 4 units of credit.

Prerequisites: Geology 303, 304, 306.

### 493. Special Problems in Environmental Science (2-4)

Individual students will participate in independent investigation of various aspects of environmental problems. The major projects will be interdisciplinary in scope involving multi-disciplinary groups of students and faculty who will participate primarily as a biologist, chemist, geologist, physicist, etc. This course is the same as Chemistry 493, Biology 493, and Physics 493. May be repeated for up to 8 units of credit.

Prerequisites: Geology 303, 304, 306 and college level courses in two of the following areas: Chemistry, Physics and Biology.

### 495. Independent Study for Majors or Minors (1-3)

Individual study under guidance of an advisor of an advanced field, laboratory or literature problem.

Prerequisites: Approval of advisor, and Division Chairman.

### 499. Geology—Special Problems (1-2)

Special study under guidance of an advisor to increase the student's strength in an area of geologic training.

Prerequisites: Approval of advisor, Division Chairman, and Provost of Old School.

## HEALTH SCIENCES

(Division of Psychology, Education, Health Sciences and Physical Education)

C. Douglas Earl, Department Chairman

James Gale, Robert Lynde, G. Edward Rudloff

Robert Sorani, William Trumbo, Ella Trussell, Martha Yates

(Course titles followed by I are offered in the fall semester;  
those followed by II in the spring.)

### 305. Care and Prevention of Injuries (2) I and II

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.

Prerequisite: Biology 310.

### 310. Kinesiology (4) I and II

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.

Prerequisites: Biology 310, Physics 100.

### 315. Physiology of Exercise (4) I and II

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.

Prerequisites: Chemistry 102, Biology 224.

### 325. School Health Programs (3) II

Health, needs, interests, and problems of elementary, secondary and junior college students. Legal aspects. Teaching methods. Evaluation of health services, health instruction, and the school health environment programs.

### 495. Independent Study for Majors or Minors (1-3) I and II

# HISTORY

Glenn Price, Department Chairman

Robert Brown, Thomas Caulfield, Theodore Grivas, Dennis Harris, LeVell Holmes, Donald Johnson, Robert Karlsrud, Albert Laferriere, Han-Sheng Lin, Daniel Markwyn, Peter Mellini, William Poe, Stephen Watrous, D. Anthony White

The History major program is designed to provide students with a thorough introduction to the universal nature, particular processes, and course of developments which constitute the experience of mankind. Although a wide latitude of choice is afforded in the selection of upper division courses, students planning on graduate work and/or a teaching career are strongly advised to diversify their studies rather than concentrate upon any single geographic area or national state. Students going on for extensive graduate study are encouraged to include foreign language courses in their program.

## HISTORY MAJOR REQUIREMENTS FOR THE B.A. DEGREE

All history majors are required to complete the four basic survey courses in World and United States history. Transfer students who have completed direct equivalents of the lower division survey courses but who have numerical unit deficiencies in that area must make up the deficit with additional units of upper division history course work. Note that most history survey and lecture courses require concurrent enrollment in a corequisite colloquium class. Enrollment in a senior or graduate seminar presumes adequate academic preparation (e.g., completion of the lower division pattern, a course in "The Study of History," and an upper division lecture class covering the general topic or period). Majors are urged to complete the full lower division pattern and a "Study of History" course before taking any other upper division work in history. Each history major will be assigned a departmental faculty advisor who must review and approve the specific pattern of study.

A. Lower Division ( <i>all courses or transfer equivalents required</i> ):	
1. History 111 and 112 (World History basic surveys and Colloquia)	8 units
2. History 250 and 251 (U.S. History basic surveys and Colloquia)	8 units
B. Upper Division ( <i>chosen in consultation with departmental advisor</i> ):	
1. History 390 or 391 (Study of History and Colloquium)	4 units
2. Upper Division History Courses (and related Colloquia)	16 units
3. History Senior Seminars (Select from <i>two</i> continental areas)	8 units
<i>Total History units required</i>	<u>44 units</u>
C. Supporting Subjects ( <i>chosen in consultation with departmental advisor</i> ):	
1. Historically oriented courses related to the pattern of study and chosen from any discipline(s) other than history	8 units
D. General Education Pattern	40 units
E. Minor and/or Elective and/or Foreign Language and/or Credential Courses	32 units
<i>Total Units Required for the B.A. in History</i>	<u>124 units</u>

## MASTER OF ARTS DEGREE IN HISTORY

The Master of Arts program in history is designed to provide students with the opportunity of carrying on advanced, comprehensive, and specialized studies in United States, European, Latin American, Asian, and/or African history. The wide variety of course offerings and the option of either writing a thesis or of taking field examinations affords the flexibility required to meet the needs of those students who regard the M.A. as a terminal degree and those preparing to go on for doctoral

work. Each student granted classified standing (that is, formally admitted to candidacy for the M.A. Degree in History) will be assigned a thesis or field examination committee chairman who must review and approve the specific pattern of study.

## 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 Graduate Record Examination (History) with scores acceptable to the Departmental Graduate Studies Committee.
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 Sonoma State College Graduate School (Office of Admissions and Records) and to the Department of History Graduate Studies Committee.
6. Favorable recommendation for admission to candidacy by the Departmental Graduate Studies Committee after a 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 Departmental Graduate Studies Committee, 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 24 units of the pattern must be completed in residence at Sonoma State College.
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 Studies Committee, the satisfactory completion of one of the following two options:

A. Master's Thesis Option ( <i>chosen in consultation with committee chairman</i> ):	
History Courses at the "400" level .....	12 units
History Graduate Seminars at the "500" level .....	12 units
Master's Degree Thesis Research (History 599) .....	6 units
Master's Degree Thesis .....	0 units

<i>Total Units Required for the M.A. in History</i> .....	30 units
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B. Field Examination Option ( <i>chosen in consultation with committee chairman</i> ):	
History Courses at the "400" level .....	16 units
History Graduate Seminars at the "500" level .....	12 units
Field Examination Reading and Research (History 598) .....	4 units
Written and Oral Field Examinations .....	0 units

<i>Total Units Required for the M.A. in History</i> .....	32 units
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## **History**

### **HISTORY MINOR FIELD REQUIREMENTS**

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."

#### **LOWER DIVISION HISTORY COURSES**

##### **111. Foundations of World Civilization to 1600 (3)**

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.

Corequisite: History 111A.

##### **111A. Colloquium: Foundations of World Civilization to 1600 (1)**

Corequisite: History 111.

##### **112. Development of the Modern World Since 1600 (3)**

A general survey of western and non-western societies from early modern times to the present day. Required of all history majors.

Corequisite: History 112A.

##### **112A. Colloquium: Development of the Modern World Since 1600 (1)**

Corequisite: History 112.

##### **250. United States History to 1865 (3)**

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 requirements in history and government. Required of all history majors.

Corequisite: History 250A.

##### **250A. Colloquium: United States History to 1865 (1)**

Corequisite: History 250.

##### **251. United States History Since 1865 (3)**

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 requirements in history and government. Required of all history majors.

Corequisite: History 251A.

##### **251A. Colloquium: United States History Since 1865 (1)**

Corequisite: History 250.

##### **295. Community Involvement Project (1-2)**

History oriented community service projects open only to Freshmen and Sophomore students on a Pass/No Credit basis. May be taken for one or two units as determined by the departmental faculty sponsor. Applies only as general elective credit towards graduation. (Note: For additional information see the comments on C.I.P. in the "Regulations and Procedures" section of this catalog.)

#### **UPPER DIVISION HISTORY COURSES**

##### **305. Early Modern Europe, 1450-1789 (3)**

A survey of European society and culture from the late Middle Ages to the French Revolution. Topics include the Renaissance and Reformation, rise of the nation state, the Age of Discovery and Expansion, the Scientific Revolution and the Enlightenment, and the relationship between eastern and western Europe.

Corequisite: History 305A.



**305A. Colloquium: Early Modern Europe, 1450–1789 (1)**

Corequisite: History 305.

**306. Modern Europe Since 1789 (3)**

A survey of European history from the French Revolution to the present. Topics include an examination of the influences of the French Revolution and the Industrial Revolution on modern Europe, revolution, autocracy, liberalism, socialism, imperialism, and contemporary trends.

Corequisite: History 306A.

**306A. Colloquium: Modern Europe Since 1789 (1)**

Corequisite: History 306.

**313. Classical Studies in History (1–3)**

An in-depth study and analysis of selected classical materials which have had an historic impact on the shaping and development of human thought and culture. Consult the class schedule for the specific topic selected by the instructor. May also be applied as a General Education elective credit in the classical studies area.

**330. Africa to 1850 (3)**

A survey of the history of the African continent from prehistoric times to the Arab conquest and the advent of European explorations. Emphasis on the development of African and Arab civilizations prior to the European intrusion.

Corequisite: History 330A.

**330A. Colloquium: Africa to 1850 (1)**

Corequisite: History 330.

**331. Africa Since 1850 (3)**

A survey of the history of the African continent from the European intrusion to the present. Coverage includes European colonization, the partition of Africa, the rise of African nationalism, and the establishment of the Organization for African Unity.

Corequisite: History 331A.

**331A. Colloquium: Africa Since 1850 (1)**

Corequisite: History 331.

**335. East Asia to 1800 (3)**

A survey of the historical development of East Asian peoples and nations from prehistoric times to the end of the eighteenth century. Emphasis upon the political, social, economic, and cultural growth of oriental civilization.

Corequisite: History 335A.

**335A. Colloquium: East Asia to 1800 (1)**

Corequisite: History 335.

**336. East Asia Since 1800 (3)**

A survey of historical developments in East Asia from the opening of the nineteenth century to the present with emphasis on twentieth century changes in China, Japan, Korea, and Southeast Asia. Topics include war and peace in East Asia, population growth and poverty, modernization and industrialization, and the impact of the occident in East Asia.

Corequisite: History 336A.

**336A. Colloquium: East Asia Since 1800 (1)**

Corequisite: History 336.

## **History**

### **340. Colonial Latin America to 1825 (3)**

A survey of early Latin American history from pre-Columbian times through the Wars of Independence with emphasis on the Spanish and Portuguese colonization experience and the blending of Indian, African, and Iberian cultures to create distinct political, social, and economic patterns.

Corequisite: History 340A.

### **340A. Colloquium: Colonial Latin America to 1825 (1)**

Corequisite: History 340.

### **341. Latin American Republics Since 1820 (3)**

A survey of Latin American history from the close of the colonial period to the present day with emphasis on the major political movements, economic and social conditions, cultural patterns, and inter-American relations.

Corequisite: History 341A.

### **341A. Colloquium: Latin American Republics Since 1820 (1)**

Corequisite: History 341.

### **390. The Study of History: Non-American (3)**

An examination of the various philosophies and methodologies which have shaped historiography over the span of time. Consideration will be given to the relationship between the historian and the climate of opinion, varying interpretations of historical events, the place of history as a literary art, and the techniques of historical research and writing.

Corequisite: History 390A.

### **390A. Colloquium: The Study of History: Non-American (1)**

Corequisite: History 390.

### **391. The Study of History: American (3)**

This course examines the various philosophies and methodologies which have shaped American historiography. Consideration will be given to the relationship between the historian and the climate of opinion, to varying interpretations of historical events, and to the place of history as a literary art, as well as to the techniques of historical research and writing.

Corequisite: History 391A.

### **391A. Colloquium: The Study of History: American (1)**

Corequisite: History 391.

### **395. Community Involvement Project (1-2)**

History oriented community service projects open only to Junior and Senior students on a Pass/No Credit basis. May be taken for one or two units as determined by the departmental faculty sponsor. Applies only as general elective credit towards graduation. (Note: For additional information see the comments on C.I.P. in the "Regulations and Procedures" section of this catalog.)

## **UPPER DIVISION AND GRADUATE HISTORY COURSES**

### **400. Greece and the Aegean, 2500 B.C.-133 B.C. (3)**

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.

Corequisite: History 400A.

## 400A. Colloquium: Greece and the Aegean, 2500 B.C.–133 B.C. (1)

Corequisite: History 400.

## 401. The Roman World, 753 B.C.–A.D. 476 (3)

A study of historical developments relating to Rome and the neighboring states from the founding of the city through the growth of Roman power in the Mediterranean region to the collapse of the western empire. Coverage includes a comparative study of cultures in contact with Rome.

Corequisite: History 401A.

## 401A. Colloquium: The Roman World, 753 B.C.–A.D. 476 (1)

Corequisite: History 401.

## 402. Medieval Europe, 476–1450 (3)

Western European 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.

Corequisite: History 402A.

## 402A. Colloquium: Medieval Europe, 476–1450 (1)

Corequisite: History 402.

## 403. Renaissance and Reformation, 1450–1650 (3)

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.

Corequisite: History 403A.

## 403A. Colloquium: Renaissance and Reformation, 1450–1650 (1)

Corequisite: History 403.

## 404. Europe: The Age of Absolutism and Enlightenment, 1650–1789 (3)

European history from the mid-seventeenth century to the outbreak of the French Revolution. Major topics include the rise of modern science, mercantilism and European expansion, enlightened despotism, and the decline of the old regime.

Corequisite: History 404A.

## 404A. Colloquium: Europe: The Age of Absolutism and Enlightenment, 1650–1789 (1)

Corequisite: History 404.

## 405. Europe: The Age of Dominance, 1789–1914 (3)

A detailed study of European history from the French Revolution to the Great War. Emphasizes European political, social, economic, and ideological movements of the nineteenth century and their impact on the world.

Corequisite: History 405A.

## 405A. Colloquium: Europe: The Age of Dominance, 1789–1914 (1)

Corequisite: History 405.

## 406. Europe: The Age of Totalitarianism, 1914–Present (3)

An examination of European history from the Great War to the Cold War. Emphasis upon the world impact of fascism, communism, and other important political, social, economic, and ideological movements in twentieth century Europe.

Corequisite: History 406A.

## **History**

### **406A. Colloquium: Europe: The Age of Totalitarianism, 1914–Present (1)**

Corequisite: History 406.

### **410. European Cultural and Intellectual History (3)**

Selected studies in the intellectual developments and main currents of thought in modern Europe. Consult the class schedule for the specific topic selected by the instructor.

Corequisite: History 410A.

### **410A. Colloquium: European Cultural and Intellectual History (1)**

Corequisite: History 410.

### **411. Spain and Portugal, 206 B.C.–Present (3)**

A study of Iberian history from Greco-Roman times to the present with emphasis on the Second Spanish Republic, the Civil War, and the Franco government. Coverage also includes the Visigoth and Moslem intrusions, the rise of monarchy and national states, the Reconquista, and the Napoleonic wars.

Corequisite: History 411A.

### **411A. Colloquium: Spain and Portugal, 206 B.C.–Present (1)**

Corequisite: History 411.

### **412. Origins of Modern France to 1870 (3)**

A study of the dramatic transformation of the old regime by the French Revolution to the emergence of the French Republic in 1870. Major topics include the coming of the French Revolution, Robespierre, Napoleon and his legacy, Restoration and Revolution, and the transition from Empire to Republic.

Corequisite: History 412A.

### **412A. Colloquium: Origins of Modern France to 1870 (1)**

Corequisite: History 412.

### **413. Modern France Since 1870 (3)**

A study of French history from the beginnings of the Third Republic to the present day with emphasis on the major changes in the French nation and its culture. Topics include the triumph of French liberalism, France and the world wars, the collapse of 1940, and the problems of contemporary France.

Corequisite: History 413A.

### **413A. Colloquium: Modern France Since 1870 (1)**

Corequisite: History 413.

### **414. Origins of Modern Germany: to 1848 (3)**

Early German history from the time of Charlemagne and the Holy Roman Empire through the Revolutions of 1848 and the problems of German unification. Coverage also includes the Reformation and the Thirty Years War, the rise of Prussia and the Hapsburg-Hohenzollern rivalry, the Napoleonic era, and the cultural and national awakening.

Corequisite: History 414A.

### **414A. Colloquium: Origins of Modern Germany: to 1848 (1)**

Corequisite: History 414.

**415. Modern Germany Since 1848 (3)**

A survey of German history from the rise of Brandenburg Prussia to the Bonn Republic with an emphasis on Germany's pivotal role in international affairs and cultural and political developments of the late nineteenth and first half of the twentieth century.

Corequisite: History 415A.

**415A. Colloquium: Modern Germany Since 1848 (1)**

Corequisite: History 415.

**418. Origins of Modern Russia: to 1856 (3)**

A survey of Russian history including the Kievan, Mongol, and Muscovite periods with emphasis on Imperial Russia from Peter the Great through the Crimean War. Coverage includes a study of the nature of Russian society, culture, and government, and Russia's relations with the West.

Corequisite: History 418A.

**418A. Colloquium: Origins of Modern Russia: to 1856 (1)**

Corequisite: History 418.

**419. Modern Russia and the Soviet Union: Since 1856 (3)**

A detailed survey of the transformation of Russia through reform, industrialization, and revolution with emphasis upon political, social, ideological, artistic, and intellectual changes. Coverage also 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.

Corequisite: History 419A.

**419A. Colloquium: Modern Russia and the Soviet Union: Since 1856 (1)**

Corequisite: History 419.

**420. Tudor and Stuart England, 1485-1714 (3)**

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.

Corequisite: History 420A.

**420A. Colloquium: Tudor and Stuart England, 1485-1714 (1)**

Corequisite: History 420.

**421. Great Britain, 1714-1867 (3)**

The development of modern Britain emphasizing domestic political, economic and social history and essential aspects of foreign imperial affairs.

Corequisite: History 421A.

**421A. Colloquium: Great Britain, 1714-1867 (1)**

Corequisite: History 421.

**422. Great Britain Since 1867 (3)**

Themes and topics in modern British history from the Reform Bill of 1867 through the European Common Market negotiations.

Corequisite: History 422A.

**422A. Colloquium: Great Britain Since 1867 (1)**

Corequisite: History 422.

## **History**

### **423. British Empire to 1914 (3)**

A survey of the origins and development of the British Empire and of the imperial idea to 1914.

Corequisite: History 423A.

### **423A. Colloquium: British Empire to 1914 (1)**

Corequisite: History 423.

### **424. British Empire and Commonwealth Since 1914 (3)**

A survey of the decline of the formal Empire and the evolution of the Commonwealth since 1914.

Corequisite: History 424A.

### **424A. Colloquium: British Empire and Commonwealth Since 1914 (1)**

Corequisite: History 424.

### **425. The Ancient Near East to 539 B.C. (3)**

A study of the cultures of Southwest Asia and the eastern Mediterranean region from the earliest traces of human occupation in the area to the establishment of the Achaemenid Persian Empire in 539 B.C.

Corequisite: History 425A.

### **425A. Colloquium: Ancient Near East to 539 B.C. (1)**

Corequisite: History 425.

### **426. The Persian and Hellenistic World, 539 B.C.–A.D. 641 (3)**

Near Eastern history from the founding of the Achaemenid Persian Empire to the Islamic conquest of the Sassanian Persian Empire with emphasis on the cultural interchange and intellectual life of the Hellenistic period.

Corequisite: History 426A.

### **426A. Colloquium: The Persian and Hellenistic World, 539 B.C.–A.D. 641 (1)**

Corequisite: History 426.

### **427. Byzantium, Islam, and the West, 325–1453 (3)**

A history of the eastern Mediterranean region from the bifurcation of the Roman Empire through the Crusades and the fall of Constantinople.

Corequisite: History 427A.

### **427A. Colloquium: Byzantium, Islam, and the West, 325–1453 (1)**

Corequisite: History 427.

### **429. Middle East and North Africa Since 1798 (3)**

Major themes in Middle Eastern and North African history such as the advance and retreat of European colonialism, the development of the Islamic states, and recent adjustments in Islamic society.

Corequisite: 429A.

### **429A. Colloquium: Middle East and North Africa Since 1798 (1)**

Corequisite: History 429.

### **430. History of Southern Africa (3)**

An in-depth study of the history of the southern half of the African continent with emphasis on the Republic of South Africa, Mozambique, Zambia, and Madagascar from the seventeenth through the twentieth centuries.

Corequisite: History 430A.

**430A. Colloquium: History of Southern Africa (1)**

Corequisite: History 430.

**431. History of West Africa (3)**

A detailed study of the history of western Africa with emphasis on the Bantu peoples, the Arab and European intrusions, and the effect of the interrelationship of these groups and their institutions on the political, social, economic, and cultural development of the region.

Corequisite: History 431A.

**431A. Colloquium: History of West Africa (1)**

Corequisite: History 431.

**432. History of Central and East Africa (3)**

A regional history of central and eastern Africa with particular emphasis on the nature, extent, and influence of the cultural contacts and interrelationships between east Africa and the Arab states of Persia and India.

Corequisite: History 432A.

**432A. Colloquium: History of Central and East Africa (1)**

Corequisite: History 432.

**435. Twentieth Century China (3)**

A detailed survey of China's twentieth century transformation with emphasis on the rise and effect of the People's Republic on political, social, economic, and cultural institutions.

Corequisite: History 435A.

**435A. Colloquium: Twentieth Century China (1)**

Corequisite: History 435.

**436. History of Chinese Thought (3)**

An historical examination of Chinese thought from earliest times to the present day. Emphasis will be given to the impact of Confucianism, Taoism, Buddhism, and other great ideas on China's socio-political structure, economic system, and intellectual life. Close attention will be given to the sinicization of alien ideas.

Corequisite: History 436A.

**436A. Colloquium: History of Chinese Thought (1)**

Corequisite: History 436.

**438. History of Japan (3)**

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.

Corequisite: History 438A.

**438A. Colloquium: History of Japan (1)**

Corequisite: History 438.

**439. History of Modern India Since 1512 (3)**

The transformation of India from the Mughal rise and decline through the establishment of the British hegemony to the era of political independence.

Corequisite: History 439A.

**439A. Colloquium: History of Modern India Since 1512 (1)**

Corequisite: History 439.

## History

### 440. Colonial Mexico to 1821 (3)

A study of colonial Mexico from pre-Columbian times to the independence movement. Coverage includes Indian cultures, the Iberian background, the conquest, the Spanish colonial system, and the struggle for independence.

Corequisite: History 440A.

### 440A. Colloquium: Colonial Mexico to 1821 (1)

Corequisite: History 440.

### 441. Mexico Since 1821 (3)

A study of the evolution of the Mexican nation from independence to the present day. Particular emphasis upon the survival of colonial institutions and attitudes, the *Reforma*, the *porfiriato*, and the Mexican Revolution of 1910 and its aftermath.

Corequisite: History 441A.

### 441A. Colloquium: Mexico Since 1821 (1)

Corequisite: History 441.

### 442. History of Brazil (3)

A study of the Brazilian people from their Indian, African, and European origins to the present day. Coverage includes the establishment of the Portuguese colony, the Empire, the Old Republic, the era of Getulio Vargas, and the New Republic.

Corequisite: History 442A.

### 442A. Colloquium: History of Brazil (1)

Corequisite: History 442.

### 444. Twentieth Century Latin America (3)

A study of the major political, social, economic, and cultural developments in Latin America since 1900. Emphasis is placed upon the major political movements and their leaders, the problems of economic development, and the relations of Latin America with the rest of the world—especially the United States.

Corequisite: History 444A.

### 444A. Colloquium: Twentieth Century Latin America (1)

Corequisite: History 444.

### 445. Inter-American Relations (3)

A study of the political, economic, and cultural relations between the nations of the Western Hemisphere from the American Revolutionary era to the present. Topics include U.S. policy and involvement in Latin America, Latin American reactions to U.S. policy and dominance, international conflicts within Latin America, the Pan-American movement and the Organization of American States, and recent attempts to politically and economically integrate Latin America.

Corequisite: History 445A.

### 445A. Colloquium: Inter-American Relations (1)

Corequisite: History 445.

### 447. Women and History (3)

An examination of the role of women in historical perspective with emphasis on the history of the family, labor, contraception, popular images of women, and the feminist movement.

Corequisite: History 447A.

### 447A. Colloquium: Women and History (1)

Corequisite: History 447.



**450. Colonial America to 1763 (3)**

A study of the development of the political, social, and economic foundations of American society from the discovery and colonization of North America to the Eve of the Revolution. Coverage includes the Old World background, explorations, and the transition from settlements to society.

Corequisite: History 450A.

**450A. Colloquium: Colonial America to 1763 (1)**

Corequisite: History 450.

**451. Revolutionary America, 1763–1789 (3)**

An examination of the movement towards American independence, the Revolutionary War, the Confederation period, and the drafting and ratification of the Federal Constitution with particular emphasis upon the underlying ideological and socio-economic aspects.

Corequisite: History 451A.

**451A. Colloquium: Revolutionary America, 1763–1789 (1)**

Corequisite: History 451.

**452. The Early American Republic, 1789–1815 (3)**

An analysis of the growth and development of the American nation from the establishment of the Federal government through the War of 1812. Coverage includes the Hamiltonian System, the rise of political parties, and western and foreign affairs under Washington, Adams, Jefferson, and Madison.

Corequisite: History 452A.

**452A. Colloquium: Early American Republic, 1789–1815 (1)**

Corequisite: History 452.

**453. American Expansion and Reform, 1815–1850 (3)**

Expansion and sectional change, economic sectionalism and national politics, the rise of Jacksonian democracy, and social and political reform in United States history from the Peace of Ghent to the Compromise of 1850.

Corequisite: History 453A.

**453A. Colloquium: American Expansion and Reform, 1815–1850 (1)**

Corequisite: History 453.

**454. Civil War and Reconstruction, 1850–1877 (3)**

A detailed examination of the background and causes of the Civil War, the problems of the war years, and the struggles of the Reconstruction Era.

Corequisite: History 454A.

**454A. Colloquium: Civil War and Reconstruction, 1850–1877 (1)**

Corequisite: History 454.

**455. Emergence of Modern America, 1877–1900 (3)**

A study of the major political, social, economic, diplomatic, and intellectual developments in late nineteenth century America. The rise of the United States as a world industrial power, settlement of the Great Plains, the Populist Revolt, and American Imperialism.

Corequisite: History 455A.

**455A. Colloquium: Emergence of Modern America, 1877–1900 (1)**

Corequisite: History 455.

## **History**

### **456. The Progressive Era, 1900–1929 (3)**

A study of America's great Age of Reform. The rise of urban progressivism in the 1890's; the progressivism of Roosevelt, Taft, and Wilson; the First World War and its aftermath; prosperity and complacency in the 1920's.

Corequisite: History 456A.

### **456A. Colloquium: The Progressive Era, 1900–1929 (1)**

Corequisite: History 456.

### **457. The Great Depression and the New Deal, 1929–1945 (3)**

A close analysis of the Great Depression years with the emphasis on Roosevelt and the New Deal. The background and results of the market crash of 1929; Hoover's response to the depression; the various "phases" of the New Deal; the Supreme Court crisis of 1937; and America's involvement in the Second World War.

Corequisite: History 457A.

### **457A. Colloquium: The Great Depression and the New Deal, 1929–1945 (1)**

Corequisite: History 457.

### **458. Contemporary America, 1945–Present (3)**

A study of the United States and its emergence as a world leader since the Second World War. Problems and policies of America's political leaders from Truman to Nixon with an emphasis on foreign affairs, the achievements of a liberal Supreme Court, the economics of automation, and the revolution in civil rights and civil liberties.

Corequisite: History 458A.

### **458A. Colloquium: Contemporary America, 1945–Present (1)**

Corequisite: History 458.

### **460. American Cultural and Intellectual History to 1865 (3)**

This course examines the American response to the challenges of the colonial experience, revolution, and republicanism. Emphasis will be given to religion, literature, art, political theory, attitudes toward egalitarianism and urbanization, and the impact of romanticism on politics and culture.

Prerequisite: History 250 or consent of instructor.

Corequisite: History 460A.

### **460A. Colloquium: American Cultural and Intellectual History to 1865 (1)**

Corequisite: History 460.

### **461. American Cultural and Intellectual History Since 1865 (3)**

An analysis of the development of the national character in an age of industrialization, urbanization, and international involvement. Major emphasis upon the political and social implications of naturalism (including social and reform Darwinism), pragmatism and relativism, and the quest for neo-orthodoxy since World War II.

Prerequisites: History 251 and completion of the General Education "Humanities" requirement or consent of the instructor.

Corequisite: History 461A.

### **461A. Colloquium: American Cultural and Intellectual History Since 1865 (1)**

Corequisite: History 461.

**465. Women in American History (3)**

An historical examination of the roles, images, achievements, and aspirations of women in American society from colonial times to the present.

Coverage includes a study of the various factors affecting women's status in American society and the development and progress of the feminist movement in the United States.

Corequisite: History 465A.

**465A. Colloquium: Women in American History (1)**

Corequisite: History 465.

**466. American Diplomatic History (3)**

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.

Corequisite: History 466A.

**466A. Colloquium: American Diplomatic History (1)**

Corequisite: History 466.

**467. History of American Labor (3)**

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.

Corequisite: History 467A.

**467A. Colloquium: History of American Labor (1)**

Corequisite: History 467.

**468. History of Black America (3)**

An in-depth study of the history of the Negro in America from the African slave trade of the fifteenth century to the present. A significant departure from traditional surveys of American history in terms of content, perspective, and approach.

Corequisite: History 468A.

**468A. Colloquium: History of Black America (1)**

Corequisite: History 468.

**469. The City in American History (3)**

A study of the development of an urban culture in the United States from colonial times to the present. Coverage includes pre-nineteenth century American cities, 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.

Corequisite: History 469A.

**469A. Colloquium: The City in American History (1)**

Corequisite: History 469.

**470. The Atlantic Frontier, 1000–1850 (3)**

A study of the origins and development of the Westward Movement from its European beginnings through the exploration and settlement of the Mississippi River Valley. Emphasis upon exploration, discovery, expansion, and the influence of the frontier on national policy and character.

Corequisite: History 470A.

## **History**

### **470A. Colloquium: The Atlantic Frontier, 1000–1850 (1)**

Corequisite: History 470.

### **471. The American West (3)**

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.

Corequisite: History 471A.

### **471A. Colloquium: The American West (1)**

Corequisite: History 471.

### **472. Spanish and Mexican California (3)**

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.

Corequisite: History 472A.

### **472A. Colloquium: Spanish and Mexican California (1)**

Corequisite: History 472.

### **473. Contemporary California (3)**

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.

Corequisite: History 473A.

### **473A. Colloquium: Contemporary California (1)**

Corequisite: History 473.

### **475. History of the American South (3)**

An examination of the political, social, and economic life in the American South from settlement times to the present with emphasis upon the development of the South as a unique section and sub-culture in American society.

Corequisite: History 475A.

### **475A. Colloquium: History of the American South (1)**

Corequisite: History 475.

### **495. Independent Study (1–4)**

Individual studies in historical topics, themes, periods, and/or areas. Open from one to four units as determined by the departmental faculty sponsor. (Note: for additional information see the comments on Independent Study in the "Regulations and Procedures" section of this catalog.)

### **496. Research Techniques in American History (2)**

An introduction to the most essential reference guides, finding aids, and bibliographies pertinent to research in American history. Specific methods and techniques for the organization and conduct of a disciplined critical inquiry. Notes on the mechanics and style of scholarly writing. Coverage also includes a survey of local, regional, and national repositories accessible to the researcher.

### **497. Archaeological Theory and Methodology (2)**

A survey of the application of archaeological methods in historical research.

### **498. Quantitative Methods in Historical Research (2)**

A survey of quantitative analyses of archaeological and historical data including computer applications.

**499. Special Problems (1-4)**

Group studies in historical topics, themes, periods, and areas beyond the scope of the established curriculum. Open only to superior senior and graduate students from one to four units as determined by the departmental faculty sponsor. (Note: For additional information see the comments on Special Problems in the "Regulations and Procedures" section of this catalog.)

**SENIOR SEMINARS IN HISTORY****478. Senior Seminar: Women and History (4)**

Directed studies in women's history. Consult the class schedule for the specific topic selected by the instructor.

**479. Senior Seminar: Historical Themes and Issues (4)**

Directed studies in historical themes and issues extending beyond the scope of the conventional political, geographic, and/or chronological subdivisions. Consult the class schedule for the specific topic selected by the instructor.

**480. Senior Seminar: Ancient History (4)**

Directed studies in Ancient history from prehistoric times through the Roman period. Consult the class schedule for the specific topic selected by the instructor.

**481. Senior Seminar: Medieval Europe (4)**

Directed studies in European history from the Roman period through the Middle Ages. Consult the class schedule for the specific topic selected by the instructor.

**482. Senior Seminar: Early Modern Europe (4)**

Directed studies in European history from 1450 to 1789. Consult the class schedule for the specific topic selected by the instructor.

**483. Senior Seminar: Modern Europe (4)**

Directed studies in European history from 1789 to 1914. Consult the class schedule for the specific topic selected by the instructor.

**484. Senior Seminar: Contemporary Europe (4)**

Directed studies in European history from 1914 to the present. Consult the class schedule for the specific topic selected by the instructor.

**485. Senior Seminar: Russia and Eastern Europe (4)**

Directed studies in Russian and eastern European history. Consult the class schedule for the specific topic selected by the instructor.

**486. Senior Seminar: Middle Eastern and North African History (4)**

Directed studies in Middle Eastern and North African history. Consult the class schedule for the specific topic selected by the instructor.

**487. Senior Seminar: African History (4)**

Directed studies in African history. Consult the class schedule for the specific topic selected by the instructor.

**488. Senior Seminar: Asian History (4)**

Directed studies in Asian history. Consult the class schedule for the specific topic selected by the instructor.

**489. Senior Seminar: Latin American History (4)**

Directed studies in Latin American history. Consult the class schedule for the specific topic selected by the instructor.

## **History**

### **490. Senior Seminar: Colonial America (4)**

Directed studies in American history from the discovery and colonization of the New World to 1763. Consult the class schedule for the specific topic selected by the instructor.

### **491. Senior Seminar: Revolutionary and Republican America (4)**

Directed studies in United States History from 1763 to 1815. Consult the class schedule for the specific topic selected by the instructor.

### **492. Senior Seminar: Nineteenth Century America (4)**

Directed studies in United States history from 1815 to 1900. Consult the class schedule for the specific topic selected by the instructor.

### **493. Senior Seminar: Twentieth Century America (4)**

Directed studies in twentieth century United States history. Consult the class schedule for the specific topic selected by the instructor.

### **494. Senior Seminar: The American West (4)**

Directed studies in the Westward Movement, the Trans-Mississippi West, and California history. Consult the class schedule for the specific topic selected by the instructor.

## **GRADUATE SEMINARS AND SPECIAL STUDIES IN HISTORY**

### **578. Graduate Seminar: Women and History (4)**

Advanced studies and/or research projects in women's history.

### **579. Graduate Seminar: Historical Themes and Issues (4)**

Advanced studies and/or research projects in historical themes and issues extending beyond the scope of the conventional political, geographic, or chronological subdivisions.

### **580. Graduate Seminar: Ancient History (4)**

Advanced studies and/or research projects in Ancient history from prehistoric times through the Roman period.

### **581. Graduate Seminar: Medieval Europe (4)**

Advanced studies and/or research projects in European history from the Roman period through the Middle Ages.

### **582. Graduate Seminar: Early Modern Europe (4)**

Advanced studies and/or research projects in European history from 1450 to 1789.

### **583. Graduate Seminar: Modern Europe (4)**

Advanced studies and/or research projects in European history from 1789 to 1914.

### **584. Graduate Seminar: Contemporary Europe (4)**

Advanced studies and/or research projects in European history from 1914 to the present.

### **585. Graduate Seminar: Russia and Eastern Europe (4)**

Advanced studies and/or research projects in Russian and eastern European history.

### **586. Graduate Seminar: Middle Eastern and North African History (4)**

Advanced studies and/or research projects in Middle Eastern and North African history.

**587. Graduate Seminar: African History (4)**

Advanced studies and/or research projects in African history.

**588. Graduate Seminar: Asian History (4)**

Advanced studies and/or research projects in Asian history.

**589. Graduate Seminar: Latin American History (4)**

Advanced studies and/or research projects in Latin American history.

**590. Graduate Seminar: Colonial America (4)**

Advanced studies and/or research projects in American history to 1763.

**591. Graduate Seminar: Revolutionary and Republican America (4)**

Advanced studies and/or research projects in United States history from 1763 to 1815.

**592. Graduate Seminar: Nineteenth Century America (4)**

Advanced studies and/or research projects in United States history from 1815 to 1900.

**593. Graduate Seminar: Twentieth Century America (4)**

Advanced studies and/or research projects in twentieth century United States history.

**594. Graduate Seminar: The American West (4)**

Advanced studies and/or research projects in the Westward Movement, the Trans-Mississippi West, and California history.

**595. Independent Study (1-4)**

Individual studies in historical topics, themes, periods, and/or areas. Open only to graduate students from one to four units as determined by the departmental faculty sponsor. Credits not applicable towards the M.A. Degree.

**598. Field Examination Reading and Research (4)**

Directed reading and research activities in preparation for the M.A. Degree Field Examinations (written and oral) under the direction of the student's Field Examination Committee Chairman. 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)**

Extensive individual research and writing project under the direction of the student's Thesis Committee Chairman. Open only to graduate students with classified standing in History who have selected the Thesis Option for the M.A. Degree. Preferably taken for credit during the semester in which the M.A. Thesis is scheduled for submission in final form.

# HUMANITIES

## (Division of Humanities)

### 201, 202. Introduction to Humanistic Studies (6-6)

An integrated examination of art, literature, philosophy and the performing arts. Fulfills General Education requirements in the Humanities and in English Composition. Six units each semester.

## LINGUISTICS MINOR PROGRAM

### (Division of Humanities)

Elizabeth Bright, English Department, Program Director

The Linguistics Minor is an interdisciplinary program designed to offer a secondary field of interest that strongly supports majors in related disciplines, thereby encouraging students to develop interests outside their major fields. 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 his interest in a particular field of linguistics as a complement to his major.

#### Course Requirements:

20 units, 11 of which must be in the following linguistics courses:

Linguistics 300—The Linguistic Study of Language .....	3 units
Linguistics 310-311—Analysis of Language .....	4-4 units

#### Electives:

9 units to be chosen from linguistically oriented courses offered by established departments. (Note: Courses may not be counted toward both the linguistics minor and a major or another minor.)

Anthropology 380—Language and Culture .....	4 units
Anthropology 382—Language Change .....	4 units
Anthropology 389—The Ethnography of Speaking .....	4 units
Anthropology 494—Seminar in Anthropological Linguistics .....	4 units
English 403—Structure of English .....	3 units
English 405—Social Functions of Language .....	3 units
English 408—Special Studies in Language .....	3 units
English 508—Seminar in Language Study .....	3 units

#### Ethnic Studies:

AMES 356—Language and Ethnicity .....	4 units
AMES 445—Seminar: Ethnic Groups, Social Variables, and Language Behavior .....	4 units
MAMS 225—Language of the Barrio .....	4 units
NAMS 440—Seminar in Native American Linguistics .....	4 units

#### Foreign Languages:

French 425—Applied Linguistics .....	3 units
German 425—Applied Linguistics .....	3 units
Russian 425—Applied Linguistics .....	3 units
Spanish 425—Descriptive Linguistics .....	3 units
Spanish 501—Diachronic Linguistics .....	3 units
Spanish 518—Structural Linguistics .....	3 units
Philosophy 330—Philosophy of Language .....	3 units
Psychology 476—Psychology of Language .....	4 units



**Linguistics**

**300. The Linguistic Study of Language (3)**

Introduction to the scientific study of language: the systematic nature of language and how languages are similar and how they are different; language change and linguistic reconstruction.

**310-311. Analysis of Language (4-4)**

(Three class meetings plus two hours of lab per week)

Methods and practice in the analysis of phonological, morphological, syntactic and semantic components of language.

# MANAGEMENT

## (Division of Social Sciences)

Wallace Lowry, Chairman of Department

Richard Bell, Norman Cohn, Ronald Coles, Wyman Hicks, Paul V. Juhl,

John Liddell, Stanley Piascik, John G. Rohrman, Jr., Delmar Valleau

The Management Major is flexible. The student majoring in Management, in consultation with his advisor, will develop an individualized program of study within the field of Management and related disciplines. This program of study will identify the student's course requirements and will be the basis of understanding between the Department and the student. The flexibility in this procedure allows this understanding to be amended by the mutual consent of the student and his advisor at any time prior to graduation. The successful completion of the planned program will fulfill the Department of Management's requirements for graduation. This type of individualized program assumes a close working relationship between the student major and his faculty advisor. It is the responsibility of the student major to maintain contact with his advisor and to secure the advisor's consent before changes are made in his program.

The Management Major requires 55 units consisting of the following:

- A. All Management Majors are required to take
 

Mathematics 117 .....	3 units
Economics 201 .....	4 units

 or their equivalent.
- B. The Management Major will also take at least 36 units in the field of Management, of which up to 8 units may be taken in Economics courses.
- C. 12 units of supporting courses, not considered part of the student's General Education requirements, completes the major.

The requirements for the B.A. Degree in Management, therefore, would appear as follows:

<b>Management Major for the B.A. Degree</b>	
General Education .....	40 units
<b>Major</b>	
Mathematics 117 .....	3 units
Economics 201 .....	4 units
Management and/or Economics (Note B above) .....	36 units
Supporting Courses .....	12 units
Total for the Major .....	55 units
Other Electives .....	29 units
Total required for the B.A. Degree .....	124 units

No more than 12 units within the Management major may be taken on a pass/no credit (P/NC) basis. To complete for credit a P/NC course a class grade of C must be maintained. Students on academic probation will not be permitted to enroll for P/NC. P/NC units taken within the major may be in addition to the 24 units permitted outside the major.

The student major, as well as non-major, who wishes to seek admission to graduate programs leading to an MBA degree will work with his advisor to develop a program which includes such common body of knowledge features as the following: Management functions and operations; economic, social and legal environments; quantitative methods; information systems; organization theories; behavioral studies; and administrative processes and policies.

The student is reminded that 40 upper division units are required within the 124 units necessary for the B.A. Degree. There are, however, no such minimum requirement within the 55 units for the Management Major.

### **MANAGEMENT**

#### **208. The Economics of War and Peace (4)**

Can the United States convert to a peace-time economy without a major recession? Is there an inherent need for war spending? The course will examine the structural forces leading to ever increasing military budgets. Consequences for long-term growth and employment and accompanying social costs will be assessed. The economics of a society at peace will be explored.

#### **215. Theory of Programming with Mini-Computers (3)**

Lecture and Laboratory.

The theory of programming is approached in an easy and direct way by learning the use of programmable calculators. These machines program directly, and do not require prior knowledge of computer languages.

#### **216. Uses of Computers (4)**

Lecture and Laboratory.

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.

#### **225. Law and Society (4)**

An analysis of the nature and functions of law in relation to social problems. Course work will focus on the theory of contractual obligations, jurisdiction, judicial procedure, and the concepts of legal rights and responsibilities in a democratic society.

#### **230. Accounting and Managerial Decisions (4)**

Lecture and Laboratory.

Fundamentals of the accounting process. This course is designed to provide a foundation for further work in any area of management.

#### **315. Statistics for the Social Sciences (4)**

Lecture and Laboratory.

By developing an awareness of statistical reasoning, concepts and procedures, the course provides essential background for the social and behavioral sciences. Topics include elementary probability, averages and dispersions, sampling and sampling distributions, misuse of statistics, statistical inference and estimation, correlation and regression, and economic and business indices and statistics.

Prerequisite: Math. 117.

#### **316. Computer Management (4)**

Lecture and Laboratory.

An introduction to material which will be useful in the design of information systems for planning and control in organizations. Study of tools available to the systems analyst in applying this knowledge. Assignments will include exercises in computerized accounting, business statistics, and business management.

Prerequisite: Mgmt. 216, and Mgmt. 230, or equivalent preparation.

#### **317. Frontiers of Computer Science (1-4)**

Current issues in computer science.

May be repeated for credit.

## **Management**

### **330AB. Intermediate Accounting (4-4)**

Lecture and Laboratory.

The functions, theory, and practice of accounting and its relationship to business management. Usefulness and limitations of accounting in providing relevant information. Determination of income, and of equity interests. Presentation, interpretation, and analysis of financial data and financial statements.

Prerequisites: Mgmt. 230 and Math. 117 or consent of instructor.

### **332. Managerial Accounting (4)**

Lecture and Laboratory.

A study of problems in finance and managerial accounting with emphasis given to the interpretation of accounting data as it applies to the decision-making process.

Prerequisite: Management 230.

### **340. Manpower Administration (3)**

An introduction to that field of management that is concerned with planning and carrying out the function of procuring, developing, maintaining, directing, and leading the labor force of the organization.

### **341. Human Relations and the Labor Movement (3)**

Study of the development of the organized labor movement from the Knights of Labor to Caesar Chavez. Analysis of human relations and social questions and the related economic, legal and political aspects of this development.

### **342. Human Relations in Management (3)**

Study of human relations and behavioral science aspects of relationships in organizations and between subcultures, and their effect on the management process.

### **343. Women and the American Economy (3)**

An exploration into women's present role in the American economy, the political economy of change, and the economy of investment in human potential.

### **344. Managerial Psychology (1)**

May be repeated for credit.

### **350. Management Theory and Organizational Behavior (3)**

A study of the managerial functions of planning, organizing, directing, controlling and staffing. Applications of management principles.

### **351. Managing the Small Business (3)**

Problems of legal form to be adopted; how to raise funds; how to test, penetrate, and expand the market; how to control cost and process information; and how to deal with people, are considered in the context of the small business and its environment.

### **360. Marketing Environment (3)**

Study of marketing as a decision-making process within an environment of continually interacting economic, sociological, psychological, and political forces.

Prerequisite: Economics 201 or consent of the instructor.

### **370. Introduction to Managerial Finance (4)**

Lecture and Laboratory.

Consideration, at an introductory level, of the management of the company finance function. Topics include alternate forms of the business enterprise, with special emphasis on the corporation; stocks and bonds; conversion, refunding and redemption; raising long and short term capital; surplus, dividend, and reserve policies; relationships with the banking system; financial difficulties and the re-planning process.

**371. Financial Institutions (4)**

Lecture and Laboratory.

A study of the role of banking and monetary institutions and financial intermediaries in serving the needs of government, business, and individuals, with a survey of how these sources of credit are used.

**375. Money and Banking (4)**

Lecture and Laboratory.

The Federal Reserve System, the Treasury, and banking and financial institutions will be studied. Special attention will be given to their role in determining interest rates and the supply of loanable funds. Study of factors and interactions leading to inflation or recession; growth or stagnation. Alternative goals and policy measures.

Prerequisites: Econ. 201 and Math. 117.

**381. Management Research Methods and Reports (3)**

Develops an awareness of the uses and limitations of scientific methodology in the social sciences, with particular reference to contemporary business, social, and governmental problems. Problem analysis and research planning will be emphasized.

Prerequisite: Math. 117.

**391. Theory of Business Behavior (4)**

A consideration of economic and organizational analyses that are applicable to the problems of a profit oriented organization within the contemporary economic system.

Prerequisite: Economics 201.

**392. Planet Management (4)**

Scientists, ecologists and others have warned of impending catastrophe to the biosphere. How shall such threats and the appropriateness of possible counter measures be evaluated? This course will explore how "spaceship earth" may be managed so as to ensure long run survival.

**395. Community Involvement Project (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.

**401. The Minority Entrepreneur (2-4)**

Research in and discussion of developments which may gain for minority peoples a larger share in ownership and management of America's economic resources. Offered as a 2 unit class or a 4 unit seminar. May be repeated for credit.

Prerequisite for the 4 unit seminar: consent of instructor.

**415. Quantitative Analysis for Economics and Management (4)**

Lecture and Laboratory.

An introduction to the use of models, simulation, and other quantitative methods in managerial decision making. Applications in accounting, economics, and general management theory.

Prerequisite: Management 315 or Economics 315, and Math. 117.

## **Management**

### **416. Seminar on the Computer and Society (4)**

Individual studies of advanced applications and experiments with computers to investigate the reasons for the widespread suspicion of computers in our society, and the reluctance to accept their handling of tasks for which they are technically efficient as a socially desirable trend. No previous knowledge of computers is required.

### **425. The Legal Environment of Management (3)**

A study of the legal framework within which management decisions are made. Frequent attention will be given to the role of government participation in the operation of American economic enterprise.

### **426. Human Behavior and the Law (3)**

An analysis of the legal process, emphasizing the nature and functions of law, legal reasoning and the operation of law particularly as it pertains to business transactions, including problems arising out of partnerships, corporations, agency, real property, and sales with emphasis on the Uniform Commercial Code.

### **430. Advanced Accounting (4)**

Lecture and Laboratory.

Designed for the student who has completed introductory and intermediate studies and who possesses an understanding of the theoretical framework of accounting. This course seeks to prepare the student to apply basic accounting principles to the special problems that are found in both profit and non-profit organizations.

Prerequisite: Mgmt. 330, or consent of instructor.

### **431. Seminar in Accounting for Management (3)**

Lecture and Laboratory.

This course stresses substantive knowledge related to the management functions of planning and control, including accounting and financial aspects, as well as increase in skill in problem solving and decision making.

Prerequisites: Mgmt. 230 and 332 and Math. 117, or consent of instructor.

### **432. Seminar in Finance and Accounting in Planning and Reporting (4)**

Lecture and Laboratory.

The student plays the role of the executive in charge of the finance function, dealing with contemporary real-world problems.

Prerequisites: Mgmt. 230 and 330, 332 and Math. 117, or consent of instructor.

### **433. Tax Law (4)**

Lecture and Laboratory.

Determination of taxable income, sources of law, rates and returns, personal and corporation taxes and tax planning. Subject matter to reflect the most recent tax law changes.

Prerequisite: Mgmt. 230, or consent of instructor.

### **434. Auditing (4)**

Lecture and laboratory.

Concepts and procedures for verification of financial records together with the ethical, legal, and other professional aspects of auditing.

Prerequisite: Mgmt. 330 or 332, or consent of instructor.

### **440. Seminar in Manpower Policy (3)**

Current issues in manpower policies, centered around the two questions of employment as a sources of status and income on the one hand, and as an important national resource on the other.

**442. Behavioral Science in Management (3)**

A review of descriptive and analytical studies of organizations from the standpoint of behavioral science. Such areas as control systems in complex organizations, communications, motivation and social structure will be analyzed.

**444. Seminar in Human Relations (4)**

Research and discussion of human relations aspects of current issues in management.

**450. Seminar in Advanced Management Theory (4)**

An eclectic and interdisciplinary approach to the study of management theory and organizational 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: Mgmt. 230, Econ. 201, Math. 117, or consent of instructor.

**451. Management Theory with Practical Applications (4)**

Theory and practice of decision making in planning and control.

**452. Seminar in The Management of Innovation in Institutions (4)**

Creativity and intuition contribute to the discovery of new ideas, but translating new ideas into action—causing innovation to happen—requires much more. A study of the criteria by which proposals for change are evaluated, and the institutional mechanisms for both resisting and supporting change.

May be repeated once for credit.

Prerequisite: Consent of instructor.

**455AB. The Planning Process (4-4)**

A. Urban and Regional Planning

B. Corporate Planning

Planning will be studied as a continuous, comprehensive process, involving line management and staff support, policy makers and implementers. Students engage in actual planning of real-life situations. Decision making, systems analysis, and other specific planning techniques will be used.

Subject field for student projects and class discussion will be Urban and Regional Planning for Part A, and Corporate Planning for Part B. Students may enroll in both Parts in the same semester; groups will meet at different times.

**460. Marketing Management (3)**

Marketing theory and the marketing concept are studied, making use of material borrowed from economics, the behavioral sciences, and mathematics, as well as research in the specific field of marketing. Stress is placed on decision-making.

Prerequisite: Economics 201 and Management 360, or consent of the instructor.

**461. Consumer Protection Law (3)**

An analytical study of consumer protection legislation, with emphasis on anti-trust laws, the Federal Trade Commission, the Food and Drug Administration, and other current issues in laws relating to marketing generally, and consumer protection in particular.

**462. Seminar in Marketing Research (3)**

A review of marketing information systems, the way they are made and used. Students make marketing decisions in simulation models, using information obtained from the models.

Prerequisite: Management 360, or consent of instructor.

## **Management**

### **463. Introduction to International Business (3)**

A survey including economic, political, environmental and social constraints on foreign economic activities by domestic business organizations. The effects of investment on the host and the domestic economies, and on the phenomena of multinational business organizations will be investigated.

### **470. Managerial Finance (4)**

Lecture and laboratory.

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: Management 230 or consent of instructor.

### **471. Public Finance (4)**

Use of fiscal policy to achieve economic growth, full employment, and other policy goals. Real costs of public debt and limits on its expansion. What are the consequences of present federal, state and local tax structures and how can they be made more equitable and more consistent with a progressive economy?

### **472. Investments (4)**

A study of the investment setting, sources of investment information, security valuation, investment timing, and portfolio management.

### **481. Seminar in the Conduct of Inquiry (4)**

Consideration, by advanced, eager students, of sophisticated techniques for analyzing and solving problems, especially under conditions of uncertainty. The role of inquiry in man's decision processes.

Prerequisite: Mgmt. 381 or consent of instructor.

### **482. Research in Management (2)**

May be repeated for credit.

### **491. Seminar in Management Theory and Policy (3)**

Group discussion of managerial policy. Readings and discussions in management theory. Study of social responsibility and the managerial process in a pluralistic society.

Prerequisite: Mgmt. 350 or consent of instructor.

### **492. Social and Economic Foundations of the Enterprise System (3)**

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.

### **495. Independent Study for Majors or Minors (1-4)**

### **496. Supervised Individual Projects (1-4)**

Field experience in Business or Government. Enrollment by prior arrangement only.

### **499. Special Problems (1-4)**

### **550. Seminar in Organization and Simulation Theory (4)**

A study of theories and models of formal organizations, including models of management processes.

### **595. Special Studies in Management (1-3)**

Prerequisite: Graduate standing and consent of the instructor.



# MATHEMATICS

(Division of Natural Sciences)

Clement Falbo, Chairman of Department

William Barnier, Daniel Bloch, Donald Duncan, John A. Ewell, Norman Feldman,  
Frederick Luttmann, Thomas Nelson, Charles Phillips,  
Thomas Volk, Sommai Vongsuri

A basic curriculum suitable for continuation toward advanced degrees in mathematics as well as an approved major for teaching credentials.

## MATHEMATICS MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	44 units
Electives .....	40 units
<b>Total</b> .....	<b>124 units</b>

## MATHEMATICS MAJOR COURSE REQUIREMENTS FOR THE B.A. DEGREE

140—Calculus I (3 units in G.E., 1 unit in major) .....	1 unit
190—Calculus II .....	4 units
220—Logic, Proof, and Vector Spaces .....	3 units
240—Calculus III .....	3 units
317—Calculus IV .....	3 units
320—Modern Algebra I .....	3 units
322—Linear Algebra .....	3 units
328—Foundations of Mathematics .....	3 units
340—Real Analysis I .....	3 units
345—Probability Theory .....	3 units
418—Topology or 460—Complex Variables .....	3 units
440—Real Analysis II .....	3 units
Upper Division Electives in Mathematics .....	9 units
<b>Total</b> .....	<b>44 units</b>

## MATHEMATICS WITH AN OPTION IN APPLIED MATHEMATICS AND COMPUTER SCIENCE FOR THE B.S. DEGREE

General Education .....	40 units
Major .....	47 units
Electives .....	37 units
	<b>124 units</b>

## MAJOR COURSE REQUIREMENTS

120—Machine Programming .....	2 units
162—Calculus with Applications I (3 units in G.E.) .....	—
212—Calculus with Applications II .....	3 units
220—Logic, Proof, and Vector Spaces .....	3 units
262—Calculus with Applications III .....	3 units
312—Calculus with Applications IV .....	3 units
322—Linear Algebra .....	3 units
330—Applied Differential Equations I .....	3 units
331—Applied Differential Equations II .....	3 units
340—Real Analysis I .....	3 units
345—Probability .....	3 units

## Mathematics

350—Introduction to Computer Science .....	3 units
352—Numerical Analysis .....	3 units
430—Partial Differential Equations } .....	3 units
or .....	
480—Integral Transforms .....	3 units
440—Real Analysis II .....	
450—Systems Programming .....	3 units
460—Complex Variables .....	3 units
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47 units	

### MATHEMATICS WITH AN OPTION IN STATISTICS FOR THE B.S. DEGREE

General Education .....	40 units
Major .....	44 units
Electives .....	40 units
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124 units	

### MAJOR COURSE REQUIREMENTS

120—Machine Programming .....	2 units
140—Calculus I (2 units in G.E.) .....	2 units
190—Calculus II .....	4 units
220—Logic, Proof, and Vector Spaces .....	3 units
240—Calculus III .....	3 units
317—Calculus IV .....	3 units
322—Linear Algebra .....	3 units
340—Real Analysis I .....	3 units
345—Probability .....	3 units
360—Design of Experiments .....	3 units
365—Statistical Inference .....	3 units
Electives selected from Math. 440, 455, 466, 467, 470, 515, 560, 565 .....	12 units
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44 units	

### MINOR IN MATHEMATICS—20 UNITS

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 units must include calculus and a course in statistics. At least 6 units must be upper division.

### MATHEMATICS

#### Lower Division

#### 107. Algebra and Trigonometry (4)

Intermediate algebra and trigonometry.

Prerequisite: One year of high school algebra or consent of the instructor.

#### 114. Mathematical Elements for Freshman Science Courses (3)

This course is designed to prepare students for the basic algebraic and analytic computations in beginning chemistry, biology, geology, descriptive astronomy and descriptive physics.

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 slide rule. Satisfies General Education requirement for mathematics.

Prerequisite: None.

**115. Fundamentals of Mathematics (3)**

A general education course designed to give cultural depth in the mathematics required for a liberal education. This course is designed to give the student an insight into the inner workings of a mathematician's thoughts as each instructor develops his own material for the course.

Prerequisite: None.

**117. Mathematics for the Social Sciences (3)**

Applications to problems from management, sociology, psychology. Topics include a review of algebraic expressions, inequalities, business mathematics, sets and functional representation, systems of linear equations and inequalities, differential calculus of algebraic functions, antiderivatives, and integrals.

Prerequisite: None.

**118. Mathematics for the Social Sciences (3) II**

A continuation of Mathematics 117. Topics include vectors and matrices, mathematics of finance, probability distribution functions, linear programming, statistics.

Prerequisite: Math. 117 or equivalent, or consent of instructor.

**119. Recreational Mathematics (2)**

Does not satisfy the general education requirement in mathematics. Mathematical games, puzzles, and devices, such as chess, Go, Life (a game of symmetries), mathematical reasoning applied to "Soma Cubes," "Think-a-dot," "Instant Insanity," etc. Other problems from the discipline of recreational mathematics. Readings from *Scientific American* and similar journals.

Prerequisite: One semester of college mathematics or logic or consent of instructor.

**120. Machine Programming (2)**

Programming high speed electronic computers, the main emphasis will be on the FORTRAN language.

Prerequisite: Math. 107 or Math. 115 or consent of instructor.

**140. Calculus I (4)**

Functions, limits and continuity, introduction to integration and differentiation.

Prerequisite: Math. 107 or consent of instructor.

**150. Elementary Decision Theory (3)**

Probability, utility, descriptive statistics, Bayes strategies, models, estimation, hypotheses testing, confidence intervals, regret functions.

Prerequisite: Math. 107 or consent of instructor.

**162. Calculus with Applications I (3)**

Curves and slopes, elementary derivatives and applications, plane analytic geometry, trigonometric functions, complex numbers, DeMoivre's theorem, elementary integration.

Prerequisite: Math. 107 or consent of instructor.

**165. Elementary Statistics I (3)**

Discrete probability theory, sampling, conditional probability, random variables, special distributions, law of large numbers, central limit theorem, estimation, and tests of hypothesis.

Prerequisite: Math. 107 or equivalent or consent of instructor.

**166. Elementary Statistics II (3)**

Comparing two populations, criteria for a good estimator, tests of significance, the concept of power, some non-parametric tests, analysis of variance, linear regression and correlation, and elementary experimental design.

Prerequisite: Math. 165 or consent of instructor.

## **Mathematics**

### **190. Calculus II (4)**

Derivatives and applications, the definite integral, elementary functions, applications of integration.

Prerequisite: Math. 140 or equivalent or consent of instructor.

### **212. Calculus with Applications II (3)**

Methods and applications of integration, arc length, theorem of Pappus, transcendental functions, improper integrals, conic sections, polar coordinates.

Prerequisite: Math. 162 or consent of instructor.

### **220. Logic, Proof and Vector Spaces (3)**

Elementary concepts of set theory, logic, and vector spaces. Other subjects of finite mathematics may also be covered.

Prerequisite: Math. 190 or 212 or equivalent or consent of instructor. It is suggested that mathematics majors take this course concurrently with Math. 240 or 262 and before Math. 317 or 312. Transfer students should take Math. 220 during their first semester here.

### **240. Calculus III (3)**

Vector analysis, partial differentiation, derivative, gradient, curl, divergence, multiple integrals, theorems of Gauss, Green and Stokes.

Prerequisite: Math. 190 or equivalent or consent of instructor.

### **262. Calculus with Applications III (3)**

Vector functions and their derivatives, velocity and acceleration, linear equations and determinants, polar and cylindrical coordinates, partial differentiation, gradient, chain rule, exact differentials.

Prerequisite: Math. 212 or consent of instructor.

### **295. Community Involvement Project (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.

## **Upper Division**

### **300. Elementary School Mathematics (3)**

The new math topics of elementary schools. Theory of the structure of arithmetic and algebra of the real number system. Essentially: Changing number bases, study of sets, and laws of arithmetic. Numbers and operations, systems of numeration, geometry, measurement, sets, logic.

Prerequisite: One semester of college mathematics or consent of instructor.

### **301. Secondary School Mathematics (3) III**

Topics from analytic geometry, trigonometry, and algebra.

Prerequisite: One semester of college mathematics or consent of instructor.

### **306. Number Theory (3) I**

Mathematical induction, Euclidean algorithm, congruences, fundamental theorem of arithmetic, perfect numbers, number theoretic functions, prime number theorem.

Prerequisite: Math. 140 or Math. 162 or consent of instructor.

### **308. College Geometry (3) II**

Studies of axiom systems in geometry, comparison of Lobachevskian, Euclidean and Riemannian geometries. The Hilbert postulates.

Prerequisite: One year of college mathematics or consent of instructor.

**\* 309. Projective Geometry II**

A brief survey of the historical development of projective geometry; the axiomatic foundations; the classical theorems of Desargues and Pappus; coordinates in the projective planes; projectivities.

Prerequisite: Math. 220 or consent of the instructor.

**312. Calculus with Applications IV (3)**

Multiple integrals and applications, spherical coordinates, line integrals, Green's theorem, Stokes' theorem, divergence theorem, infinite series, power series expansion of functions, tests for convergence, Taylor's theorem, elementary complex variable, power series of functions of a complex variable, elementary differential equations.

Prerequisite: Math. 262 or consent of instructor.

**317. Calculus IV (3)**

Infinite series, power series, sequences of functions.

Prerequisite: Math. 240 or equivalent or consent of instructor.

**320. Modern Algebra I (3) I**

Basic algebraic properties of number theory, mappings, groups.

Prerequisite: Math. 220 or consent of instructor. This course and Math. 220 may be taken concurrently with consent of the instructor.

**321. Modern Algebra II (3)**

A continuation of Math. 320. Topics include: Rings and ideals, fields, Galois theory.

Prerequisite: Math. 320 or consent of instructor.

**322. Linear Algebra (3)**

Vectors and vector spaces, transformations of coordinates, linear transformations, geometry of real vector spaces, determinants, applications to physics and geometry.

Prerequisites: Math. 220 and one year of calculus or consent of instructor.

**328. Foundations of Mathematics (3) I**

Sets, infinite unions and intersections, index sets, functions, partially ordered and totally ordered sets, axiom of choice, other topics.

Prerequisite: Math. 220, 317 or 312, and 320 or consent of instructor.

**330. Applied Differential Equations (3)**

Existence and uniqueness theorems for linear differential equations. Complete solution to linear equations with constant coefficients. Method of solving equations with variable coefficients. Iterative methods for nonlinear equations. Phase plane solutions. Applications.

Prerequisite: Math. 190 or 212 or consent of instructor.

**331. Applied Differential Equations II (3) II**

Continuation of Mathematics 330. Laplace transform method. Power series method. Equations of hypergeometric type. Orthogonal sets, Fourier series and simple boundary value problems.

Prerequisite: Math. 330 or consent of instructor.

**340. Real Analysis I (3)**

Sequences, series, metric spaces, continuity, and possibly differentiation.

Prerequisites: Math. 220 and Math. 317 or 312, or consent of instructor. This course and Math. 220 may be taken concurrently with consent of instructor.

\* Offered alternate years.

## Mathematics

### 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. 317 or 312, or consent of instructor.

### \* 350. Introduction to Computer Science (3)

Boolean algebra, logic design, machine language, computer organization.

Prerequisite: Math. 120 or Chem. 381 or Mgmt. 216, 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. 240 or 262, and Math. 120 or equivalent, Math. 330, or consent of instructor.

### 360. Design of Experiments (3)

Principles used; comparison of designs; interpretation of results.

Prerequisite: Math. 165 or consent of instructor.

### 365. Statistical Inference (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, analysis of variance and covariance, applications.

Prerequisites: Math. 190 or 212, and Math. 345 or consent of instructor.

### 395. Community Involvement Project (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.

### 408. Advanced Geometry (3) I

Classification of isometries and similarities in Euclidean 3-space; discrete groups of isometries; crystallographic point groups; affine spaces; affine coordinates; affine symmetries and their analytic representation.

Prerequisite: Math. 320 and Math. 322 or consent of instructor.

### 410. History of Mathematics (3) II

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: One semester of college mathematics or consent of instructor.

### 418. General Topology (3)

Definition of topology, closed sets, relativizations, base and subbases of a 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. Mathematical Logic (3) II

Propositional logic, first order logic, consistency, completeness.

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 317 or 312, and Math. 330 or consent of instructor.

\* Offered alternate years.

**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, isometrics, geodesics, Gauss Bonnet Theorem.

Prerequisite: Math. 317 or 312, and Math. 322 or consent of instructor.

**440. Real Analysis II (3)**

Differentiation, Riemann integral, sequences of functions, Taylor series.

Prerequisite: Math. 340 or consent of the instructor. This course is a continuation of Math. 340.

**441. Real Analysis III (3)**

Advanced topics in analysis.

Prerequisite: Math. 440 or consent of the instructor.

**450. Systems Programming (3) II \***

Theory and construction of monitors, simulators, assemblers, and compilers.

Prerequisite: Math. 120 and Math. 350 or consent of instructor.

**\* 455. Computability and Unsolvability (3)**

Turing machines, recursive functions, equivalence of Turing computability and recursiveness.

Prerequisite: Math. 320 or consent of instructor.

**460. Introduction to Complex Variables (3) II**

The complex field, functions, limits, continuity, complex differentiation and the Cauchy-Riemann equations, complex integration, residues, conformal mappings.

Prerequisite: Math. 340 or equivalent or consent of the instructor.

**465. Decision Theory (3)**

Structure of statistical decision problems; principles of choice; Bayes rules; sufficiency; invariance; sequential analysis; estimation.

Prerequisite: Math. 365 or consent of instructor.

**466. Sampling Methods and Theory (3)**

The basic sampling models and methods, generalization of basic models and applications, analytic surveys.

Prerequisite: Math. 166 or consent of instructor.

**467. Non-parametric Methods in Statistics (3)**

Tests of randomness, symmetry, random blocks, independence and the theory underlying them.

Prerequisite: Math. 166 or consent of instructor.

**470. Measure and Integration (3)**

Lebesgue measure and the Lebesgue integral, convergence theorems,  $L_p$  spaces, functions of finite variation, the indefinite Lebesgue integral, probability theory.

Prerequisite: Math. 440 or consent of instructor.

**480. Integral Transforms (3) I**

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. Independent Study for Majors or Minors (1-3)**

\* Offered alternate years.

## Mathematics

### 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. Special Problems

#### MASTER OF ARTS DEGREE IN MATHEMATICS

The following requirements are prescribed for the degree of Master of Arts in Mathematics.

##### 1. Admission to candidacy:

- A B.A. degree from Sonoma State College or its equivalent. Undergraduate mathematics courses must include the equivalent of 345, 320, 322, or 321, 340, 328, 440, 418 or 460, or permission of the Mathematics Department.
- A high standard of scholarship in his undergraduate work and major, a grade point average of 3.0 in upper division work.
- Taking of a graduate record examination or its equivalent.
- Acceptance by a graduate departmental advisor. Mutual agreement by the department and advisor that the area of interest of the student is compatible with the facilities and interests of the department.

##### 2. Requirements for the Degree:

- Completion of 30 units of approved graduate study with at least 24 units in mathematics, and a 3.0 G.P.A. in all mathematics courses.
- Completion of at least 15 non-thesis units in 500 level mathematics. Courses must include Math. 550 and a 500 level course in analysis and a 500 level course in topology.
- Passage of a comprehensive examination at least one semester before graduation.
- Acceptance of a thesis and final presentation of the thesis in a seminar open to all faculty and students.

#### 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, Math. 321, and Math. 441 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 and Math. 441 or consent of instructor.

### 525. Numerical Analysis (3)

Selected topics in numerical analysis which are of present day interest to the applied mathematician.

Prerequisite: Math. 330, 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 I (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. 441 or 570 and Math. 418 or consent of instructor.

**541. Functional Analysis II (3)**

A second course continuing with general theorems on linear operators. Spectral analysis; including Ascoli's theorem, operational calculus, and spectral mapping theorem. Integration and linear functionals.

Prerequisite: Math. 540 or consent of instructor.

**550. Abstract Algebra-Group Theory (3)**

The Jordan-Holder-Schreier theorem. Galois theory, ideal theory, multilinear algebra.

Prerequisites: Math. 322 and Math. 328 or consent of instructor.

**551. Abstract Algebra—Algebraic Number Theory (3)**

A continuation of Mathematics 550, with emphasis on algebraic number fields and their applications to the Galois theory.

Prerequisite: Math. 550 or equivalent 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.

**565. Stochastic Processes and Their Applications (3)**

Theory and applications of processes, including stationary and non-stationary processes.

Prerequisite: Math. 345 or consent of instructor.

Recommended corequisite: Math. 515.

**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.

**595. Special Studies in Mathematics (2-3)****599AB. Thesis (3-3)**

Prerequisite: See Master's Degree requirements.

# MUSIC

## (Division of Humanities)

Margaret Donovan-Jeffry, Chairman of Department

Ellen Amsterdam, Margaret Broughton, Leo Christiansen, Albert Cognata, Anne Crowden, Lynn Dowdey, Philip Elwood, Joann Feldman,\* Arthur Hills, William Johnson, Sally Kell, Jeremy Merrill, Walter Oster, Margareta Redwine, Gardner Rust, David Sloss, Larry Snyder, Jean Stevens, Augustus Vidal, Lawrence Vogt.

The student majoring in music refines his musical sensitivity against the background of a liberal education. The Music Department offers a four-year program for music majors designed to give the student comprehensive preparation in theory, history and performance. 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. The Department encourages students to develop advanced proficiency in their performing specialties, but at the same time the Department expects all music majors to pursue a broadly diversified program of class study designed to equip them as "complete" musicians.

### MUSIC MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	43 units
Electives .....	41 units
<b>Total .....</b>	<b>124 units</b>

(A minor is not required for the B.A. in Music)

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.

### PROFICIENCY EXPECTATIONS

All prospective music majors will be given a placement test to determine at what level they should enter the program. Students who do not demonstrate fluent reading of treble and bass clef, ability to sing at sight a simple tune, knowledge of basic intervals, understanding of simple meter and rhythm, and familiarity with major and minor scales, will be asked to take Music 105 as a prerequisite to Music 110 and 120. No student will be admitted to any music theory class until he has passed Music 105, or has demonstrated equivalent achievement on the placement test.

Entering students must either pass a Piano Proficiency Test or begin immediately to develop technique sufficient to pass it. Students with no previous keyboard experience should expect to take four semesters of Basic Piano (Music 101, 102, 103, and 104), beginning in the first semester of work as a music major. All students in the four-year program will be expected to pass the Piano Proficiency Test before beginning Upper Division work as music majors.

An Aural Skills Test, checking the student's ability to hear accurately intervals, scales, rhythms, and simple chord progressions, will be given as part of the final examination in Music 310. This test will be taken on a pass-fail basis; all students will be expected to pass this test before going on to Upper Division work in music.

### TRANSFER STUDENTS

All transfer students wishing to enter as music majors in the junior year will be given the Aural Skills Test as soon as they arrive at Sonoma State College. Students who do not pass this test will be advised to take Lower Division courses as necessary before beginning Upper Division work in music.

\* On leave 1971-72.

## **Music**

Transfer students will also be expected to take the Piano Proficiency Test during the first week of residence, and will be advised to take Basic Piano classes if necessary. Normally, Upper Division work in music at Sonoma State College assumes keyboard facility sufficient to pass the Piano Proficiency Test. No student may graduate in music without having passed it.

### **LOWER DIVISION PROGRAM**

The core of the Lower Division Program for music majors is a sequence of four courses in Musicianship. The Musicianship sequence is a comprehensive approach to ear-training in its broadest sense. It includes, but is not limited to, sight-singing, dictation, conventional harmony, and historic and stylistic considerations as they relate to the development of aural and written skills. The basic proposition is that a literate musician should hear what he sees and see what he hears. To that end, materials and solfege techniques from a variety of musical cultures will be used, so that the student learns to understand "rules" only as attempts to define particular musical styles.

### **UPPER DIVISION PROGRAM**

The core of the Upper Division Program is a series of courses designed to integrate the traditional studies of music history and form and analysis. There are four courses in this series: Music 301, 302, 303, and 304. Music 301 is required for all music majors. In addition, each music major must choose two of the remaining three courses in the series.

Every music major will be expected to do a Senior Project, which may be counted for one or two units, depending on its scope. The Senior Project will generally be done during the last semester of residence, although unusually extensive Projects may be done during the last two semesters. The Senior Project may take the form of directed research leading to a lecture demonstration, or 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 at least seven additional units in music (six if the student completes a two-unit Senior Project). These units may be chosen from various courses such as those in specific periods, genres, or composers; advanced theory, form and analysis, or conducting; composition; orchestration; jazz arranging, non-Western music, performance practice, or studio instruction. Music 105, ensemble groups, and Basic Piano classes may not be counted among these units.

### **THE PERFORMANCE REQUIREMENT**

The Music Department maintains a busy schedule of ensemble activities, including Orchestra, Chorus, Madrigal Singers, Chamber Music, Opera Workshop, Jazz Workshop, Concert Jazz Ensemble, and Workshops in non-Western music. All music majors must participate in ensemble groups 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 College.

### **ADVISING**

Each music major is expected to consult an advisor in the Music Department before beginning work as a music major. The student is also asked to see his advisor immediately after completing his first semester of work in Theory and Ear-training, in order to discuss the student's prospects for further work in music.

Apart from the core courses required of all music majors, the student chooses classes that best serve his own interests. Students with highly developed interests in specialized areas (such as composition, electronic music, ethnomusicology, etc.) are encouraged to consult an advisor about the possibility of arranging individually tailored programs of study. All music majors are urged to seek help from their

## Music

assigned advisors each semester; the advisor's signature will constitute departmental approval of the student's schedule each semester.

Students planning to do graduate work in music are strongly urged to take fourteen units in French or German.

### MUSIC MAJOR COURSE REQUIREMENTS

#### Lower Division

Music 110—Musicianship II .....	2 units
Music 120—Musicianship II Lab .....	2 units
Music 111—Musicianship III .....	2 units
Music 121—Musicianship III Lab .....	2 units
Music 210—Musicianship IV .....	2 units
Music 220—Musicianship IV Lab .....	2 units
Music 310—Musicianship V .....	2 units
Music 320—Musicianship V Lab .....	2 units
Music 200—Listening Skills I .....	3 units
Music 300—Listening Skills II .....	3 units

#### Upper Division

Music 301—History and Analysis—Common Practice Period .....	5 units
Two courses to be selected from the following three:	
Music 302—History and Analysis—Early Western Music .....	4 units
Music 303—History and Analysis—Twentieth Century Music .....	4 units
Music 304—History and Analysis—Non-Western Music .....	4 units
Music 490—Senior Project .....	1 unit
(Music 490 may be taken for two units with approval of advisor, in which case the number of additional units required is reduced by one.)	
Additional Upper Division Music courses .....	7 units
<b>Total</b> .....	<b>43 units</b>

### TEACHING CREDENTIAL MUSIC MAJOR

The Teaching Credential program requires a year of post-graduate study. Candidates must (a) complete the requirements for admission to teacher education (see Department of Education) and (b) complete, in addition to the requirements for the baccalaureate degree major, the following program:

Music 115, 415—Beginning Voice Technique .....	1 unit
Music 116, 416—Instrumental Technique—Strings .....	1 unit
Music 117, 417—Instrumental Technique—Woodwinds .....	1 unit
Music 118, 418—Instrumental Technique—Brass .....	1 unit
Music 119, 419—Instrumental Technique—Percussion .....	1 unit

The student is advised to consult his advisor in the Education Department for further courses in Education needed for the Credential.

### MINOR IN MUSIC

Students may complete a minor in music by taking Music 250, Introduction to Music Literature, in partial fulfillment of the General Education requirement, and by adding 17 additional units in consultation with the departmental advisor. Students contemplating minoring in music should consult the music department at the earliest possible date for approval and advising.

### MUSIC

#### 101. Basic Piano I (1)

A beginning course in the development of fundamental keyboard skills. Emphasis on functional keyboard harmony and improvisation.

**102. Basic Piano II (1)**

A beginning course in the development of fundamental keyboard skills. Emphasis on functional keyboard harmony and improvisation.

Prerequisite: Music 101 or consent of instructor.

**103. Basic Piano III (1)**

Prerequisite: Music 102 or consent of instructor.

**104. Basic Piano IV (1)**

Prerequisite: Music 103 or consent of instructor.

**105. Musicianship I: Fundamentals (3)**

A basic course in reading notes, ear training, dictation, sight-singing, etc. Upon satisfactory completion a student would be able to start courses in theory and ear-training.

**110. Musicianship II: Theory (2)**

Diatonic harmony and contrapuntal techniques with supplementary keyboard assignments. Must be taken concurrently with Music 120.

Prerequisite: Music 105, or equivalent, or consent of instructor.

**111. Musicianship III: Theory (2)**

Continuation of Musicianship II. Must be taken concurrently with Music 121.

Prerequisites: Music 110 and 120, or equivalent.

**112. Class Instruction in Organ (1)**

A beginning course in organ playing. Piano proficiency at the level of Book III of the Bartok *Mikrokosmos* and consent of the instructor are prerequisites.

**113. Class Instruction in Guitar (1)**

Introductory instruction in guitar techniques including use of basic chords in various types of song accompaniment. All notes in the first position will be studied along with solo and ensemble pieces for guitar.

**114. Class Instruction in Recorder (1)**

Group work in beginning recorder techniques.

Prerequisite: Consent of instructor.

**115. Beginning Voice Technique (1)**

Group work in the fundamental techniques of singing. Problems of tone production, breath control, diction, repertoire and interpretation. May be repeated for credit.

**116. Instrumental Technique—Strings: May be taken as Music 416 (1)**

**117. Instrumental Technique—Woodwinds: May be taken as Music 417 (1)**

**118. Instrumental Technique—Brass: May be taken as Music 418 (1)**

**119. Instrumental Technique—Percussion: May be taken as Music 419 (1)**

**120. Musicianship II Laboratory: Ear-Training (2)**

Sight-singing and dictation. Must be taken concurrently with Music 110.

Prerequisite: Music 105, or equivalent, or consent of instructor.

**121. Musicianship III Laboratory: Ear-Training (2)**

Continuation of Musicianship II Lab. Must be taken concurrently with Music 111.

Prerequisite: Music 110 and 120 or equivalent.

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### 122. Class Instruction in Strings (1)

Prerequisite: Consent of instructor.

### 123. Class Instruction in Woodwinds (1)

Prerequisite: Consent of instructor.

### 124. Class Instruction in Brass (1)

Prerequisite: Consent of instructor.

### 128. Intermediate Voice Technique (1)

Continuation of Music 115.

Prerequisite: Music 115 and consent of instructor.

### 133. Studio Instruction—Strings (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 134. Studio Instruction—Woodwinds (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 137. Studio Instruction—Brass (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 138. Studio Instruction—Percussion (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 139. Studio Instruction—Keyboard (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 141. Studio Instruction—Voice (1)

Prerequisite: Consent of the Department. May be repeated for credit.

### 200. Listening Skills I (3)

Masterworks of Western music treated chronologically. Emphasis is placed on listening and on the larger aspects of analysis.

### 210. Musicianship IV: Theory (2)

Chromatic harmony and contrapuntal techniques with advanced keyboard harmony. Must be taken concurrently with Music 220.

Prerequisites: Music 111 and Music 121, or equivalents.

### 220. Musicianship IV Laboratory: Ear-Training (2)

Advanced sight-singing and dictation. Must be taken concurrently with Music 210.

Prerequisites: Music 111 and Music 121, or equivalent.

### 250. Introduction to Music Literature (3)

An introductory course for non-music majors with lectures and demonstrations dealing with materials of music and different styles. May not be counted for credit toward the music major.

### 255. Workshop in African Music and Dance (1-2)

A laboratory devoted to instruction in African drumming, songs, and dances. An opportunity to gain understanding of African music and dance through participation.

Prerequisite: Consent of instructor.

### 256. African Music Concert Ensemble (1)

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.

Prerequisite: Music 255 or consent of instructor.

**295. Community Involvement Project (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. Students taking C.I.P. through the Music Department must arrange for supervision by a Music Department advisor.

**300. Listening Skills II (3)**

Introduction to non-Western music, using the techniques and approaches developed in Music 200.

Prerequisite: Music 200 or equivalent course, or consent of instructor.

**301. History and Analysis of Western Music in the Common Practice Period (5)**

A course integrating the history and analysis of music from the early Baroque through the late Romantic periods (1600-1900).

Prerequisite: Aural Skills Test, or consent of instructor.

**302. History and Analysis of Early Western Music (4)**

A course integrating the history and analysis of music from plain chant through the late Renaissance (900-1600).

Prerequisite: Aural Skills Test, or consent of instructor.

**303. History and Analysis of Twentieth Century Music (4)**

A course integrating the history and analysis of music from Debussy to the present.

Prerequisite: Aural Skills Test, or consent of instructor.

**304. History and Analysis of non-Western Music (4)**

A survey of non-Western and ethnic music.

Prerequisite: Aural Skills Test, or consent of instructor.

**310. Musicianship V: Theory (2)**

Continuation of Musicianship IV. Must be taken concurrently with Music 320.

Prerequisites: Music 210 and 220, or equivalent.

**315. Orchestration (3)**

Study of the instruments of the orchestra, with exercises in writing for instrumental groups and scoring for the orchestra as a whole. Prerequisite: Aural Skills Test, or consent of instructor.

**316. Stage Band Composition and Orchestration (2)**

Study of the instruments of the stage band, with examples in writing for various instrumental groups and scoring for the band as a whole. Admittance by audition.

**317. Stage Band Composition and Orchestration (2)**

Continuation of Music 316.

Prerequisite: Music 316 or consent of instructor.

**319. Jazz in American Society (3)****320. Musicianship V Laboratory: Ear-Training (2)**

Continuation of Musicianship IV Laboratory. Must be taken concurrently with Music 310.

Prerequisites: Music 210 and 220, or equivalent.

**325. Chorus (1)**

The study and presentation of choral music from all periods of musical literature. May be repeated for credit. Prerequisite: Consent of instructor.

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### **326. Piano Ensemble (1)**

The study in performance of literature for piano ensembles. May be repeated for credit.

Prerequisite: Consent of instructor.

### **327. Wind Ensemble (1)**

The study and presentation of wind ensemble music from all periods of musical literature. May be repeated for credit.

Prerequisite: Consent of instructor.

### **328. Orchestra (1-3)**

The study and presentation of orchestral music from all periods of musical literature. May be repeated for credit.

Prerequisite: Consent of instructor.

### **329. Chamber Music Workshop (1)**

Instruction and coaching in the performance of chamber music. May be repeated for credit.

Prerequisite: Consent of instructor.

### **330. Opera Workshop (1-3)**

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 or by consent of instructor. May be repeated for credit.

Prerequisite: Consent of instructor.

### **331. Songwriting (3)**

### **340. Acting and Directing for the Lyric Theater (1-3)**

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 (3)**

Advanced study of a particular contrapuntal style. May be repeated for credit with consent of instructor.

Prerequisites: Aural Skills Test and consent of instructor.

### **342. Studies in Music History (3)**

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 (3)**

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 (3)**

Study of life and works of a specific composer. May be repeated for credit with consent of instructor.

Prerequisite: Consent of instructor.

### **374. Music on the American Scene (3)**

A course designed for any student interested in examining and becoming better acquainted with such topics as: Rock; style, genre and point of view; Jazz since the



Second World War; The Academic Avant-Garde; The Ritual Crisis in "Serious" music today; Music and Economics; The American Experimental Tradition. Students are encouraged to compose and/or perform as a part of their study of various facets of the music of today.

Prerequisite: None. Not applicable toward completion of music major requirements.

**380. American Folk Music (3)**

A survey of the history and development of American folk music.

**390. Jazz Workshop (1)**

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)**

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)**

A course designed to study chord playing and jazz improvisation.

Prerequisite: Consent of instructor.

**393. Madrigal Singers (1)**

Study and performance of Renaissance and Baroque choral literature. May be repeated for credit.

Prerequisite: Consent of instructor.

**395. Community Involvement Project (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. Students taking C.I.P. through the Music Department must arrange for supervision by a Music Department advisor.

**400. Curriculum of the Elementary School (Music) (3)**

Philosophy, method and materials for teaching music in the elementary school. Enrollment limited to students admitted to Elementary Education Curriculum, or by consent of instructor.

**412. Class Instruction in Organ (1)**

**413. Class Instruction in Guitar (1)**

**415. Beginning Voice Technique (1)**

**416. Instrumental Technique—Strings (1)**

**417. Instrumental Technique—Woodwinds (1)**

**418. Instrumental Technique—Brass (1)**

**419. Instrumental Technique—Percussion (1)**

**422. Class Instruction in Strings (1)**

Prerequisite: Consent of instructor.

## **Music**

### **423. Class Instruction in Woodwinds (1)**

Prerequisite: Consent of instructor.

### **424. Class Instruction in Brass (1)**

Prerequisite: Consent of instructor.

### **425. Composition (3)**

This course will serve as the culmination of the student's advanced work in theory and will integrate previous study. Individual projects in creative work.

Prerequisite: Consent of instructor.

### **426. Seminar in Music History (3)**

Individual or class projects on particular aspects of music history. The emphasis will be on studies in depth, integrating previous study in history and analysis. May be repeated for credit.

Prerequisite: Music 301, or consent of instructor.

### **427. Studies in Musical Analysis (3)**

Detailed examination of music from a particular style or period. May be repeated for credit with consent of instructor.

Prerequisite: Aural Skills Test and consent of instructor.

### **428. Intermediate Voice Technique (1)**

Continuation of Music 415.

Prerequisite: Music 415 and consent of instructor.

### **430. Conducting (2)**

Prerequisites: Aural Skills Test, Piano Proficiency Test and Music 301 or consent of instructor. It is recommended that Music 432 be taken concurrently.

### **431. Advanced Conducting (2)**

Prerequisite: Music 430 or consent of instructor.

### **432. Score Reading at the Piano (1)**

Prerequisite: Piano Proficiency Test or consent of instructor.

### **433. Studio Instruction—Strings (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

### **434. Studio Instruction—Woodwinds (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

### **436. Studies in Performance Practice (3)**

Research and inquiry into the authentic procedures of musical performance of a period, style or civilization. The specific topic will vary each time the course is offered.

Prerequisite: Consent of instructor.

### **437. Studio Instruction—Brass (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

### **438. Studio Instruction—Percussion (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

### **439. Studio Instruction—Keyboard (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

**441. Studio Instruction—Voice (1)**

Prerequisite: Consent of the Department. May be repeated for credit.

**451. Music of India and the Near East (3)**

A survey of the music of India, Iran, the Arab and other Near Eastern countries. Included in the course are films and demonstration of instruments.

Prerequisite: Music 250 or consent of instructor.

**452. Music of Indonesia and the Far East (3)**

A survey of the music of Indonesia, Tibet and countries of the Far East, South-east Asia, Australia and the islands of the Pacific. Included in the course are films and demonstrations of instruments.

Prerequisite: Music 250 or consent of instructor.

**453. Workshop in Near Eastern Music (1-2)**

Studies in theory and performance practice of Near Eastern music. An opportunity to gain understanding of Near Eastern music through participation. May be repeated for credit with consent of instructor.

Prerequisite: Music 451 (may be taken concurrently) or consent of instructor.

**454. Workshop in Far Eastern Music (1-2)**

Studies in theory and performance practice of Far Eastern music. An opportunity to gain understanding of Far Eastern music through participation. May be repeated for credit with consent of instructor.

Prerequisite: Music 452 (may be taken concurrently) or consent of instructor.

**455. Workshop in African Music and Dance (1)**

A laboratory devoted to instruction in African drumming, songs, and dances. An opportunity to gain understanding of African music and dance through participation. Must be taken concurrently with Music 457, 458.

Prerequisite: Music 457 or consent of instructor.

**456. African Music Concert Ensemble (1-2)**

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.

Prerequisite: Music 455 or consent of instructor.

**457. African Music (3)**

African Music will examine the history, organization, function and the music (melody, text, instruments) of various African musical types: Social Music; Occupational Music; Music for Political Institutions; Music for Religious Institutions; Music for Rites "de passage" (birth, nursery, puberty, circumcision, marriage, death). In addition, the course will examine the mutual influences of contemporary African and Western cultures.

Prerequisite: Music 200 or 250 or consent of instructor.

**458. African Music (3)**

Continuation of Music 457.

Prerequisite: Music 457 or consent of instructor.

**460. Mixed Media Composition (3)**

The study of technical and aesthetic principles which underly recent art works coordinating music, art, cinema, dance and drama; and the application of these principles in the creation of original conceptions.

Prerequisite: Consent of instructor.

## **Music**

### **461. Electronic Music Composition (3)**

A study of techniques of the classical studio (tape composition, mixing techniques, concrete sound sources), sound generation using a digital computer and composition using direct sound generation systems. Problems involved in the construction of sound systems will also be considered.

Prerequisite: Consent of instructor.

### **462. History of Musical Instruments (3)**

A study of the evolution of musical instruments, western and non-western, from their origins to the present.

### **463. History of Theory (3)**

A comprehensive survey of the important theoretical writings of western music. A consideration of the work of Pythagoras, Schütz, Descartes, Rameau, Reicha, Riemann, Schenker, Babbitt and others whose thought seeks to explain the nature of western music as it evolves.

Prerequisite: Consent of instructor.

### **464. Seminar in Musical Aesthetics and Criticism (3)**

A course in the reading and writing of criticism. Critical viewpoints will be studied in the light of the aesthetic values they assume, and an attempt will be made to define a role for criticism today. Musical criticism will provide the focus, but students with other artistic interests are encouraged to enroll.

Prerequisite: Consent of instructor.

### **490. Senior Project (1-2)**

A course designed to culminate the work of the music major. Group or individual projects in research, analysis, or theory, bringing together all the skills and proficiencies that have been developed. The work in the seminar may include a recital on an instrument or voice. A student may accumulate a maximum of two units in Senior Project.

Prerequisite: Music 301 or consent of instructor.

### **495. Independent Study for Majors or Minors (1-4)**

### **499. Special Problems (1-2)**

By consent of instructor.

### **501. Introduction to Graduate Study (3)**

A course in the methods and materials for research in music. Proficiency in an imaginative use of the library will be developed through projects in bibliography. Some original research will be expected.

Prerequisite: Consent of the Graduate Committee. This course is required of all students during their first semester of graduate study.

### **502. Pedagogy of Music Literature (2)**

Prerequisite: Music 501 or consent of the Graduate Committee.

### **503. Pedagogy of Piano (3)**

Prerequisite: Music 501 or consent of the Graduate Committee.

### **504. Pedagogy of Theory (3)**

Prerequisite: Music 501 or consent of the Graduate Committee.

### **505. Acoustics of Music (3)**

Prerequisite: Music 501 or consent of the Graduate Committee.

**506. Advanced Techniques of Musical Analysis (3)**

Prerequisite: Music 501 or consent of the Graduate Committee.

**525. Chorus (1)**

Prerequisite: Consent of the Graduate Committee.

**526. Piano Ensemble (1)**

The study in performance of literature for piano ensembles. May be repeated for credit.

Prerequisite: Consent of instructor.

**528. Orchestra (1-3)**

Prerequisite: Consent of the Graduate Committee. May be repeated for credit.

**529. Chamber Music Workshop (1)**

Prerequisite: Consent of the Graduate Committee. May be repeated for credit.

**530. Opera Workshop (1-3)**

Prerequisite: Consent of the Graduate Committee. May be repeated for credit.

**554AB. Graduate Seminar in Music Education (3-3)**

Advanced studies in Music Education. Examination of music studies in public schools and their relationship to the creative process. The role of music in culture and its relationship to music education.

Prerequisite: Music 501 or consent of the Graduate Committee.

**590. Jazz Workshop (1)**

Prerequisite: Consent of instructor. May be repeated for credit.

**591. Concert Jazz Ensemble (1)**

Prerequisite: Music 590 or consent of instructor. May be repeated for credit.

**593. Madrigal Singers (1)**

Prerequisite: Consent of instructor. May be repeated for credit.

# NURSING

(Division of Natural Sciences)

Mary Searight, Chairman of Department

The major in nursing is a two-year upper division program. Men and women who are candidates for the Bachelor of Science Degree in Nursing must have completed the equivalent of an associate degree in nursing and must have evidence of licensure as a registered nurse. Graduates of diploma programs may be certified by the junior college as having equivalent preparation through challenge or equivalency examinations, credit for previous experience or education and by completing required lower division general education and nursing courses.

The first year of the nursing program will focus upon community health nursing, through a two-semester, integrated, process-oriented curriculum. The senior year will offer an opportunity to select episodic or distributive nursing as an area of concentration.

Communication, decision-making, self awareness, the process of change, and beginning teaching skills will be emphasized throughout. A cross-cultural approach to understanding health problems will be utilized and ethnic diversity within the student body encouraged.

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. Graduates will be prepared to teach patients, families and staff, plan and implement patient care, and provide leadership for those less well prepared.

Requirements for admission to the Bachelor of Science Degree Nursing major:

1. Junior standing
2. Current California licensure as a registered nurse
3. Associate degree or the equivalent from a community college

Admission to the Nursing Program will be permitted only in the Fall semester. Students will not be admitted in the Spring semester.

The college reserves the right to limit the enrollment of students to Nursing 310AB and Nursing 321 and 322AB, to available clinical facilities. Preference will be given to those students who can attend full time or who have completed the necessary course work to complete the program in two academic years. *No part-time students will be admitted to the nursing major for the Fall of 1972 or 1973.*

As eligibility is determined, qualified applicants will be admitted to the nursing major.

## Philosophy

Sonoma State College Department of Nursing accepts the following definition of professional nursing prepared and adopted by California nurses in 1971:

"The Profession of Nursing utilizes a wide base of knowledge from the physical, behavioral and social sciences to promote the well being of each individual and of society. Professional Nursing Practice uses problem solving processes and employs appropriate resources in identifying each person's physical, psychological and social needs, and in assisting the individual and his family to achieve an optimal level of health and dignified death."

The professional nurse coordinates and assists in the provision of continuous, uninterrupted care as individuals move on the health continuum. He is responsible as a citizen and as a health care provider to speak and act in the interest of consumers of health services.

Preparation for professional nursing includes a liberal education, knowledge and skill to provide leadership in planning, implementing and teaching optimum patient care in hospitals and in the community.

The faculty believe that education for nursing belongs within the total framework of general education, not following it in the organizational scheme of the total curriculum.

They further believe that professional nursing education is characterized by distinct processes essential to effective nursing practice: the spirit of inquiry, seeking and analyzing new data and arriving at practical solutions; the ability to make critical judgment regarding value and risk; the formulation of questions and hypotheses and seeking the right direction; recognizing and becoming involved in changes accruing in a dynamic society and health care system; pursuing the quest for personal and professional growth and development.

The faculty accept the democratic philosophy that each learner has the right to as much education as he is capable of pursuing and that people learn in many different ways. We believe there are many different approaches to the same goal and that students may have traveled different routes, distances, and directions. Life experiences, motivation and ability all affect one's timing and attainment of goals.

It is the faculty's responsibility to provide through a flexible individualized curriculum, learning experiences which will enhance previous knowledge and skills and enrich the student's life as a professional member of society.

### Objectives of the Program

Through participation in a variety of learning experiences, the student will demonstrate increased ability to:

1. Assume responsibility as a citizen.
2. Develop knowledge and skill in the practice of nursing.
3. Provide leadership in the planning and implementation of patient care.
4. Teach patients, families and staff.
5. Identify the need for, plan for, and initiate change.
6. Seek new knowledge and assess and utilize that which is meaningful in a progressive pattern of personal and professional growth.
7. Understand himself and his fellow man.

### Nursing Major for the B.S. Degree

Major Courses .....	59 units
General Education .....	40 units
Supporting Courses .....	12 units
Electives .....	13 units
	<hr/>
	124 units

This includes a minimum of 30 units in nursing and 30 units of general education, supporting, and elective courses transferred from the junior college.

### Upper Division Nursing Major Course Requirements

Nursing 301AB—Community Health .....	12 units
Nursing 315—Science Principles Applied to Human Phenomena .....	3 units
Nursing 321AB—Preceptorship in Episodic Nursing.....	} 8 units
or	
Nursing 322AB—Preceptorship in Distributive Nursing.....	} 2 units
Nursing 333—Seminar in Current Professional Problems.....	
Nursing 367AB—Interaction and Change .....	4 units
	<hr/>
	29 units

### Nursing Major Supporting Course Requirements

American Ethnic Studies 432—Health and Culture .....	4 units
Management 455—The Planning Process .....	4 units
	<hr/>
	8 units

## Nursing

Selection of other supporting courses and electives should be determined by choice of preceptorship and by prior educational and experiential background. Students are encouraged to work closely with their major advisor in developing background for the preceptorship.

### NURSING MAJOR CURRICULUM

#### Junior Year

<i>First Semester</i>	<i>Units</i>
Nursing 310A—Community Health Nursing .....	6 units
Nursing 315—Science Principles Applied to Human Phenomena .....	3 units
Nursing 367A—Interaction and Change .....	2 units
Electives and Supporting Courses .....	5 units
	<hr/> 16 units

#### *Second Semester*

Nursing 310B—Community Health Nursing .....	6 units
American Ethnic Studies 432—Health and Culture .....	4 units
Nursing 367B—Interaction and Change .....	2 units
Electives and Supporting Courses .....	4 units
	<hr/> 16 units

#### Senior Year

##### *First Semester*

Nursing 321A—Preceptorship in Episodic Nursing .....	} 4 units
or	
Nursing 322A—Preceptorship in Distributive Nursing .....	} 4 units
Management 455—The Planning Process .....	
Electives and Supporting Courses .....	8 units
	<hr/> 16 units

##### *Second Semester*

Nursing 321B—Preceptorship in Episodic Nursing .....	} 4 units
or	
Nursing 322B—Preceptorship in Distributive Nursing .....	} 2 units
Nursing 333—Seminar in Current Professional Problems .....	
Electives and Supporting Courses .....	10 units
	<hr/> 16 units

### NURSING

#### **310A. Community Health (6)**

Lecture, 2 hours; laboratory, 12 hours.

Theory and principles applied to the nursing role in promotion of optimum health for families. A micro-teaching component will assist students with patient, family, and staff teaching. Clinical experience under the leadership of the nursing faculty will be provided in appropriate health agencies.

Prerequisites: Junior standing, admission to the nursing major and current driver's license.

#### **310B. Community Health (6)**

Lecture, 2 hours; laboratory, 12 hours.

Continuation of theory and principles applied to the nursing role in promotion of optimum health. Involvement in community health planning and service as an advocate of patients and their families will be stressed. Learning experience under the leadership of the nursing faculty will be provided in affiliated community health agencies.

Prerequisites: Nursing 310A, 315 and 367A.



**315. Science Principles Applied to Human Phenomena (3)**

Lecture-discussion, 3 hours.

An integrated course emphasizing the dynamic aspects of biology, chemistry, and physics in the maintenance of homeostasis.

Prerequisite: High school chemistry or concurrent enrollment in Chemistry 102 and 103 or equivalent, Biology 220 and 224 or equivalent, or permission of instructor, and upper division standing.

**321AB. Preceptorship in Episodic Nursing (3-5) (3-5)**

Seminar, 2 hours; laboratory, 3-9 hours.

With faculty assistance, students will select and delineate a concentrated program of study concerned with the curative and restorative aspects of nursing care of patients with diagnosed disease, either acute or chronic. The student will assess his own needs and with help of an advisor define his goals, select learning experiences proposed to meet these goals, participate in selected learning experiences and evaluate the results. Clinical work in participating health facilities will be under the supervision of a Preceptor. Weekly interdisciplinary seminars will be conducted by students with assistance of instructor.

Prerequisites: Nursing 310AB, 315 and 367AB.

**322AB. Preceptorship in Distributive Nursing (3-5) (3-5)**

Seminar, 2 hours; laboratory, 3-9 hours.

With faculty assistance, students will select and delineate a concentrated program of study concerned with nursing practice which emphasizes prevention of disease and maintenance of health, and is directed toward continuous care of persons not confined to health care institutions. The student will assess his own needs and with help of an advisor define his goals, select nursing experiences proposed to meet these goals, participate in selected learning experiences and evaluate the results. Clinical work in participating community agencies will be under the supervision of a Preceptor. Weekly interdisciplinary seminars will be conducted by students with assistance of instructor.

Prerequisites: Nursing 310AB, 315 and 367AB.

**333. Seminar in Current Professional Problems (2)**

Readings, reports, group discussion and directed study to examine in depth contemporary nursing problems.

Prerequisites: Senior standing in nursing major.

**367AB. Interaction and Change (2-2)**

Seminar, 2 hours.

Theories of group processes and leadership; methods for studying group behavior; principles for understanding group functioning; the dynamics of planned change. Small groups will be used as basis for increasing self-understanding and understanding others in one-to-one and group interaction.

Students must maintain a minimum grade of C in nursing and supporting courses as prerequisites to successive nursing courses.

# PHILOSOPHY

(Division of Humanities)

Philip Temko, Chairman of Department

Harold Alderman, Stanley McDaniel, Edward Mooney, Richard Paul,  
George Proctor, John Smaby.

The major in philosophy provides an introduction to different areas of philosophy as well as various specializations. The major consists of 33 units. This must include, a) at least one course in each of the 4 specified areas, b) the Junior Seminar, and c) at least 3 units of philosophy seminar *in addition to the Junior Seminar*. With the exception of the requirements of the general education program, there are no specific course requirements for work done outside the department and a good deal of experimentation is encouraged, though the experimentation might be guided by the work done in philosophy. For example, a student whose primary interest is philosophy of science might develop a minor in one of the sciences, a student interested in aesthetics might develop a minor in one of the arts, etc. For students interested in graduate school a foreign language is recommended.

Majors are strongly encouraged to work closely with their advisors. (Note: Majors and minors interested in obtaining a teaching credential should inquire about special requirements.)

The minor in philosophy consists of 18 units approved by the department advisor.

At pre-registration time each semester the Philosophy Department publishes a guide sheet indicating which courses will be offered, their prerequisites if any, and something of their content.

A minimum of 124 units is required for the B.A. degree.

## 100. Introduction to Philosophy (3)

An examination of selected problems and texts within the discipline of philosophy. Topics and approaches vary greatly among the departmental members. May be used for major credit but not required.

### Value Theory

## 240. Ethics (3)

An introduction to the philosophical analysis of morals, morality and value. Among several fundamental questions to be examined are the following: "What is a good life?" "Is benevolence self-interest in disguise?" "Can disagreements be resolved by logic?" "Is morality absolute or relative? Objective or subjective?" Readings and discussion.

## 360. Aesthetics (3)

An analysis of the nature of art through a consideration of such problems as the cognitive role of art, art and perception, the artist and his world, among others.

## 370. Social and Political Philosophy (3)

A critical analysis of theories concerning the good society, the nature and importance of freedom, the relations between the individual and organizations, and right social action.

## 373. Philosophy of Law (3)

### Logic, Epistemology, Methodology

## 200. Introduction to Logic (3)

A study of deductive and inductive argument, meaning, and the uses of language. The purpose of the course is to develop an understanding of the rules of clear and critical thinking and of the structure of arguments.

**300. Symbolic Logic (3)**

Prerequisite: Philosophy 200 or consent of the instructor.

**330. Philosophy of Language (3)**

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, to linguistics, psychology, and the social sciences. Analysis of philosophical issues in the study of fiction and poetry.

**341. Philosophy of Science (3)**

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.

**351. Epistemology (3)**

A critical examination of the nature and scope of knowledge, with particular emphasis on the concepts of meaning, truth, and validity.

**355. Philosophy of Mind (3)**

A study of the various philosophical theories of "mind" and its relationship to the "body." Particular attention will be paid to the metaphysical, epistemological, and empirical assumptions and consequences of these theories.

**361. Phenomenology (3)**

A discussion of the origin of phenomenology in the work of Brentano and Husserl and an examination of key concepts such as intentionality, epoche, world, etc. The distinction between eidetic and existential phenomenology, and a consideration of the use of phenomenology in the social sciences.

**History of Philosophy**

**310. 19th Century Philosophy (3)**

A selective examination of the works of thinkers such as Fichte, Hegel, Marx, Kierkegaard, Nietzsche, Mill, Pierce, James and others. May be repeated.

**315. Continental Rationalism (3)**

A systematic study of rationalistic metaphysics as exemplified in Descartes, Spinoza, and Leibnitz.

**320. 20th Century Philosophy (3)**

A selective examination of the work of thinkers such as Husserl, Heidegger, Russell, Whitehead, Wittgenstein, and others. May be repeated.

**325. British Empiricists (3)**

An examination of British philosophy from Bacon to Hume. Special attention will be given to epistemological and moral philosophy.

**340AB. Eastern Philosophy (3)**

An introduction to the major philosophical and religious thought of the East, including Yoga, Hinduism, Jainism, and Buddhism. The second semester will include Tibetan Buddhism, Taoism, and Zen Buddhism.

**353. Greek Philosophy (3)**

A study of Greek philosophy from the Milesians to the Stoic and Epicurean philosophers. Particular emphasis is on the development of Plato and Aristotle and their influence on later classical philosophy.

## **Philosophy**

### **363. Medieval Philosophy (3)**

A study of philosophy from Plotinus to Occam with particular emphasis on Augustine and Aquinas. Epistemological, metaphysical, and ethical problems are analyzed and discussed.

### **375. Kant. (3)**

A systematic examination of the *Critique of Pure Reason* and the *Critique of Practical Reason* focusing on the epistemological, metaphysical, and moral problems treated in these works.

### **Speculative Philosophy**

### **350. Philosophy of Religion (3)**

A philosophical study of religion concerned to explore its language, meaning, and possible basis in feeling, intuition, or reason.

### **352. Metaphysics (3)**

A consideration of the nature of metaphysical thought through an examination of both classical and contemporary sources such as Aristotle, Kant, Pepper, Heidegger, Collingwood, Wisdom and others.

### **362. Marxism (3)**

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.

### **372. Pragmatism (3)**

An examination of the pragmatic doctrines of meaning, truth, man, and society as presented in the works of Pierce, James, Dewey, Santayana and Lewis.

### **380AB. Existential Philosophy (3)**

A is an examination of the background of existential thought in Kierkegaard and Nietzsche and an examination of basic existential concepts such as being-in-the-world, dread, and attunement. B is an intensive examination of texts selected from the works of Heidegger, Sartre, Camus, Marcel, Jaspers, and others.

Prerequisite: A is the prerequisite for B.

### **382. Non-Western Speculative Systems (3)**

Study of metaphysical attitudes and systems outside the main-stream of European civilization, including India, China, Japan, Tibet, and various primitive non-European societies. (Specific texts will be selected each semester by the instructor.)

### **392AB. Philosophy of Man (3-3)**

An inquiry into the nature of man considering both philosophical and anthropological sources. Approach varies among members of the department.

Prerequisite: A is the prerequisite for B.

### **Special Courses**

### **354. Junior Seminar (3)**

An examination of the goals and methods of philosophy. Approach varies among the departmental members. Required of all junior philosophy majors.

### **489. Graduate Thesis (6)**

### **495. Independent Study for Majors or Minors (1-3)**

**496. Senior Thesis (6)**

Writing of a paper deemed acceptable by a faculty director and reader. Superior papers nominated for honors will be defended before the philosophy faculty. Students wishing to be candidates for graduation with honors are strongly recommended to write a thesis.

**Seminars**

Open to juniors, seniors, and graduate students. May be taken for either undergraduate or graduate credit.

**485. Seminar in Value Theory (3)**

Topics to be selected.

**486. Seminar in Logic and Epistemology (3)**

Topics to be selected.

**487. Seminar in History of Philosophy (3)**

Topics to be selected.

**488. Seminar in Speculative Philosophy (3)**

Topics to be selected.

# PHYSICAL EDUCATION

(Division of Psychology, Education, Health Sciences and Physical Education)

C. Douglas Earl, Chairman of Department

Mary Covington, Robert Donlan \*, Kenneth Flynn, James Gale, David Gibbs, William Gray, Kathryn Klein, Robert Lynde, Charles Pease, Carl Peterson, G. Edward Rudloff, Barbara Schneiderhan, Robert Sorani, William Trumbo, Ella Trussell, Sherri Tuttle, Martha Yates.

Subsequent to establishing a "track" within the major, by appropriate choice of electives, students can obtain a major in Physical Education which will satisfy the requirements for any of the following objectives: Graduate school preparation, secondary teaching credential, special education, child development, pre-professional curricula, i.e., physical therapy, public health research.

## PHYSICAL EDUCATION MAJOR FOR THE B.A. DEGREE \*\*

General Education .....	40 units
Major Requirements .....	48 units
Electives .....	36 units
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Total .....	124 units

\*\* Teaching majors working toward a secondary teaching credential must participate in the equivalent of one intercollegiate sport a year. A course in Folk and Square Dance (men and women) and Modern Dance (women only) is required.

## PHYSICAL EDUCATION MAJOR COURSE REQUIREMENTS

Physical Education, the study of man as an individual engaging in motor activities, expressing his aesthetic values and/or his physical and competitive nature, is concerned with contributing to man's understanding of nature and himself. Variations in the basic curriculum provide suitable preparation for advanced degrees in physical education, teaching credential, special education or pre-professional curricula, i.e., physical therapy, public health.

A. Physical Education Courses—all majors (Note should be made of prerequisites)

Health 310 Kinesiology .....	4 units
Health 315 Physiology of Exercise .....	4 units
Phys. Ed. 300 ABCD Analysis of Motor Performance .....	8 units**
Phys. Ed. 305 Psychological Factors .....	4 units
Phys. Ed. 315 Sociology of Sport .....	4 units
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	24 units

\*\* Total number of P.E. 300 units required may vary depending upon the student's area of concentration within the major and upon approval of the student's advisor.

## AREAS OF CONCENTRATION (24 units)

An additional 24 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 his advisor in the Physical Education Department, a student can choose a pattern of courses to concentrate in the areas of teacher preparation, developmental and adaptive physical education—special education, growth and development, physical therapy, recreation and leisure, or research and graduate study.

Guidelines for courses in these areas are available in the Physical Education Department. Students should consult with their advisor as early as possible.

\* On leave 1971-72.

### 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.

#### I. Required Courses

P.E. 500 Research Design .....	3 units
P.E. 501 Graduate Seminar .....	3 units
P.E. 525 Thesis .....	3 units
and two courses selected from:	
P.E. 505 Advanced Motor Learning .....	3 units
P.E. 510 Advanced Kinesiology .....	3 units
P.E. 515 Advanced Exercise Physiology .....	3 units
P.E. 520 Cultural Factors Seminar .....	3 units

6 units

#### II. Elective Courses

15 units

Selected with approval of advisor from natural, social or behavioral sciences or physical education.

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Total ..... 30 units

For admission to classified status, the candidate must:

1. Have completed an undergraduate major comparable to that offered at Sonoma State College, including undergraduate courses in sport sociology, kinesiology, exercise physiology, motor learning, measurement and evaluation.
2. Have maintained a 3.0 (B) GPA in his major and an overall upper division GPA of 2.75 or as an unclassified graduate student received a B or higher in two graduate level courses designated by the department graduate committee.
3. Be accepted for admission by the departmental graduate committee.

For completion of the degree, the candidate must:

1. Complete the program (30 units) with a 3.0 GPA.
2. Complete a thesis acceptable to the candidate's committee.
3. Successfully participate in a final oral examination administered by the candidate's graduate committee.

### PHYSICAL EDUCATION

#### 100. Scientific Basis of Health and Physical Education (2) I and II

This course is designed to inform the student why one should engage in physical activity by analyzing in physical and physiological terms modern day problems such as the nation's death rate from heart disease. The student is asked to form conclusions from the evidence presented in lecture form and from empirical evidence gathered in the laboratory.

## **Physical Education**

### **101. Physical Education Activities (1) I and II**

Activities Classes: Most sections meet twice weekly. Classes are conducted in the following activities: archery, badminton, bowling, fencing, golf, gymnastics, judo, wrestling, modern dance, physical fitness, swimming, trampoline, tennis, and folk and square dance. Sailing, Karate, Outward Bound, Horsemanship.

### **102. First Aid (1) I**

Survey of common accidents, injuries and illnesses with an emphasis on prevention and emergency care. Laboratory experience in learning and applying accepted first aid skills. Successful completion of course can lead to certification.

### **103. Life Saving and Water Safety (1) II**

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.

### **105. Sports Officiating (2) I and II**

Rules and officiating techniques of selected sports activities for men and women. Students will attempt to become qualified officials.

### **300ABCD. Analysis of Motor Performance (1-2) I and II**

#### **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.

Prerequisite: Must pass proficiency exams in skills included in the course.

### **301. Philosophy of Physical Education (3) I**

The philosophic process applied to physical education. Exploration of contemporary values and critical issues in physical education.

Prerequisite: Junior or Senior standing.

### **305. Psychological Factors of Motor Performance (4) I and II**

#### **Lecture, laboratory**

Perception, learning, motivations and emotion in relation to motor performance; reaction time and coordination. The psychology of competition and personal adjustment and social behavior as observed in play.

### **315. Sociological Foundations of Physical Education (4) I and II**

Examines and utilizes basic sociological concepts and demonstrates their manifestations within the area of sport.

Prerequisite: Physical Education 301 and Sociology 201 or its equivalent.

### **320. Practicum (1) I and II**

A semester of supervised observation and teaching experience in physical education activity programs.

### **325. Developmental and Adaptive Physical Education (3) I**

#### **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. Developmental and Adaptive Physical Education (3) II**

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.

**330. Measurement and Evaluation (2) I and II**

Emphasis in developing a broad concept of evaluation and its place in the total educational scheme; familiarize the student with techniques of measurement and evaluation, as applied to objectives, program and student achievement; study of principles of test selection, construction, administration and interpretation, with some emphasis on descriptive statistics.

**380. Varsity Intercollegiate Sports (1) I and II**

Activities include: I. Cross-country, basketball, football, gymnastics, swimming, water polo, wrestling. II. Golf, baseball, tennis, track and field.

**389. Varsity Intercollegiate Sports for Women (1) I and II**

Activities include: field hockey, volleyball, tennis, track and field, cross-country, basketball, gymnastics, and softball.

**400. Elementary School Physical Education (3) I**

Theory and practice in teaching, and directing rhythms, self-testing activities, individual, dual, and team games of the elementary school. Emphasis is on program planning, methods, and evaluation.

**410. Human Motor Development (3) II**

Survey of the development of perceptual—motor function from birth through adolescence with emphasis on gross motor performance.

**430. Field Experience (1-3) I and II**

Emphasis is on advanced study in the public school and in specified areas of public health.

**495. Independent Study for Majors or Minors (1-3) I and II**

Includes completion of a project designed to meet a highly specialized advanced study need. Project to be selected in conference with the faculty adviser.

Prerequisite: Consent of advisor.

**499. Special Problems (1-2) I and II**

**500. Research Design (3) I**

Study of research design and its application to health and physical education. An introduction to statistical analysis of data as a tool for understanding of pertinent literature and development of personal research.

Prerequisite: Physical Education 330.

**501. Research Seminar (3)**

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 and independent student research problems.

Prerequisite: P.E. 500 and concurrent enrollment in P.E. 525 (Thesis).

## **Physical Education**

### **505. Advanced Motor Learning Seminar (3)**

The course is designed so that the graduate in physical education becomes knowledgeable in the specifics of motor learning. Included in these specifics are the factors of neuroanatomy concerning motor performance, theories of learning (both physiological and psychological) and transfer of learning. Independent research projects concerning these specifics will afford students the necessity for use of laboratory facilities. A portion of study will be made upon neurologically motor-retarded children and corrective programs designed for these children.

Prerequisite: Undergraduate course in Motor Learning.

### **510. Advanced Kinesiology Seminar (3)**

Consideration of anatomical and mechanical principle of human movement, and analysis of movement by goniometric, photographic, cinematographic, electromyographic and associated techniques.

Prerequisite: Undergraduate course in Kinesiology.

### **515. Advanced Exercise Physiology Seminar (3)**

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.

Prerequisite: Undergraduate course in physiology of exercise.

### **520. Cultural Factors Seminar (3)**

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 (3)**

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. Scientific Basis of Coaching (3)**

A kinesiological, physiological, and psychological understanding of the nature and procedure of competitive sport.

### **535. Administration (3)**

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.

# PHYSICS

(Division of Natural Sciences)

Samuel L. Greene, Chairman of Department

Isaac Bass, John Dunning, Jr., George Johnston, Duncan Poland,  
Garrión Sposito, Joseph Tenn

## PHYSICS MAJOR FOR THE B.S. DEGREE

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.

General Education .....	40 units
Major .....	41 units
Supporting Courses .....	22 or 24 units
Electives and Foreign Language .....	21 or 19 units

## MAJOR COURSE REQUIREMENTS FOR THE B.S. DEGREE

The student is expected to have completed introductory chemistry, calculus, and introductory physics by the end of his fourth semester.

114, 214, 314—Introduction to Physics (3 units in G.E.) .....	6 units
116, 216, 316—Introductory Laboratory (1 unit in G.E.) .....	2 units
320—Analytical Mechanics .....	3 units
330AB—Electricity and Magnetism .....	6 units
332—Electronics and Physical Measurements .....	3 units
340—Theory of Light .....	3 units
450—Statistical Physics .....	3 units
431 or 461—Advanced Laboratory .....	3 units
460AB—Quantum Physics .....	6 units
* Physics Elective .....	6 units
	<hr/> 41 units

## SUPPORTING COURSES

### A. Mathematics †

120 and 140 or 162 (3 units in G.E.) .....	3 or 2 units
190 or 212, 240 or 262, 317 or 312, 330 .....	13 or 12 units
	<hr/> 16 or 14 units

### B. Chemistry

115AB or 125AB (2 units in G.E.) .....	8 units
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## PHYSICS MAJOR FOR THE B.A. DEGREE

The B.A. program in Physics is designed to give the student a good foundation in physics and, at the same time, to allow considerable breadth in selected areas of concentration. It is definitely not intended as a preparation for graduate study in physics. Rather, it will provide the student with an opportunity to obtain an understanding of the natural world which can be of lasting value to him.

\* Electives to be chosen from Physics 310, 354, 355, 390 and any course numbered in the 400's (except 403-405) or Astronomy 310AB, 320.

† Physics 281 (Programming for Physicists) may be substituted for Mathematics 120. Mathematics 162, 212, 262, and 312 is the recommended calculus sequence for science majors.

## Physics

Students interested in primary or secondary school teaching, environmental design, management, economics, political science, philosophy, psychology, physical education, music, geophysics, art history, electronics, and other related fields are encouraged to consider this major as an opportunity to acquire an education tailored to their individual needs. The major is also designed for the person who desires to learn about physics without delving deeply into mathematics.

At an early stage, after entry into the B.A. program, the student must consult with a departmental advisor as to the proper selection of courses to suit his or her aims.

General Education .....	40 units
Major .....	27 to 28 units
Supporting Courses .....	0 to 3 units
Area of Concentration Courses .....	12 units
Electives .....	45 to 41 units

### MAJOR COURSE REQUIREMENTS FOR THE B.A. DEGREE

To complete lower division requirements, the student must take the courses in one of the following Advisory Plans.

Advisory Plan A requires little or no mathematics and would be appropriately followed by non-mathematical upper division Physics and Astronomy courses.

Advisory Plan B requires algebra and trigonometry and would be appropriately followed by those upper division Physics and Astronomy courses where calculus is not used or is used only minimally and with some accompanying explanation of calculus concepts.

Advisory Plan C will provide entry to most upper division Physics and Astronomy courses, including some of those where calculus is routinely used.

Advisory Plans A and B should be chosen by those students who plan careers requiring a good basic knowledge of some science but little knowledge of mathematics. If, in addition to a good foundation in Physics, some acquaintance with the uses of calculus is required, Advisory Plan C should be chosen.

The student should select that advisory plan and those upper division courses which most suit his individual needs. He must consult with a departmental advisor regarding the proper selection.

#### Advisory Plan A (Non-mathematical Level)

Physics 100—Descriptive Physics (3 units in G.E.) .....	0 units
<i>One of the following courses:</i>	
Astronomy 100—Descriptive Astronomy .....	3 units
Astronomy 300—Cosmology and Extraterrestrial Intelligence .....	3 units
<b>Total Lower Division Units</b> .....	<b>3 units</b>
<b>Upper Division Courses in Physics and Astronomy *</b> .....	<b>24 units</b>
	<b>27 units</b>

#### Advisory Plan B (Algebra and Trigonometry Level)

Physics 210A—General Physics (4 units in G.E.) .....	0 units
Physics 210B—General Physics .....	4 units
<b>Total Lower Division Units</b> .....	<b>4 units</b>
<b>Upper Division Courses in Physics and Astronomy *</b> .....	<b>24 units</b>
	<b>28 units</b>

\* The student must confer with a departmental advisor before selecting these upper division courses.

**Supporting Course:**

Mathematics 107—Algebra and Trigonometry (3 units in G.E.)..... 1 unit

**Advisory Plan C (Calculus Level)**

Physics 114—Introduction to Physics I (3 units in G.E.)..... 0 units  
*It is strongly recommended that Physics 116 (1 unit of laboratory in G.E.) be taken concurrently.*

Physics 214—Introduction to Physics II ..... 3 units  
*It is strongly recommended that Physics 216 (1 unit of laboratory) be taken concurrently.*

Total Lower Division Units ..... 3-4 units

Upper Division Courses in Physics and Astronomy \* ..... 24 units

27 or 28 units

**Supporting Courses:**

Mathematics 162—Calculus with Applications I (3 units in G.E.)..... 0 units

Mathematics 212—Calculus with Applications II ..... 3 units

3 units

**RECOMMENDED COURSES IN ENVIRONMENTAL PHYSICS**

Students desiring to prepare for careers in environmental science are strongly recommended to include the following courses in their programs of study. The curriculum listed provides a general introduction as well as a genuine opportunity to engage in interdisciplinary work.

Physics 301—The Relation of Physics to Society..... 3 units

Physics 354—Problems in Environmental Physics ..... 3 units

Physics 355—Environmental Physics Laboratory ..... 1 unit

Physics 481—Applied Nuclear Chemistry and Physics ..... 2 units

Physics 482—Applied Nuclear Chem. and Phys. Laboratory ..... 2 units

Physics 491—Environmental Interdisciplinary Seminar ..... 1 unit

Physics 493—Special Problems in Environmental Science ..... 2 to 4 units

14 to 16 units

**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 regarding courses.

**100. Descriptive Physics (3) I and II**

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 Department.

**114. Introduction to Physics I (3) I and II (formerly Physics 215A lecture)**

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; special relativity; mechanical waves; thermophysics.

Prerequisite: Concurrent enrollment in Mathematics 162.

**116. Introductory Laboratory Experience (1) I and II (formerly Physics 215A laboratory)**

Laboratory, 3 hours.

\* The student must confer with a departmental advisor before selecting these upper division courses.

## Physics

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.

### 210AB. General Physics (4-4)

Lecture, 3 hours; laboratory, 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 Department approval.

Prerequisite: High school algebra, trigonometry and a high school physical science.

### 211. People's Electronics (3)

Lecture, 2 hours; laboratory, 3 hours.

A survey of the electronic principles and practices involved in the appliances and machines of contemporary society. The course stresses mastery of the construction arts and basic principles of operation of implements of our technological culture such as radios, sound systems, transistorized automobile ignitions, toasters, and television receivers. In the laboratory the construction and repair of devices that are personally useful to the student is encouraged.

### 212. A Survey of Introductory Physics (3)

This course will cover, in a cursory and elementary fashion, most of the topics covered in Physics 114-314. It is designed for those prospective physics, chemistry, and mathematics majors who need additional background before entering Physics 114.

### 214. Introduction to Physics II (3) I and II (formerly Physics 215B lecture)

The continuation of Physics 114. Electrostatics, quasistatic fields and currents, magnetostatics; electromagnetic induction; physical and geometric optics, and quantum physics up to the Bohr theory of the atom.

Prerequisite: Physics 114; concurrent enrollment in Mathematics 212.

### 216. Introductory Laboratory (1) I and II (formerly Physics 215B laboratory)

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.

### 281. Programming for Physicists (2) I and II

Same as Chemistry 381. Basic FORTRAN programming with emphasis on applications.

Prerequisite: Physics 114 and Mathematics 190 or 212.

### 300. Physics of Music (3)

Introduction to the 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)**

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.

**310. Atomic Physics (3)**

Bohr theory of the atom and its subsequent development; Stern-Gerlach and Lamb-Retherford experiments; Zeeman and Stark effects, fine and hyperfine atomic structure, and elementary molecular physics.

Prerequisite: Physics 214 or consent of instructor.

**311. Elements of Electronics (3)**

Lecture, 2 hours; laboratory, 3 hours.

Same as Chemistry 311. 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.

Prerequisites: Completion of the general education requirements in mathematics and physical science.

**313. Classical Studies (1-3)**

An intensive study of a work or a closely-related group of works which has figured importantly in the development of physics or astronomy. This course counts toward the *elective* General Education requirement.

Prerequisite: Completion of the General Education requirement in physical science or consent of instructor.

**314. Introduction to Physics III (3) I and II (formerly Physics 215C lecture)**

The continuation of Physics 214. Elementary quantum mechanics: de Broglie waves; the Schrödinger wave equation, with applications to simple, one-dimensional problems and to atomic structure; elementary nuclear physics; introduction to equilibrium statistical mechanics; the partition function; Boltzmann, Bose, and Fermi statistics.

Prerequisite: Physics 214; concurrent enrollment in Mathematics 262.

**316. Introductory Quantum Laboratory. (1) I and II (formerly Physics 215C laboratory)**

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) I**

Principles of Newtonian Mechanics. Relativistic dynamics. Introduction to Hamiltonian mechanics. Applications to central force problems and small vibrations.

Prerequisite: Physics 114, Mathematics 330 (may be taken concurrently).

**330AB. Electricity and Magnetism (3-3)**

Electrostatics; magnetostatics; electric currents, electromagnetic induction; electric and magnetic fields in matter; Maxwell's equations, retarded potentials, radiation reaction, light emission, simple scattering and antenna theory, properties of waveguides, relativistic formulation of electrodynamics, Fourier decomposition of fields.

Prerequisite: Physics 214, Mathematics 330 (may be taken concurrently).

## **Physics**

### **332. Electronics and Physical Measurements (3) II**

Lecture, 2 hours; laboratory, 3 hours.

Fundamental DC and AC circuit theory; principles of vacuum tube and transistor amplifiers, oscillators, and measuring instruments; bridge and potentiometer methods in measurements; the realization of precision standards; selected techniques in optical, thermal, and nuclear studies; and error analysis.

Prerequisite: Physics 314, 316.

### **340. Theory of Light (3) II**

The quantum theory of light; coherence, interference, diffraction and polarization; masers, lasers; geometrical optics; spectroscopy.

Prerequisite: Physics 314.

### **342. Popular Optics (3)**

A descriptive, non-mathematical, but analytical treatment of the physical properties of light; the camera, telescope, microscope, and laser; holography; mirages, rainbows, and the blue sky; colors in flowers, gems, and pigments; human and animal vision and visual perception. Satisfies part of the natural science general education requirement.

Prerequisites: Any physical science course or consent of instructor.

### **354. Problems in Environmental Physics (3)**

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 162 is recommended.

### **355. Environmental Physics Laboratory (1)**

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.

### **390. History of Physical Science (2)**

Same as Chemistry 400 and Geology 400.

Prerequisite: Major in the physical sciences or consent of the instructor.

### **403. Physics of Structure (3)**

The physics and geometry of structures, with emphasis on experimental and recently-invented structures; geodesic domes, zomes, pneumatic, ferro-cement, and wire-supported structures; theories of Fuller, Nervi, and Otto.

Prerequisite: A course in physical science or consent of instructor.

### **404. Physics of Structure Laboratory (1)**

Construction of small- and large-scale models of geodesic domes, zomes, pneumatic, ferro-cement, and wire-supported structures; field trips to visit existing experimental structures.

Prerequisite: A course in physical science or consent of instructor.



**405. Physics of Experimental Structures and Devices (2)**

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.

**425. Introduction to Mathematical Physics (3)**

Introduction to the theory of transformations in linear spaces, with special emphasis on invariance and extremum principles in physical theory. Topics in tensor analysis, functional analysis, transcendental functions, and calculus of variations.

Prerequisite: Physics 314; Mathematics 330, or consent of instructor.

**431. Advanced Electronic Methods Laboratory (3) II**

Laboratory, 9 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 332.

**450. Statistical Physics (3) II**

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.

**451. Plasma Physics (3)**

Analysis of phenomena occurring in highly ionized gases using guiding center, fluid, and kinetic theory descriptions. Shielding, plasma oscillations, equilibria, stability, transport properties, and interaction with radiation. Selected applications to astrophysics, space physics, and controlled fusion.

Prerequisite: Physics 330A.

**460AB. Quantum Physics (3-3)**

The Schrödinger equation; atomic theory; scattering theory; the Dirac equation; axiomatic formulation of quantum mechanics; topics in nuclear physics, elementary particle physics, and field theory.

Prerequisite: Physics 320, 330A; Mathematics 330.

**461. Quantum Physics Laboratory (3) II**

Laboratory, 9 hours.

Selected experiments to illustrate the empirical foundations of the quantum theory, special project studies of thermal, optical, and nuclear phenomena and an introduction to computer techniques.

Prerequisite: Physics 332.

**470AB. Solid State Physics (3-3)**

Symmetry groups of crystals; wave propagation in crystal lattices; transport phenomena; theory of metals and semiconductors; cooperative phenomena.

Prerequisite: Physics 330A, 450.

**480. Introduction to Nuclear Physics (3)**

Nuclear forces; the deuteron; nuclear spectra and theories of nuclear structure; nuclear reactions; applications.

Prerequisite: Physics 460A.

## Physics

### 481. Applied Nuclear Chemistry and Physics (2)

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.

### 482. Applied Nuclear Chemistry and Physics Laboratory (2)

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).

### 490. Introduction to Field Theory and Elementary Particles (3)

Second quantization; Fourier decomposition of operators; relativistic field equations; interaction Hamiltonians and Lagrangians; elementary particles and resonances and their interactions and decays.

Prerequisite: Physics 460AB; Mathematics 460 is recommended.

### 491. Environmental Interdisciplinary Seminar (1)

Interdisciplinary seminars on topics currently of interest in Environmental Science. This course is the same as Biology 491, Chemistry 491, Geology 491.

May be repeated up to 4 units of credit.

Prerequisites: Junior standing; completion of Physics 301, 354, or 481.

### 493. Special Problems in Environmental Science (2-4)

Individual participation in independent investigations of environmental problems. The major projects will be interdisciplinary in scope involving groups of students and faculty who will participate primarily as biologists, chemists, geologists, physicists, etc. This course is the same as Biology 491, Chemistry 493, Geology 493.

May be repeated for up to 8 units of credit.

Prerequisites: Junior standing; completion of Physics 301, 354 or 481; college-level courses in at least two of the following fields: Biology, Chemistry, Geology.

### 494. Physics Seminar (1)

Group discussions of selected recent papers on experimental and theoretical physics. May be repeated for credit.

Prerequisite: Consent of instructor.

### 495. Independent Study for Majors or Minors (1-3) I and II

### 499. Special Problems (1-2) I and II

# POLITICAL SCIENCE

## (Division of Social Sciences)

William Nighswonger, Chairman

Stephen Fraser, John Kramer, Kenneth Marcus, Cecile Pace, Cheryl Petersen,  
Robert Smith, Jerry Tucker, William Young, David Zibblatt

### BACHELOR OF ARTS IN POLITICAL SCIENCE

The undergraduate major in political science provides a foundation in the subdivisions of the discipline within a liberal arts context. The major is also designed to meet the needs of students whose goals are: (1) graduate or law school, (2) government employment—federal, state or local, (3) careers in human ecology and the urban environment and (4) a general understanding of the American governmental system without a specific vocational goal. It also serves, in combination with other courses in the social sciences, as an academic major for those who contemplate a career in teaching.

The Political Science major is a flexible major with a minimum of requirements. In consultation with his adviser, the major will develop a program of study in the field of Political Science and related disciplines which best meets his needs. That program of study will be the basis of understanding between the Department and the student as to that student's pattern of study in Political Science. That program may be altered at any time upon agreement of the major and his adviser. Fulfillment of this program will constitute the student's meeting of the Political Science requirements for graduation. This type of individualized major assumes a close working relationship between the student major and his faculty adviser. It is the responsibility of the student major to maintain contact with his adviser and to secure his consent before any change is made in his individualized program of study. All Political Science majors must take the following 3 courses or their equivalent:

### POLITICAL SCIENCE MAJOR COURSE REQUIREMENTS

Poli. Sci. 200—American Government .....	4 units
Poli. Sci. 301—Introduction to Political Inquiry .....	3 units
Poli. Sci. 302—Seminar in Methodology .....	4 units

In addition to these required 11 units of Political Science, the student major must complete at least 22 additional units in Political Science. No more than 12 units of the Political Science major can be taken on a pass/no credit basis. This is in addition to the 24 units permitted outside the major.

### POLITICAL SCIENCE MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Major .....	33 units
Electives .....	51 units
<b>Total</b> .....	<b>124 units</b>

### CODE REQUIREMENTS

Political Science 200 (American Government) and Political Science 204 (Introduction to Environmental Politics) meet the State Code requirements in U.S. History, U.S. Constitution and California State and Local Government. Upper division courses may also be used to satisfy certain these code requirements upon the approval of the Department Chairman. It is the responsibility of the student to ensure that he has met all 3 Code requirements for graduation. The State Code requirements must not be confused with the G. E. requirement in social science. These are different requirements.

## Political Science

### TEACHING CREDENTIAL

For students who wish to qualify for the standard teaching credential, 24 units of the major must be composed of upper division courses (300 and 400 level courses).

### MINOR IN POLITICAL SCIENCE

The following minor is recommended:

Political Science 200.....	4 units
Political Science 301.....	3 units
Three upper division courses.....	13 units
	<hr/>
	20 units

### MASTER OF ARTS DEGREE IN POLITICAL SCIENCE

#### (Political Involvement Emphasis)

The Master of Arts Degree in Political Science is guided by several principles. First, it is assumed that political action and political inquiry should be mutually related processes in an academic program. Effective action for social change has to have a basis in knowledge. Knowledge can be acquired in many ways. This program emphasizes field experience and evaluation. Second, it is assumed that when efforts are made to change an institution its underlying structure may be revealed. This may make it possible to develop new social science concepts that are useful in theory and practice. Third, the program is designed to provide students with an opportunity to work out their own answers to two closely connected questions: What am I going to do with my life? How can I make this a better world? The goal of the program is to help students to reconcile their personal life plans with their political concerns for social change. Admission to the program will be limited to 15 full-time students per year and will take place only in the fall semester. Part-time students will not be admitted.

### ADMISSION REQUIREMENTS

A. A bachelor's degree with a major in a social science discipline from an accredited college or university.

B. Evidence of ability to successfully pursue the Field Work experience.

C. Recommendation by the faculty-student Admissions Committee.

In order to successfully complete the Degree Program a student must:

A. Maintain a grade point average of 3.0.

B. Satisfactorily complete the 33 units in the program including the Field Work and a master's thesis or Creative Project, within 3 semesters (including summer sessions).

#### Required Courses

Poli. Sci. 586 .....	6 units
Poli. Sci. 587 .....	6 units
Poli. Sci. 588 .....	3 units
Poli. Sci. 589 .....	4 units
Poli. Sci. 590 .....	4 units
Poli. Sci. 591 .....	2 units
Social Science Elective .....	3 units
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Total .....	33 units

**POLITICAL SCIENCE**

**Lower Division**

**200. American Government (4)**

An examination of American politics and governmental institutions. Satisfies the Code requirements in U. S. History, American Constitution and State and Local Government.

**201. Contemporary Political Issues (3)**

An examination of contemporary politics. Analysis of current problems from the perspective of the Political Scientist. Newspapers, periodicals, and television coverage of the news will be the prime material in this class. Satisfies the Code requirements in American Constitution and State and Local Government. Open only to non-majors.

**Upper Division**

Prerequisites: Upper division standing or permission of the instructor is required for admission to the courses listed below. Completion of the Code requirements in American Constitution and State and Local Government is also required unless special permission for enrollment is granted by the student's advisor and the instructor in the course.

**Methodology**

**301. Introduction to Political Inquiry (3) (Formerly Political Science 205)**

An introduction to the systematic study of politics. An attempt will be made to draw on the students' own political experiences and understanding, relating them to contemporary thought and study in political science. Political Science 301 should normally be taken before Political Science 302.

**302. Introduction to Political Methodology (4)**

An introduction to several of the techniques used in studying political systems and behavior including sampling, measurement and scaling, and the logic of multi-variate analysis. Students may analyze political data from surveys, experiments, aggregate statistics, roll call votes or may carry out their own research projects.

**Political Theory**

**310. Political Thought (6)**

An examination of the major works in political thought from the Greeks to the mid-19th Century. Emphasis will be placed on reading original sources and on developing individual opinions on the issues raised.

**312. American Political Thought (3)**

An examination of the development of American political ideas from the colonial period to the 1970's.

**314. Political Theory in the Modern Era (3)**

An examination of major movements and individual political theorists in the 19th and 20th Centuries. Emphasis will be given to the origin and development of political theories of importance in the contemporary world.

**415. Seminar in Modern Political Theory (3-5)**

An analysis of selected themes or movements in modern political theory including contemporary theories of the political system, 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.

## **Political Science**

### **416. Individual Theorist (2-4)**

Intensive study of the works of one political theorist such as Lippmann, Machiavelli, Marx, Locke, de Tocqueville, Jefferson, and Lasswell. Consult class schedule for current offering. May be repeated for credit.

### **417. Great Books in Political Science (3) (Formerly Political Science 420)**

An exploration of political science literature. Emphasis on reading and analyzing a variety of books within the field, including novels, political science "classics," and some of the more controversial contemporary works.

### **419. The Political Novel (3)**

Offered jointly with the Department of English. An analysis of selected American and European political novels from the nineteenth and twentieth centuries.

## **American Government**

### **320. State, City and County Government (6)**

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.

### **321. Politics in Sonoma County (3)**

An examination of the various styles of political life in Sonoma County; traditional, citizen-participation, and radical. Emphasis will be placed upon student participation in, and direct observation of, politics in the county.

### **423. Constitutional Law and the Judicial System (6)**

Judicial interpretation of the Constitution with emphasis upon separation of powers, presidential powers, federalism, interstate commerce, civil liberties, including freedom of speech, religion and the rights of accused persons and the government's responsibility to protect persons from discrimination. The role of the Courts in the governmental process will be stressed.

### **426. Congress and the Presidency (6)**

An examination of the Congress and the Presidency in the American governmental system. Emphasis will be placed upon the interplay between the President and the Congress. The relationship of the Congress and the Presidency to political parties, interest groups, the press, public opinion and the bureaucracy will be examined.

### **428. Seminar in California Politics and Government (3)**

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.

### **429. Seminar in Theories of American Politics (3)**

Examination of theories that purport to account for the way in which political life is conducted in the United States. Ruling class models, elite models, pluralist models and alternate models will be examined.

## **Public Administration**

### **330. Introduction to Public Administration (4)**

An introductory study to the field of public administration with emphasis upon bureaucratic life, leadership, and decision-making.

**432. Seminar in Public Personnel and Financial Administration (6)**

An examination of the recruitment, training and professionalization of public employees with emphasis on the role of the civil servant in society and an examination of the role of budgeting and other aspects of fiscal management in the development of public policy.

Prerequisite: Political Science 330 or consent of the instructor.

**437. Seminar in Administration Overseas (3)**

Problems of public administration in the context of modernization and social change. Administrative traditions in developing nations, foreign aid agencies, and international organizations.

Prerequisite: Consent of the instructor.

**439. Government Intern Seminar (2-5)**

Field experience in city, county, state and federal agencies. Enrollment by prior arrangement only. May be repeated twice for credit.

**International Relations**

**342. Introduction to International Politics and Foreign Policy (6)**

An introductory analysis of the dynamics of international political system 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. Simulations of selected inter-governmental crises by teams of students as decisionmakers, using the Simulation Laboratory.

**345. Seminar in International Organization (4)**

Introduction to the structure and political dynamics of the United Nations. The theory and practice of a Model United Nations. Offered in the fall semester only. May be repeated once for credit.

**346. Seminar in International Organization (3)**

Model United Nations. A continuation of Political Science 345 with participation in the Western Political Science Model United Nations Conference. May be repeated once for credit.

**444. United States Foreign Policy (3)**

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. Seminar in Contemporary Diplomatic Strategies (3)**

An examination of the less formal programs and agencies in foreign policy: propaganda, foreign aid, cultural exchange, intelligence operations, the Peace Corps, and non-governmental organizations. Communist and non-communist strategies and national capabilities will be analyzed and compared.

Prerequisite: Political Science 342 or 444, or consent of the instructor.

**Comparative Politics**

**350. European Politics: Parliamentary Democracies (6)**

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.

## **Political Science**

### **351. European Politics: Totalitarianism and Authoritarianism (6)**

An analysis of the major European totalitarian political systems in the 20th Century with emphasis on Nazi Germany and the Soviet Union. An examination of representative authoritarian systems such as Spain and Greece. A review of the theoretical literature on Communism, facism, authoritarianism and military dictatorship.

### **452. Asian Politics (6)**

A comparative analysis of major Asian political systems including China, Japan, India and Pakistan with emphasis on the physical, cultural and economic ecology of the political process.

### **453. Latin American Politics (6)**

A study of the dominant forces of the area, such as the military, aristocracy, church, labor and peasant movements, and political parties. Both unique and representative countries of the area will be studied. Particular emphasis on prospects for revolutionary and evolutionary change.

### **456. Seminar in Comparative Politics and Political Development (3)** **(Formerly Political Science 455 and 457)**

General survey of the facets of comparative theory and the process of political development. Particular attention to inter-country studies focusing on political leadership and elites, political culture, and developmental theories.

## **Political Dynamics and Social Behavior**

### **360. The American Party System, Interest Groups and Public Opinion (6)**

An introductory examination of the organization and role of American political parties, interest groups and public opinion with emphasis upon the processes by which these factors influence the political system.

### **460. Seminar in Public Opinion (3-4)**

A detailed examination of current thought as to the nature of public opinion, its formation, and its effect on public policy. Emphasis upon the problems of mass media and mass society, manipulation and propaganda. Field studies or analysis of national or California data may be required. Consult schedule to determine course value and field research requirement, if any, for any particular semester.

### **462. Seminar in Elections and Voting Behavior (3-4)**

Study of voting behavior in the United States and elsewhere. Examination of the meaning of voting for the citizen and the political system including voting as a ritual, rationality of voting, and effect of prediction on elections. Field research or analysis of local, state or national election data may be required. Consult schedule to determine course value and field research requirement, if any, for any particular semester.

### **463. Seminar in the Revolutionary Process (3)**

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.

### **465. Seminar in Interest Groups and Political Influence (4)**

An examination of the ways in which policy is influenced by interest groups and power structures. Includes discussion of the nature, strategy and resources of economic, social and ideological groups.

Prerequisite: Poli. Sci. 300.



**466. Seminar in the Dynamics of Political Change (6)**

Examination of the literature in the field of Political Change with emphasis on the transition from pre-industrial to industrial societies. Analysis of alternative futures for contemporary political societies. Analysis of various theories specifying the source, characteristics and direction of future political change.

**467. Seminar in Campaign Management (3)**

An intensive examination of the practical problems of managing a political campaign in a local area. Discussion of candidate selection, finance, timing and issue management, voting data analysis. Analysis of a political campaign from the perspective of a volunteer, candidate, voter or impartial observer.

**URBAN POLITICS****475. The Metropolis (3)**

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: Political Science 320 or consent of the instructor.

**476. Seminar in the Politics of Ecology (3)**

This seminar seeks to provide a political action framework for environmental conservation. Students will be expected to participate actively in local conservation issues. Legal issues surrounding the debate over land use, control of automobile traffic, ownership of public lands, and related subjects will be explored.

**Interdisciplinary Courses****380. Seminar in Contemporary Political Issues (2-4)**

Each offering of this course focuses on a current issue in public policy. Themes may be drawn from local, state, national, and international areas. May be repeated for credit.

**480. Seminar in Southeast Asia (3)**

A multi-disciplinary approach to the Southeast Asian area, including the history, culture, economy, and politics of individual nation-states and their international behaviors in relation to each other and the major world powers.

Prerequisite: Consent of the instructor.

**Research and Independent Study****495. Independent Study for Majors or Minors (2-4)****Special Problems in Political Science (2-4)**

## **Political Science**

### **Graduate Courses**

(Open only to Political Science Master's candidates.)

#### **586. Inequality and Public Policy in America (6)**

An evaluation of several theories concerning the origins and political consequences of power, privilege, and inequality in society. An assessment of public policy in such institutional areas as education, health, welfare, housing and employment. Recent public policy efforts in these areas will be critically examined and evaluated.

#### **587. The Politics of the Environment (6)**

Examination of the current policy making process and the alternatives for political action with regard to such problems as mass transportation, land subdivision, air and water pollution and preservation of open space and public parks.

#### **588. Graduate Internship (8)**

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.

#### **589. Seminar in Political Reform (4)**

Analysis and evaluation of field experience.

#### **590. Seminar in Theories of American Politics (4)**

Examination of theories that purport to account for the way in which political life is conducted in the United States. Ruling class models, elite models, pluralist models and alternate models of an industrial society will be considered.

#### **591. Master's Thesis or Creative Project (2-4)**

# PSYCHOLOGY

(Division of Psychology, Education, Health Sciences and Physical Education)

Stanley Goertzen, Chairman of Department

Ernest Caillat,\* Frances Clark, Eleanor Criswell, Carlos Cordero, Victor Daniels, Duncan Gillies, Barry Godolphin, Robert Greenway, Laurence Horowitz, Bernd Jager, William Kwong, Norma Lyman, George McCabe,† William McCreary,\* Edith Menrath, Charles Merrill, Paul Molinari, Sheila Moon, Leonard Pearson, Gerald Redwine, Robert Rueping, Frank Siroky, Robert Slagle, Gordon Tappan, Hobart Thomas,\* David Van Nuys, Arthur Warmoth, Donald Wilkinson.

## BACHELOR OF ARTS IN PSYCHOLOGY

The major in psychology is built upon the College General Education program. The number of hours required for such a major may vary from 24 to 32 upper division units in psychology. In consultation with your advisor, you will develop your own individualized program of study and file this program with the Psychology Department. Beginning in Fall 1973, this program must include Psychology 468, Current Trends in Psychology. Since this is the only specifically required course, it is very important that in developing your major you give careful attention to your educational goals. If you plan to go into teaching, for example, you will develop a program quite different from that of a student who plans to undertake graduate work in psychology.

In the development of your program, there are some general guidelines which may be of assistance to you and your advisor. If you plan to enter graduate work in psychology, you should explore with your advisor the need to develop proficiencies in foreign languages, statistics, experimental design, physiology, and experimental and theoretical psychology in order to meet the varying requirements of graduate schools. If you plan to enter teaching or community human relations work, you will probably choose courses that help you deepen your own self-understanding and improve your ability to relate to and communicate with other people. And if you do not intend to enter professional work in psychology at all, you may wish to take fewer psychology classes and more electives in other departments in order to pursue a broad liberal arts education. Still other kinds of programs of study can be worked out to meet whatever kinds of unique needs and interests you may have, subject to the limitations of the available curriculum.

Beginning in the Fall of 1972, the Psychology Department will constitute itself into several clusters, or sub-departments. Each student will become a student in a particular cluster.

## MASTER OF ARTS IN PSYCHOLOGY

The Master of Arts program in Humanistic Psychology offers courses of graduate study which emphasize insight into human phenomena through an examination of man as he lives and experiences his world. The goal is learning which has relevance to basic human existence.

The program grows not only out of the interests and personalities of the faculty members who are primarily involved, but also out of the needs and interests of the students. The directions the program takes each year are an outgrowth of the interaction among all the participants. In our view, the people are the program.

The program has in general been more educational in focus than professional, more experiential than didactic. Typically, each individual student determines the degree and kind of involvement with others which will facilitate his pursuit of his own questions. He will be encouraged to pursue his own interests in psychology and will develop a thesis or creative project.

\* On leave to School of Expressive Arts.

† On leave to California State Colleges External Degrees Program.

## Psychology

The Master of Arts Degree in Humanistic Psychology is a one-year program beginning in September for an annually varying number of faculty and students.

### ADMISSION REQUIREMENTS

- A. B.A. degree with a major in Psychology at Sonoma State College or equivalent.
- B. Undergraduate grade point average of at least 3.0.
- C. Transfer students should be recipients of favorable recommendations by faculty members of other colleges or other persons who know the applicant well and who understand the purposes and content of the program.
- D. Admission will be limited to full-time students and will take place only in the fall semester.

*Application Deadline* for Fall 1973 is November 30, 1972. Applicants will be notified by March 1, 1973 whether they have been accepted in the Psychology Master of Arts Program.

To apply for entry into the program, prospective applicants should write directly to the office of the Dean of Admissions.

All inquiries concerning the Master of Arts in the Psychology Program should be addressed to:

Director  
Masters Program in Humanistic Psychology  
Sonoma State College  
Rohnert Park, California 94928

### Required Courses

Psych. 570AB, Directed Field Experience.....	12 units
Psych. 571AB, Psychology and Humanities Seminar.....	6 units
Psych. 572AB, Research Seminar .....	6 units
Psych. 573AB, Seminar: Current Trends in Psychology.....	2 units
Psych. 574AB, Theories and Practice of Group and Individual Counseling .....	6 units
Psych. 575AB, M.A. Thesis .....	2 units
<b>Total</b> .....	<b>34 units</b>

## PSYCHOLOGY

### Introductory Course

#### 200. Human Behavior (4)

The student deepens his awareness of himself as a thinking, feeling individual. The relationship of the person to his interpersonal relationships, his attitudes toward social groups and institutions, and his structure of values and beliefs are examined.

### Experimental Psychology

#### 301. Behavior Analysis (4)

Lecture, 3 hours; laboratory, 3 hours.

Basic processes of reinforcement, operant and classical conditioning, and social learning. Analysis and modification of behavior through methods based on these concepts. Each student will carry out a behavior modification project on himself or another person.

#### 302. Introduction to Psychological Research (4)

Lecture, 3 hours; laboratory, 3 hours.

Studies in development, individual differences, perception, learning, thinking, motivation, emotion, personality, and social psychology. Laboratory exercises demonstrating methods and techniques in the study of behavior as well as in typically human phenomena.

**305. Learning (4)**

Lecture, 3 hours; laboratory, 3 hours.

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. Suggested background: Psych. 302.

**308. Animal Behavior and Intuition (4)**

Ideas by ethologists, behaviorists, and other theorists are explored through discussion and observation. Intuitions such as homing behavior, innate expectations, and other seemingly instinctive events are scrutinized. Lecture and Laboratory usually occur during travels to and observations of animals in either wild or captive settings.

Suggested background: Psych. 302.

**310. Perception and Cognition (4)**

Lecture, 2 hours; laboratory, 6 hours.

Methods and findings related to uniquely human phenomena in these areas. Students plan and conduct individual studies.

Suggested background: Psych. 302.

**315. Physiological Psychology (4)**

Lecture, 3 hours; laboratory, 3 hours.

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.

Suggested background: Psych. 302.

**317. 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: Psych. 315 or consent of instructor.

**330. Basic Statistical Methods and Concepts (4)**

Lecture, 3 hours; laboratory, 3 hours.

Descriptive and inferential statistics. Simple probability, introduction to scaling, measures of central tendency and dispersion, chi-square and other non-parametric tools, analysis of variance, and correlation.

Suggested background: Psych. 302.

**331. Advanced Statistics in the Behavioral Sciences (4)**

Lecture, 3 hours; laboratory, 3 hours.

Advanced analysis of variance and co-variance; multiple regression. Introduction to factor analysis. Theory and methods of scaling.

Suggested background: Psych. 330.

**338. Psychopharmacology (4)**

Physiological and experiential events associated with the presence of specified chemical agents within an organism. Psychoactive drugs, stimulants, depressants, and other pharmacological substances are examined in terms of physiological, biochemical, neural, behavioral, and social implications.

**339. Frontiers of Psychopharmacology (4)**

The ethonopharmacology and pharmacodynamics of plants or their extracts or related synthetic agents for medicinal, ceremonial and other purposes. Emphasizes possible personal, interpersonal, and cultural implications of psychotropic drugs.

## **Psychology**

### **341. Seminar in Experimental Methods (4)**

Emphasis on individual research in an area of interest to the student which enables him to develop a deeper insight into advanced research techniques and methodologies. Research design, specialized data gathering tools and techniques in the areas of psychology and education will be presented.

Suggested background: Psych. 330.

### **342. Seminar in Behavior Modification (4)**

The analysis and modification of human behavior. Applications of reinforcement and desensitization techniques to such areas as neurotic and psychotic behavior, child-rearing, and education.

Prerequisite: Psych. 301 or 302 or 305, or consent of instructor.

### **344. Seminar in Contemporary Empirical Psychology (4)**

Individual readings and reports, group discussions and directed study to examine in depth contemporary methodologies and empirical findings in learning, cognition, and perception. It will stress an empirical, and phenomenological orientation to these areas. Designed to fit the needs of individual, advanced students.

Suggested background: Psych. 302, 330.

### **348. Research Seminar (4)**

Lecture, 2 hours; laboratory, 6 hours.

Individual research to fit the student's need for advanced instruction and laboratory work. Students design and carry out an original research project and report in writing and in seminar format. May be taken twice for credit.

## **Social Behavior**

### **349. Social Psychology (4)**

The formation and change of attitude and belief systems; interpersonal perception and dynamics; behavior in small groups; and contemporary problems of intergroup relationships. Cultural influences on these processes may be considered.

### **350. The Cultural Revolution (4)**

Current changes in ways of thinking, acting, and living. Psychological effects of emerging patterns of behavior. Points of conflict between old and new life-styles.

### **355. The Psychology of Family (4)**

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.

### **363. Seminar in Interpersonal Behavior (4)**

Explorations of the ways in which people interact with each other on a one-to-one basis. Both experimental and phenomenological sources of information are used.

### **365. Group Processes (4)**

The use of the small group as a basis for understanding the individual, his relationship to others, and his role in group behavior. Limited to 15.

### **366. Advanced Group Processes (4)**

Advanced topics related to social dynamics and individual behavior in a group context. Limited to 15.

Prerequisite: Psych. 365.

### **368. Seminar in Small Group Facilitation (4)**

An advanced course with individually supervised experience in leadership and an individual research project.

Prerequisite: Consent of the instructor.

**370. Psychology of Political Processes (4)**

The political socialization of the individual. Psychological determinants of political views. Public opinion and political polls and the psychological processes of the voter in the political campaign. The democratic experience in psychological terms.

**376. Seminar in Revenge (4)**

Personal acts against perceived threats to existence are examined against theories of territoriality, approach-avoidance, and so on. Outcomes and alternative acts will be considered. An individual case approach based primarily on novels, primary (auto)biographical sources, and relevant psychological hypotheses of defense.

**380. Seminar on Man and Nature (4)**

Psychological implications of evolutionary processes. Man's relation to the rest of the world of nature. The wilderness experience. World ecology and the issue of survival.

Prerequisite: Consent of instructor.

**383. Seminar in Beliefs and Attitudes (4)**

Examination and personal exploration of the formation, change, and resistance to change of beliefs, opinions, attitudes, and values.

**385. Seminar in Metaphors, Learning, and Social Change (4)**

Seminar on cognitive processes, emphasizing the human capacity to form analogies, metaphors, similes, etc., which transcend objective reality and/or which seem instrumental in causing social change.

**389. Seminar in the Psychology of the Mural Process (4)**

The mural as a medium of self-exploration and communication with others. Each student will explore his psychological and artistic process in interaction with others, and express the outcome of that exploration in a mural.

**392. Experimental Social Psychology (4)**

Lecture, 2 hours; laboratory, 6 hours.

Experimental investigations in areas related to social psychology.

Prerequisite: Consent of instructor.

**394. Survey Research Seminar (4)**

Lecture, 2 hours; laboratory, 6 hours.

Theory and practice of survey research. Critique of selected major survey research studies. Class will design and carry out a research study. Suggested background: Psych. 330.

**395. Community Involvement Project (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.

**396. Crisis Intervention (3)**

Theory and experience of counseling in emergency situations. Includes manning of emergency assistance telephones on a regular basis.

**Developmental and Educational Psychology****402. Child Development (4)**

The growth and development of the child.

## **Psychology**

### **408. Behavior Problems of Children (4)**

Study and observation of children with problems, and examination of the environments in which problem events occur.

### **412. Adolescent Psychology (4)**

An attempt to understand the world of adolescence through theory, research and personal interaction with adolescents.

### **413. Environment and Learning (4)**

A seminar to explore man's capacity to recreate his environment with emphasis on the analogistic capacity of humans and an ecological approach to mental models.

### **415. Psychology of Alternative Education (4)**

Theories of instruction unique to the individual teacher and applicable to "free" private or "alternative" educational systems. Students will either work in or participate in the initiation of a local alternative school.

Prerequisite: Consent of instructor.

### **416. Educational Psychology (2)**

The teaching-learning process perceived from both the teacher and learners' points of view. A study of psychological data in interaction with analysis of the process.

Prerequisite: Admission to teacher education curriculum.

### **417. Seminar in Psychological Foundations of Education (4)**

The teaching-learning process studied from both the teachers' and learners' points of view. Includes principles of growth and development, learning theory and evaluation of learning applicable to the classroom situation.

Prerequisite: Admission to teacher education curriculum.

### **419. Explorations in Instructional Theory (4)**

A laboratory for the development of individual approaches to instruction. Emphasis is on dyads and very small groups, and on experimentation rather than development of esoteric abstract theory.

## **Individual Dynamics**

### **424. Seminar in Dynamics of Human Behavior (4)**

A study in depth of the person, his approaches to self-knowledge. A study of the creative process revealing potential meaning for the individual.

### **425. Advanced Seminar in Dynamics of Human Behavior (4)**

A continuation in depth in selected areas of study begun in Psych. 424. Prerequisite: Psych. 424.

### **426. Seminar in Humanistic Psychology (4)**

A study of contemporary humanistic psychology as represented in the works of such psychologists as Rogers, Maslow, Jourard, Bugental, and others.

### **428. Seminar in Existential Psychology (4)**

The existential tradition in philosophy and psychology. Meanings of such ideas as freedom, responsibility, action, and commitment in relation to an individual life.

### **430. Abnormal Behavior (4)**

Troubled patterns of behavior and methods of coping with the world, and examination of variables that produce them. Visits to nearby institutions and opportunities for field work are offered.

Prerequisite: 12 upper division units in psychology.



**431. Neuroses and Personality (4)**

Psychopathology expressed by neurotic and personality disorders, addictive behavior, sexual perversions and anti-social acting-out. Current theory and research relevant to these symptomatic behaviors. Stress and its relationship to maladaptive behavior.

Prerequisite: 12 upper division units in psychology. Not to be taken if credit has been received for Psychology 430, unless student has consent of instructor.

**433. Psychoses and Other Major Disabling Mental Disorders (4)**

Extreme behaviors resulting from psychogenic and organic disorders, such as schizophrenia, affective psychoses, and mental defectiveness. Students will work with patients in mental hospitals. Classroom activities include lectures, discussions, films, and student seminar presentations.

Prerequisite: Psych. 431 or consent of instructor.

**434. Psychology of Disability (4)**

An examination of psychological aspects of "body-insult", trauma, and "defect". Stressful conditions to be explored include amputation, brain damage, heart disease, obesity, leprosy, surgery, etc. Field trips to hospitals and rehabilitation centers.

**435. Seminar in Death (4) (Formerly Psychology 459)**

A psychological exploration of the meaning of death and the dying process for the individual, and critical examination of the ways that death and bereavement are viewed in our society.

**437. Seminar in Psychological Testing (1-4)**

This is an introductory course in currently, widely used objective group and individual tests, particularly those related to counseling.

**438. Introduction to Clinical Methods (4)**

Lecture, 2 hours; laboratory, 6 hours.

Techniques and procedures of diagnosis and treatment will be reviewed with a consideration of scope, aims, and problems inherent in the current practice of clinical work. Diagnostic methods, and various approaches to therapy will be studied in reference to the study of personality.

Prerequisite: Consent of instructor.

**447. Personality (4)**

Varied viewpoints are brought to bear in an attempt to conceptualize and become aware of the process and functioning of human personality.

**449. Seminar in the Dimensions of Consciousness (4)**

Selected topics relevant to exploring and affecting the processes of the individual's own consciousness.

**451. Seminar in Creativity (4)**

Creativity is primarily a point of view, a way of feeling about things, a way of responding to and exploring one's environment. The creative process will be explored in a variety of media and an attempt made to define what the process, rather than the product, means.

**455. Seminar in Myths, Dreams, and Symbols (4)**

An exploration of the inner world of man in relationship to the growth of the individual and change within a society.

**458. Psychology and Visual Media (4)**

A technically-oriented course in which the student learns to use the tools of still photography and/or cinema as a medium of psychological expression.

## **Psychology**

### **461. Self-exploration through Cinema (4)**

Each person will make one or more films exploring the meanings he finds in his inner world. Group discussions and selected film viewings. No film experience required. (Laboratory fee of up to \$25 may be required.)

Prerequisite: Consent of instructor.

### **Theoretical Psychology**

### **464. Theoretical Systems of Psychology (4)**

An examination of major theoretical systems in psychology, such as Psychoanalytic, Behavioristic, Gestalt, and phenomenological.

### **466. Seminar in Theoretical Psychology (4)**

Each semester the seminar will focus on a particular theorist (i.e. Freud, Jung, Piaget, etc.). The person whose work is studied will be listed in parentheses in the time schedule. Can be repeated for credit.

Prerequisite: Psych. 464 or consent of instructor.

### **467. Seminar: Theoretical Issues in Psychology (4)**

Each semester a particular theoretical issue will be selected for study. Differing viewpoints will be brought to bear in an attempt to understand the phenomenon in question. Can be repeated for credit.

Prerequisite: Psych. 464 or consent of instructor.

### **468. Current Trends in Psychology (4)**

Contemporary developments and new directions in our understanding of man. Many different perspectives are brought to bear on what is happening both inside and outside the "field of psychology."

### **469. Seminar in Personality (4)**

Processes involved in the development and functioning of the normal human personality and conceptualization of the student's own behavior in terms of these processes.

### **472. Psychology as a Human Science (4)**

A study of a philosophy of science of psychology. An examination of the role that natural scientific assumptions have played in psychological research, and an examination of the nature of psychological phenomena in order to develop a science of psychology based upon the unique subject matter of that field.

### **473. Psychology of Time (4)**

The meaning of time concepts and their influence on interpersonal relationships. Effects of peoples' time orientations on personality, learning, and social behavior. Psychological research, case studies, and personal experience provide source material.

### **476. Psychology of Language (4)**

Examines the creative potential of language, its psychological implications, and evidence for the linguistic underpinnings of concept formation, acculturation, and ideas of reality. Mental illness is characterized as both an individual and group language problem.

### **Asian Psychology**

### **478. Seminar: Dimensions of Asian Psychology (4)**

An integrative approach to the methods and ideas of various Asian thinkers and schools of practice, such as Lao-tzu, Sufism, Gurdjieff, Zen, and ancient and modern Indian sages. Interrelationships with contemporary Western psychology are explored.

**480. Seminar in the Psychology of India (4)**

Psychological commentary on works such as the *Bhagavad-Gita*, Upanishads, and Dhammapada.

**482. Seminar in the Psychology of Yoga (4)**

Unification of mind and body through the practice of Yoga. May be taken twice for credit.

**484. Seminar in the Psychology of Asia (The I Ching) (4)**

Exploration of the meanings of the *I Ching* for the individual's own experience.

**486. Seminar in the Psychology of Zen (4)**

An introduction to knowing and experiencing in the manner of Zen.

**Other**

**490. Psychology Seminar (4)**

Each semester one psychological topic will be selected for study in depth. Consult class schedule for topic to be studied. May be repeated for credit.

**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.

**495. Independent Study for Majors or Minors (1-4)**

May take 6 units total toward 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.

**497. Advanced Psychology Tutorial (1-16)**

A continuation of the tutorial experience.

Prerequisite: Invitation of the instructor.

**499. Special Problems (1-2)**

**522. Seminar in Teaching College Psychology (2)**

Discussions in methods and materials of teaching Psychology in junior colleges and four-year colleges.

Prerequisite: Consent of instructor.

**523. Practicum: Teaching College Psychology (2)**

Practical experience of supervised teaching in a college Psychology classroom.

Prerequisite: Consent of Instructor.

**Master of Arts**

**570AB. Directed Field Experience (6-6)**

Provides an opportunity for the graduate student to explore an interest in a field setting. Regularly scheduled individual and group meetings with Psychology Department faculty for consultation regarding field experiences. Limited to M.A. candidates.

## Psychology

### 571AB. Psychological and Humanities Seminar (3-3)

Exploration of basic human problems as reflected in art, literature and philosophy. Faculty members from art, literature, philosophy, drama, music and dance will participate as resource persons. Limited to M.A. candidates.

### 572AB. Research Seminar (3-3)

Exploration of various theoretical and research approaches to the variety of psychological problems. Emphasis on conceptualization of students' experiences. Emphasis on stimulation of students' individual research interests in second semester. Major emphasis on the actual design, conduct and completion of an individual research study. Limited to M.A. candidates.

### 573AB. Seminar: Current Trends in Psychology (1-1)

Weekly two-hour meeting of students with entire psychology staff. Critique of on-going experiences; reports on recent research and current developments in psychology; presentation of papers and studies of general interest. Limited to M.A. candidates.

### 574AB. Theories and Practice in Group and Individual Counseling (3-3)

Personal experience in group and individual counseling. Limited to M.A. candidates.

### 575AB. Master of Arts Thesis (1-1)

A research study developed by the student in consultation with the Psychology Department and approved by the department and his graduate study committee.

### 595. Independent Study for Graduate Students (1-4)

Limited to M.A. candidates.

### 599. Special Problems for Graduate Students (1-2)

# SOCIOLOGY

Division of Social Sciences

Jerry Mandel, Chairman of Department

David Arnold, James Driscoll, Susan Garfin, Daniel Haytin, Jonathan Kamin,\*  
Herbert Kutchins, Harvey Segal, John Staude, John Steiner, Clarice Stoll,  
Robert Tellander.

The major in Sociology is designed to provide the student with an understanding of contemporary society. It also provides a basic foundation for graduate work in the social sciences.

## SOCIOLOGY MAJOR FOR THE B.A. DEGREE

General Education .....	40 units
Sociology Courses .....	34 units
Supporting Subjects .....	8 units
Foreign Language and/or Electives .....	42 units
<b>Total .....</b>	<b>124 units</b>

## SOCIOLOGY MAJOR COURSE REQUIREMENTS

Sociology 201—Principles and Procedures in Sociology .....	6 units
Sociology 201 is required for all majors in sociology. Students wishing to take upper division sociology courses without having completed Sociology 201 must obtain permission from the instructor.)	
Sociology 250—Survey of Sociological Theory .....	4 units
Fields of Sociology .....	12 units
A minimum of 12 units other than seminar units must be selected from three of the following four fields of sociology:	
1) Social Behavior (courses numbered 300–329);	
2) Sociology of Culture (courses numbered 330–349);	
3) Institutions (courses numbered 400–429);	
4) Comparative Society and Social Groupings (Courses numbered 430–449);	
Seminars .....	6 units
Other approved sociology courses .....	6 units
Supporting Subjects:	
Upper division courses in Anthropology, Economics, Ethnic Studies, History, Political Science .....	8 units

## MINOR IN SOCIOLOGY

Sociology 201—Principles and Procedures in Sociology .....	6 units
Sociology 250 or 450–490 .....	4 units
Sociology 300–329 .....	3 or 4 units
Sociology 330–349 .....	3 or 4 units
Sociology 400–429 .....	3 or 4 units
Sociology 430–449 .....	3 or 4 units

### 201. Principles and Procedures of Sociology (6)

A survey of the Conceptual principles, research methods, and major findings of Sociology. Students will learn to view the world through a "sociological perspective." The course will include lectures, research discussions, field work, and training in many sociological techniques (such as basic statistics, video-tape, film-making, preparation of research reports, etc.) Required for all Sociology majors their first semester here.

\* On leave 1971–72.

## **Sociology**

### **202. Introduction to Social Welfare (4)**

An examination of Social Service Systems, particularly Welfare Departments, Mental Health Services and Housing. This course also provides a fundamental understanding of the nature of welfare.

This course does not fulfill the requirement of the major in Sociology.

### **203. Contemporary Social Problems (4)**

An examination of major social problems confronting American society today. Particular emphasis is placed on crime and delinquency, racial conflict, poverty, unemployment and student protest.

### **250. Survey of Sociological Theory (4)**

Examination of some of the more salient and relevant sociological concepts. Discussion of the historical roots of these theories and current trends in the discipline. (Can be taken the same semester with Sociology 201).

## **Social Behavior**

### **301. Social Contacts (4)**

Analysis of human encounters in specific situations; primary and secondary relations; comparative analyses of behavior in selected settings. Special attention will be paid to the theoretical and empirical works of Simmel, Goffmann, Garfinkel, Schuetz.

Prerequisite: Sociology 201 or consent of the instructor.

### **302. Socialization (4)**

Analysis of the social processes through which human beings are inducted into social groups. Emphasis upon socialization after childhood and upon the inculcation of major adult identities; particular attention given to educational institutions as socialization contexts.

Prerequisite: Sociology 201 or consent of the instructor.

### **303. Sociology of Education (5)**

Analysis of the learning process and the schooling institutions. Special attention will be given to design of educational environments and innovation in the existing educational system.

### **304. Seminar—Sociology of Love (3)**

Theories of intimate relationships—their formation, special problems, and functions. Prerequisite: Sociology 314 or consent of instructor.

### **305. Collective Behavior (4)**

Sociological analyses of the characteristics, causes and consequences of extraordinary collective actions such as fads, panics, expressive crowds, riots, demonstrations, social and revolutionary movements.

Prerequisite: Sociology 201 or consent of the instructor.

### **307. Deviant Behavior (4)**

Sociological study of deviance. The relation of deviance to order and change. Selected study of deviant groups. Special attention will be given to historical and sociological analyses of crime, delinquency, and suicide.

Prerequisite: Sociology 201 or consent of the instructor.

### **308. Sociology of Mental Illness (4)**

Contributions of the sociological perspective toward our understanding of mental illness. Comparisons between psychological and sociological approaches.

Prerequisite: Sociology 201 or consent of the instructor.

**\* 310. Seminar in Social Behavior (4)**

An intensive and advanced discussion of human encounters, the theory of roles, and the modes of behavior in selected situations.

Prerequisite: One course from among those numbered 300–309.

**311. Seminar: Field Research in Drugs and Society (2)**

An intensive look at the “drug issue” within the community. To be studied are “players” in the “drug game”—users, concerned professions like lawyers and doctors and law enforcers, rehabilitation programs, educators, etc. Object: to use the community as a research laboratory. (Sociology 312 taken in the past or concurrently, is a prerequisite.)

**312. Drugs and Society (4)**

Sociological examination of the use of drugs and law enforcement in contemporary American society.

**314. Sex Roles (4)**

Study of sex roles and sexuality, including biological and culturally-defined sex differences. Topics include women’s liberation, transsexualism and homosexuality.

**315. Seminar in Field Research (4)**

Working seminar in which each participant observes and analyzes an ongoing social setting. Strategies of observation and of qualitative analysis considered in the context of each participant’s project in process.

Prerequisite: One course from among those numbered 300–309 and consent of the instructor.

**316. Advanced Field Work Seminar (4)**

A continuation of Sociology 315. Additional work on field observation, plus greater attention to analysis of qualitative data.

Prerequisite: Soc. 315 or consent of instructor.

**317. Seminar in Survey Research (3)**

Topics such as questionnaire construction, sampling, interviewing, coding, etc., will be covered in lectures, discussions, readings, and short exercises. Students will carry out their own analysis of data from a recent full-scale survey. Some prior familiarity with sociological research is assumed. Prerequisite: Sociology 455 (Research Design) or consent of instructor.

**318. Films for Sociology (3)**

The use of the film to illustrate sociological themes. Examples of such films; discussions of problems in merging theory and media; and practice in using the camera as a research tool.

**321. Seminar—Sociology of Self (3)**

Study of the relation between society and self. An examination of some of the major types of social identities and the personal experience associated with them. Explorations of models of current and alternative society-self relationships.

**SOCIOLOGY OF CULTURE**

**330. Sociology of Religion (5)**

A sociological examination of religion combining a general theoretical approach, historical and comparative analyses of past and present religions, and in depth field research in areas of student interest.

\* Admission of non-majors by consent of instructor only.

## **Sociology**

### **331. Seminar in the Sociology of Religion (3)**

An in depth examination of specific topics in the sociology of religion (including structure of religious organizations, emergence of new religions, religion in America, etc.)

### **333. Seminar in Sociology of Sports (3)**

A consideration of sports in American society. The seminar will cover both professional and amateur sports, the place of sports in American society, sports and sex roles, the social structure of organized sports, and related topics.

### **334. Sociology of Art, Literature, and Music (4)**

Sociological analyses of the Intelligentsia in contemporary and historical settings. The status of art, literature, and music in social life. The relation of culture to aristocratic, democratic, and authoritarian systems of government. The role of the artist and writer in social change.

Prerequisite: Sociology 201 or consent of the instructor.

### **335. The Sociology of Knowledge (4)**

An investigation of the interrelations between types of knowledge and social structures, between ways of thinking and feeling, ways of looking at ourselves and our world, and the social and cultural settings of these activities. Classical and contemporary theories will be explored and researched.

### **336. Sociology of Leisure (4)**

An examination of the institutions, possibilities and structure of leisure in American society. Stress will be placed on such leisure activities as rock music, horse racing, surfing, and the new sex morality.

### **337. The Politics of Religion (4)**

Consists of a comparison of major Western political theories and their actual and possible use in defining religious doctrine and shaping the structure of the Church. Emphasis is placed on the decision-making function of the theologian, priest, and individual in shaping the meaning and form of the community of faith in the Judeo-Christian tradition.

### **338. Sociology of Literature (Seminar) (3)**

An analysis of literature as a social product and as a guide to the study of societies. Readings from past and present and cross-cultural literature.

### **339. Seminar: Mass Media (3)**

The influence of the mass medias on American culture and society, to be discerned by examining written and electronic media (newspapers and magazines, radio, TV, and popular music). Themes include: life-styles and ways of thought produced by different media—media ownership; mass markets; myths created by media; alternative use of media.

### **\* 340. Seminar in the Sociology of Culture (4)**

Advanced analyses of sociological aspects of art, music, literature, and the social role of the intelligentsia. The concept of culture in sociology and in social life.

Prerequisite: One course from among those numbered 330–339.

\* Admission of non-majors by consent of instructor only.



**Institutions**

**400. Political and Industrial Sociology (4)**

The relationship between technology and the social order. Forms of social organization under different political and technological systems. Individuality and freedom in modern societies.

Prerequisite: Sociology 201 or consent of the instructor.

**401. Seminar: Sociology of Power (3)**

An analysis of the origin, development and application of power in human interaction, social organizations and institutions. The examination of the difference between total and humanistic societal structures will be stressed in regard to the development of individuality and freedom.

**404. Kinship and Family Systems (4)**

The family as a social institution. The American family. Comparative family systems. The relationship between family form and societal type. Subcultural family forms. Formation and disruption of family ties.

Prerequisite: Sociology 201 or consent of the instructor.

**408. Sociology of the Future (4)**

Sociology of the Future is a sociological inquiry into the future development of man and society. Man's historical structure and flight from the binding nature of structural and functional antecedents, his projection and conceptualization of the future based on the imagination of himself in society in time and space.

Prerequisites: Sociology 439 or Sociology 401---or consent of instructor.

**410. Comparative Perspectives on Social Stratification (4)**

The origins and development of social differentiation and its sources in the technological bases of societies. Theories of stratification. Forms and functions of inequality. Comparative study of the stratification systems of several contemporary societies.

Prerequisite: Sociology 201 or consent of the instructor.

**411. The American Class Structure (4)**

An overview of the American class system. Analysis of the effects of this system on those who participate in it, through the medium of cross-sectional and ethnographic studies. Effects of social placement on power, privilege, prestige, opportunity, culture, and style of life. Forms and consequences of mobility.

Prerequisite: Sociology 410 or consent of the instructor.

**412. Organizations and Institutions (4)**

Political, economic, social, and psychological analyses of administrative structures. The role of formal and informal organization, ideology in bureaucracy, decision-making, morale, and conflict.

Prerequisite: Sociology 201 or consent of the instructor.

**413. Criminal Justice and the Community (3)**

Sociological analysis of law enforcement systems and court systems; police discretion, differential implementation of the criminal law; negotiation in the criminal justice system.

**418. Social Foundations of Delinquency and Crime (4)**

Historical and social analysis of crime. Crime as a social institution. Theories of the causes of crime and delinquency.

Prerequisite: Sociology 201 or consent of the instructor.

## **Sociology**

### **419. Punishments and Corrections (4)**

Theories of punishment and treatment and the actual practices used in dealing with convicts and juvenile delinquents. Analysis of the systems of behavior modification used by prison, juvenile, probation, and parole workers.

Prerequisite: Sociology 201 or equivalent, or consent of instructor.

### **\*420. Seminar in Institutions (4)**

Intensive analyses of social institutions, their functions, dysfunctions and forms. Students will choose one institutional type—family, work, religion, government, leisure—for a research paper and report.

Prerequisite: One course from among those numbered 400–419.

### **421. Seminar in Higher Education (3)**

Examination of the objectives and achievements of institutions of higher education (and the last years of High School). What are the stated and unstated objectives of administrators, teachers, and students? Are they realistic? Measurable? Achieved? What, in theory and in fact, are the functions of higher education in our society?

## **Comparative Society and Social Groupings**

### **430. American 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. American character studies and the theory of national character.

Prerequisite: Sociology 201 or consent of the instructor.

### **431. Women in Society (4)**

An analysis of sex roles with particular emphasis on women. Includes study of historical sex stereotypes; discrimination against women in law, the economy, and other institutions; the politics of the women's rights movements; theories on the roots of sexism. Includes consciousness-raising group participation.

### **432. Social Organization of Western and non-Western Societies (4)**

Comparative analyses of social institutions and values in the U.S.A., Canada, England, Western Europe, and the Soviet Union with those of China, Japan, Malaysia, and other Asian and African societies. The theory of comparative society.

Prerequisite: Sociology 201 or consent of the instructor.

### **433. Suburban Renewal (4)**

An analysis of the human factors and their relationship to physical space and social interaction in the urban setting. Selected control variables are analyzed to evaluate their significance in altering and controlling the patterns of social interaction. In addition, a parallel analysis of the aesthetic and quality controls affecting the creation of community will be considered.

### **434. Urban Sociology (4)**

Comparative analyses of urban communities in various cultural settings. The origins and trends in urbanization. Social consequences of transition from rural to urban life.

Prerequisite: Sociology 201 or consent of the instructor.

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\* Admission of non-majors by consent of instructor only.

**435. Sociology of Ecology (4)**

Survey and analysis of why and the ways in which humans have acted to change or to maintain the ecology of North America and the earth. Particular focus on analyzing social conflict over the eco-systemic effects of social organization, technology and human reproduction on other species, air, water, climate and natural resources.

Prerequisite: Sociology 201 or consent of the instructor.

**436. Minorities and Inter-Ethnic Contacts (4)**

The history and prevalence of minorities. Structure of multiracial and multi-ethnic societies. Race relations and race contacts. The sociology and social psychology of race prejudice and discrimination.

Prerequisite: Sociology 201 or consent of the instructor.

**437. Social Planning (4)**

How planning effects 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.

**439. Personality and Social Structure (4)**

Critical analysis of contemporary theory and research bearing on the relations between personality and various aspects of social structure.

Prerequisite: Sociology 450.

**\*440. Seminar in Comparative Society (4)**

Advanced examination of the theory of comparative society. Microcosmic and macrocosmic analyses of societal stability and change. Research reports on comparative society.

Prerequisite: One course from among those numbered 430-439.

**Sociological Theory and Method****450. History of Sociological Thought (4)**

Elements of sociological thought in the pre-modern western world; the circumstances of, and contributors to, the emergence of a distinctly sociological perspective in the modern world; main trends, cycles and revivals in the development of sociological thought to the present time.

Prerequisite: Sociology 201 or consent of the instructor.

**452. Contemporary Sociological Thought (4)**

An examination of the nature of sociological theory and the major theoretical approaches currently in use in sociology. Structural-functional, conflict, social action, symbolic interaction, and exchange theories of society and social behavior will be discussed. Special emphasis will be placed on convergences and contradictions among the various approaches.

Prerequisite: Sociology 201 or consent of the instructor.

**453. Humanistic Sociology (4)**

Survey of the history and current conceptual features of the humanistic perspective in sociology; major points of convergence with and divergence from other major trends in sociology and social science; intensive analysis of selected empirical studies performed by humanistic and other sociologists; critiques of the humanistic perspective.

Prerequisite: Two upper-division courses in sociology.

\* Admission of non-majors by consent of instructor only.

## **Sociology**

### **454. Theory of Social Dynamics (4)**

Evolutionary and non-evolutionary theories of social change.

Prerequisite: Sociology 201 or consent of the instructor.

### **455. Research Design in Sociological Studies (4)**

The logic and requirements of valid inference; elements of statistical reasoning; survey of the methodological and meta-methodological aspects of the experimental, historical, survey and field study approaches to sociological research; relations between basic conceptualization, theory, and methods of sociological investigation.

Prerequisite: Sociology 201 or consent of the instructor. (Formerly Sociology 300)

### **460. Seminar in Sociological Theory (4)**

Intensive examination of the contributions of some of the leading figures in sociological theory—Weber, Durkheim, Simmel, Merton, Parsons. Each semester will focus on the total work of one theorist.

Prerequisite: Sociology 450 or consent of the instructor.

### **481. Seminar in Simulation (4)**

The design and use of simulations for social science theory, research, and teaching study of models of economics, political, historical, and sociological processes. NOTE: Open to any upper division social science major. Credit may apply to other social science department majors upon petition to that specific department.

### **490. Senior Seminar (4)**

### **495. Independent Study for Majors or Minors (1-4)**

### **499. Special Problems (2-4)**

# THEATRE ARTS

(Division of Humanities)

William Sherman, Chairman of Department

Sandra Dunwoody, Roger Henderson, Robin Jackson, Nancy Lyon,  
Gerd Mairandres, Lorna Romano.

The Bachelor of Arts degree with a major in Theatre Arts (Drama) offers a concentration in Drama that is flexible, specific and oriented towards the needs of individual students. In Drama, each semester is approached thematically. The choice of theatre for the Research, Rehearsal and Production block of courses will relate to all other courses in Drama for that semester. The thematic change allows the student to repeat courses enabling him to concentrate on skills most suitable to his needs. The faculty will assist the student in determining the level of his work and in guiding majors towards their individual goals: pre-professional training, graduate work, teacher training or community theatre. Specific study is offered in acting, directing, designing and playwriting-criticism. Student-initiated projects in theory and production are encouraged. This program assumes individual counseling of the major and the proposed major candidate by members of the faculty in the area of concentration. This is of vital concern in achieving the student's objective. The student is expected to achieve a firm background in the general discipline of Theatre Arts as well as develop skills in his special interest. Supportive courses from all areas of the college are included in the major to add scope and depth to specific interests. Courses in Theatre Arts relate History and Dance to the Drama concentration. Elective courses may increase work in the major or in a minor program.

## THEATRE ARTS MAJOR FOR THE B.A. DEGREE (DRAMA)

General Education .....	40 units
Theatre Arts, Drama, Dance.....	30 units
Supportive Courses .....	18 units
Electives .....	36 units
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Total.....	124 units

## THEATRE ARTS MAJOR COURSE REQUIREMENTS (DRAMA)

Theatre Arts—Drama—Dance .....	30 units
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In Theatre Arts, the major is *expected* to have a broad background in the discipline and to develop skills in the area of his choice. He is *expected* to enroll in several areas in drama and dance, both technique and theory courses. Courses in the area of his interest may be repeated to further develop specific skills.

Supportive Courses .....	18 units
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The degree program assumes individual counseling of the major and the proposed major candidate by members of the faculty in the area of concentration. In those supporting or contributing areas outside of theatre arts, the student is counseled towards a broad background as well as choices that will support his particular theatre arts interest. Emphasis is placed on the minor program, either as outlined by various disciplines or as a specific program to support a drama or dance concentration. As an example: a student interested in becoming a professional actor can concentrate on acting courses in the drama program and support these with dance, voice, fencing, dramatic literature, psychology and other pertinent courses that will both intensify and broaden his specific interest. A student interested in acting and teaching in a high school can be specifically encouraged towards those courses that will give him the best training for his objectives.

## Theatre Arts

*List of possible courses* (Appropriate substitutions may be made)

### A. Division of Humanities; *Minimum of 10 units.*

#### (a) Three to six units from the following:

Art 202AB—Drawing .....	2 units
Art 250—Introduction to Art I and II .....	3 units
Music 110AB—Musicianship I: Theory .....	3 units
Music 115—Voice Technique .....	1 unit
Music 116, 117, 118, 119—Instrumental Techniques .....	1 unit
Music 210AB—Musicianship IV: Theory .....	3 units
Music 425—Composition .....	2 units

#### (b) Four to seven units from the following:

English 325—Creative Writing .....	3 units
English 420—Development of English Drama .....	3 units
English 450-451—Shakespeare .....	3 units
French 316—The Contemporary French Theatre in Translation .....	3 units
French 446—The 17th Century .....	3 units
German 414—Young Goethe and <i>Sturm und Drang</i> .....	3 units
German 330—German Drama of the 19th Century .....	3 units
Philosophy 352—Metaphysics .....	3 units
Philosophy 360—Aesthetics .....	3 units

### B. Division of Education and Psychology

Division of Social Sciences

Division of Natural Sciences

*Minimum of 8 units from the following lists:*

#### (a) Three to six units from the following:

Psychology 365—Group Processes .....	4 units
Anthropology 359—Art and Culture .....	4 units
Sociology 334—Sociology of Art, Literature and Music .....	4 units
Biology 332—Plants and Civilization .....	3 units
Chemistry 400—History of Physical Sciences .....	2 units

#### (b) Five to eight units from the following:

Education 200—Introduction to Education .....	3 units
Physical Education 101—Fencing .....	1 unit
Physical Education 101—Gymnastics .....	1 unit
Health 310—Kinesiology .....	4 units
Psychology 200—Human Behavior .....	3 units
Psychology 349—Social Psychology .....	4 units
Anthropology 203—Introduction to Cultural Anthropology .....	4 units
History 400—Greeks and the Aegean .....	4 units
History 402—Medieval Europe .....	4 units
Political Science 310—Political Thought .....	4 units
Political Science 311—Political Thought Since 1500 .....	4 units
Chemistry 311—Elements of Electronics .....	3 units
Physics 340—Theory of Light .....	3 units
Mathematics 410—History of Mathematics .....	3 units

None of the supportive units may be simultaneously recorded as General Education credits.

### MINOR IN THEATRE ARTS

Students interested in a minor in Theatre Arts should seek a broad range of technique and theory courses in Drama and Dance for a minimum of 24 units. Consultation with the drama faculty will aid the student in selecting appropriate courses for his needs.

### DANCE

It is not possible to receive a B.A. degree in Dance at this time. An emphasis on dance may be planned by taking eight units in dance courses, in addition to those required in the Theatre-Arts-Drama major. Consult with the advisor in the dance program.

### MINOR IN DANCE

Students interested in a minor in Dance should seek a broad range of technique and theory courses in Dance and Theatre Arts for a minimum of 24 units. Consultation with the dance faculty will aid the student in the selection of appropriate courses for his interest.

### DANCE

#### †° 100. **Beginning Modern Dance** (1)

A beginning course in fundamentals of movement. Emphasis on the communicative aspects of the art.

#### † 110. **Beginning Ballet** (1)

Fundamentals of classical and romantic ballet; basic steps and arm positions, beginning barre and allergeo.

#### † 120. **Beginning Jazz** (1)

Fundamentals of contemporary jazz techniques.

Prerequisite: Dance 100 or equivalent.

#### † 130. **Folkdance** (1)

#### †° 200. **Intermediate Modern Dance** (1)

A continuation of 100. Emphasizing development of technical proficiency in a variety of styles.

#### † 210. **Intermediate Ballet** (1)

A continuation of 110.

Prerequisite: Dance 100 or consent of instructor.

#### † 220. **Intermediate Jazz** (1)

A continuation of 120.

Prerequisite: Dance 120 or consent of instructor.

#### 241. **Dance for Children** (2)

Participation in rhythmic activities, with emphasis on the various types of dance included in the curriculum for the elementary school child. Performance and evaluation of the prospective teacher of elementary school physical education activities.

#### †° 300. **Advanced Modern Dance** (1)

A continuation of 200.

Prerequisite: Dance 200 or consent of instructor.

#### 310. **Advanced Ballet** (1)

A continuation of 210.

Prerequisite: Dance 210 or consent of instructor.

#### 320. **Advanced Jazz** (1)

A continuation of 220.

Prerequisite: Dance 220 or consent of instructor.

\* This course may be applied toward fulfilling *Elective* requirements in General Education.

† May be repeated for credit.

**350A. History of Dance: Prehistory to 1800 (3)**

Development of dance from ritual to art form in Western cultures.

**350B. History of Dance: 1800 to Present (3)**

The Golden Age of ballet, through modern dance and contemporary innovative forms.

**351A. Choreography—Solo (2)**

Prerequisite: Modern Dance.

**351B. Choreography—Group (2)**

Prerequisite: Solo Choreography.

**390. Ethnic Dance and Workshop (2)**

An intensive study of one ethnic style of dance (western or non-western), depending upon the instructor.

**400. Special Studies—Modern Dance (1)****410. Special Studies—Ballet (1)****420. Special Studies—Jazz (1)****441. Pre-Classic Forms (2)**

17th and 18th Century music and dance forms studied with an emphasis on their use in contemporary dance.

**442. Rhythmic Analysis for Dance (2)**

Theory and practice in accompaniment for dance techniques and composition. Analysis of form, structure and style.

Prerequisite: Dance 100, Music 105 or equivalent.

**443. Labanotation (2)**

Theory and practice of movement notation using the Laban system.

**490. Dance Workshop (1)**

Students may contribute choreography or dance. The culmination of the course is the presentation of a dance concert to a public audience. Students will also participate in all phases of staging the dance, costume, lighting, makeup and settings. May be repeated 4 times for credit.

## **DRAMA**

These courses may be repeated as a means for the student to develop skills and techniques relevant to his interest. A student will receive credit under the 200 or 400 designation depending on his experience and level of skill.

**210A. Research (3)****410A. Research (3)**

Investigation of literature, art and culture relating to the production of the play, that forms the block of courses; Research, Rehearsal and Production. Course work involves lectures, demonstrations, student research and projects. The course may be taken separately from the block.

**210B. Rehearsal (2)**



## **Theatre Arts**

### **410B. Rehearsal (2)**

Development of techniques of actors, designers, and special skills in the production of the play being studied in the Research, Rehearsal and Production block. Concurrent enrollment with the A and C sections is required. Admission by consultation with instructor.

### **210C. Performance (1)**

### **410C. Performance (1)**

Participation in coordinated techniques of production of the play studied in the Research, Rehearsal and Performance block. Includes development of techniques in scenery, property, costume construction, lighting and sound. May be taken separately from the block and enrollment may occur anytime prior to 3 weeks before performance.

### **220A. Acting (3)**

### **420A. Acting (3)**

Analysis of the scene as the preparation of acting a role. Acting techniques leading towards characterization, environment and costume in working with specific texts. Some of the work is directly related to the play produced in Drama 210/410. The emphasis varies each semester and the course may be repeated.

### **220B. Acting (2)**

### **420B. Acting (2)**

Problem solving exercises and games to free spontaneity and intuition in the individual and the group. Discovery and experience of creative expression. Development of certainty and conviction in ensemble performance.

### **230A. Directing (3)**

### **430A. Directing (3)**

Student directorial projects involving total concept of production. Production of work may be in residence or community. Some work may be related to production in 210/410.

### **230B. Directing (2)**

### **430B. Directing (2)**

Exploration of the total directional process by means of lecture, demonstration, practical experience and individual conference.

### **240A. Playwriting-Criticism (3)**

### **440A. Playwriting-Criticism (3)**

Analysis and practice in the writing of dialogue and the construction of a play.

### **240B. Playwriting Seminar (2)**

### **440B. Playwriting Seminar (2)**

The student will be expected to write a play or theatre piece.

### **250A. Design (3)**

### **450A. Design (3)**

Projects in design covering a range of styles and the use of drafting and drawing techniques. Emphasis placed on total concept of design as seen through painted illustration and models of set, costumes, props and lighting.

### **250B. Design (2)**

**450B. Design (2)**

Work in sketching and rendering with emphasis on the actual realization of the design—participation in production is required.

**260. Student-initiated Independent and Course-related Projects (1-3)**

**460. Student-initiated Independent and Course-related Projects (1-3)**

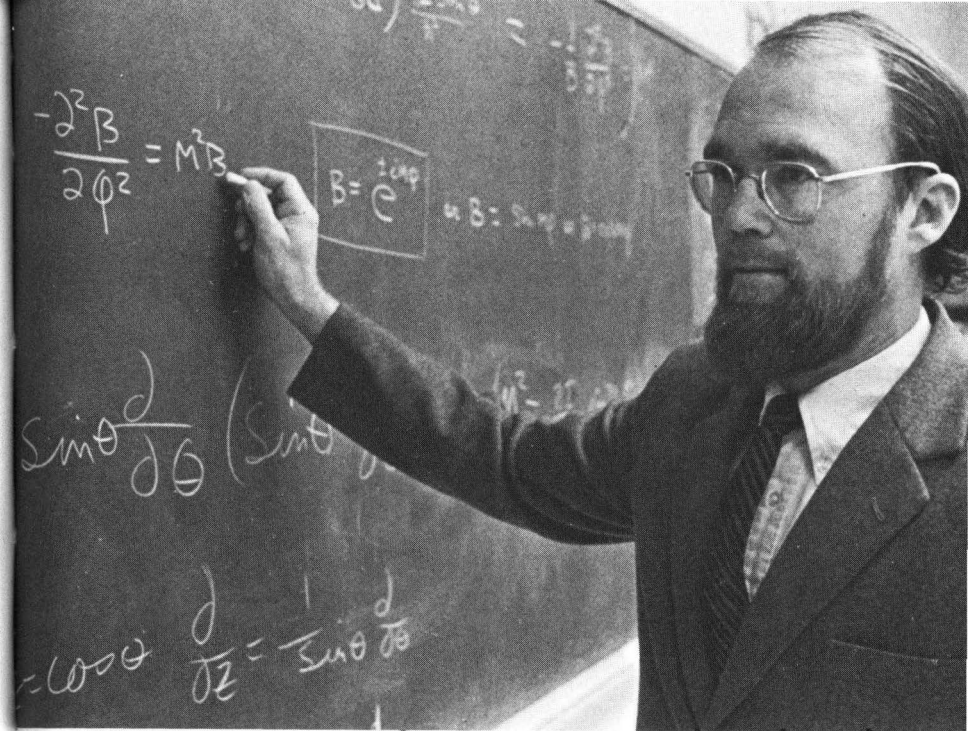
Encourages students to produce their own works of dramatic art. Some of the projects will grow out of related course work; others may have independent sources. Not all projects lead to production. Admission to course at any time prior to 4 weeks before end of semester.

**THEATRE ARTS**

**270. History of Theatre (3)**

**370. History of Theatre (3)**

A study of the world dramas and the social and artistic conventions of their respective eras. The emphasis of the class will coincide with the thematic material for the term. Students taking this course as part of the Humanities in General Education must take it at the 270 level.



FACULTY



## FACULTY (1971-72)

- Linda A. Ackers (1971).....Instructor in Education  
B.A., 1962, Chico State College.
- Leslie K. Adler (1970).....Assistant 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).....Assistant Professor of Philosophy  
B.A., 1961, University of Florida; M.A., 1965; Ph.D., 1967, Tulane University.
- Gerald J. Alves (1965).....Test Officer-Counselor  
B.A., 1959; M.A., 1960, Chico State College.
- Ellen I. Amsterdam (1969).....Assistant Professor of Music  
B.A., 1957; M.A., 1959, Smith College; Ph.D., 1968, University of California,  
Berkeley.
- Leigh G. Anderson (1970).....Assistant Professor of Geography  
B.A., 1959, Cornell University.
- Thomas B. Anderson (1968).....Associate Professor of Geology  
B.S., 1961, Yale University; M.S., 1965; Ph.D., 1969, University of Colorado.
- \* Kathryn Armstrong (1966).....Associate 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.
- David O. Arnold (1970).....Associate Professor of Sociology  
B.A., 1960, University of Chicago; M.A., 1962, University of Iowa; Ph.D.,  
1966, University of California, Berkeley.
- John R. Arnold (1961).....Professor of Biology  
B.A., 1932, Fresno State College; M.A., 1934, University of California; Ph.D.,  
1938, Cornell University.
- Mary R. Arnold (1967).....Associate 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).....Assistant Professor of Biology  
A.B., 1961; M.A., 1963, San Francisco State College; Ph.D., 1967, Purdue  
University.
- William J. Barnier (1969).....Assistant Professor of Mathematics  
B.A., 1961; M.S., 1963, San Diego State College; Ph.D., 1967, University of  
California, Los Angeles.
- Isaac L. Bass (1970).....Assistant Professor of Physics  
B.A., 1960, University of California, Berkeley; Ph.D., 1965, Columbia Uni-  
versity.
- Philip H. Beard (1969).....Assistant Professor of German  
B.A., 1965; M.A., 1966; Ph.D., 1971, Stanford University.
- Richard M. Bell (1969).....Assistant Professor of Management  
B.A., 1964, Bard College.
- Timothy A. Bell (1968).....Associate Professor of Geography  
B.A., 1958, Stanford University; M.A., 1964, University of Oregon; Ph.D.,  
1971, University of Oregon.

\* On leave 1971-72.

## Faculty

- Richard Bellamy (1969).....Bibliographer/Collection Building  
B.S., 1947, Northwestern University; M.L.S., 1966, University of California, Berkeley.
- Paul V. Benko (1970).....Assistant Professor of Biology  
B.S., 1954, University of California, Berkeley; M.S., 1958; Ph.D., 1968, University of California, Davis.
- Sterling Bennett (1967).....Associate Professor of German  
B.A., 1961, Harvard University; M.A., 1964; Ph.D., 1970, University of California, Berkeley.
- Barouch Ben-Zion (1969).....Assistant Professor of Economics  
B.A., 1965, Sonoma State College; M.A., 1968, University of Oregon.
- S. Aaron Berman (1969).....Assistant Professor of Foreign Languages  
B.Ed., 1961, University of Miami; M.A., 1964, University of Michigan.
- Barbara A. Biebusch (1962).....Head, Reference Department  
B.A., 1954, Stanford University; M.L.S., 1956, University of California.
- Frank L. Bills (1969).....Assistant Professor of Education  
B.S., 1964, Brigham Young University; M.Ed., 1968; Ed.D., 1970, Utah State University.
- Ronnie A. Blakeney (1970).....Assistant Professor of American Ethnic Studies  
B.A., 1968, University of California, Berkeley.
- Estaban A. Blanco (1970).....Assistant Professor of American Ethnic Studies  
B.A., 1968; M.A., 1970, San Francisco State College.
- Maurice Blaug (1970).....Assistant 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).....Associate Professor of English  
B.A., 1959, Queens College; M.A., 1960, Ph.D., 1970, New York University.
- Ruth R. Blitz (1965).....Associate Professor of Biology  
B.A., 1957, Brandeis University; M.A., 1959; Ph.D., 1965, University of California, Berkeley.
- Daniel A. Bloch (1970).....Assistant Professor of Mathematics  
B.S., 1963, Stanford University; Ph.D., 1967, Johns Hopkins University.
- Sue T. Branscomb (1971).....Assistant Professor of Anthropology  
B.A., 1969; M.A., 1969, University of California, Berkeley.
- Peter M. Briscoe (1970).....Reference Librarian  
B.A., 1964, University of California, Riverside; M.L.S., 1970, University of Hawaii.
- Russell H. Broadhead (1969).....Associate Professor of Education  
B.A., 1931, Otterbein College; M.A., 1937, Cornell University; Ph.D., 1946, Stanford University.
- David M. Bromige (1970).....Assistant Professor of English  
B.A., 1962, University of British Columbia; M.A., 1964, University of California, Berkeley.
- F. Leslie Brooks (1968).....Associate Professor of Chemistry  
B.S., 1957, University of California, Berkeley; Ph.D., 1961, University of Washington.

- Robert F. Brown (1967).....Assistant Professor of History  
B.A., 1952, Johns Hopkins University; Certificat de francais usuel, 1959; D. de l'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.
- John S. Bullen (1966).....Professor of English  
B.S., 1950, Utah State University; M.A., 1955; Ph.D., 1963, Stanford University.
- Wesley R. Burford (1961).....Director, Physical Planning and Development  
B.A., B.S., 1938, Fort Hays Kansas State College; M.S., 1948, Oregon State College. Licensed General Building Contractor.
- Ralph J. Bushnell (1967).....Professor of Biology  
B.S., 1931; M.S., 1932; Ph.D., 1935, University of Wisconsin.
- Libby R. Byers (1970).....Assistant Professor of Education  
B.A., 1943, Hunter College; M.A., 1968, San Francisco State College.
- Ernest L. Caillat (1971).....Assistant Professor of Psychology,  
School of Expressive Arts  
B.A., 1959, San Francisco State College.
- \*Thorsten F. Carlson (1961).....Professor of Education  
B.E., 1939, St. Cloud State Teachers College; M.A., 1941; Ph.D., 1946, University of Minnesota.
- William L. Carr (1970).....Associate Dean of Students, Activities—Housing  
B.A., 1960; M.A., 1962, Stanford University; Ed.D., 1971, University of Pennsylvania.
- Thomas D. Caulfield (1969).....Assistant Professor of History  
B.A., 1965; M.A., 1966, California State College, Los Angeles.
- Sucheng Chan (1971).....Assistant Professor of American Ethnic Studies  
B.A., 1963, Swarthmore College; M.A., 1965, University of Hawaii.
- Patricia G. Chapman (1968).....Catalog Librarian  
B.A., 1944, Stanford University; M.L.S., 1968, University of California, Berkeley.
- R. M. D. Childs (1961).....Business Manager  
B.S., 1948, University of Idaho.
- Lynn W. Clark (1967).....Assistant Professor of Speech-Drama,  
School of Expressive Arts  
B.A., 1962, Marysville College; M.A., 1964, San Francisco State College.
- Robert B. Clayton (1963).....Associate Professor of English  
B.A., 1948, Stanford University; M.A., 1956; Ph.D., 1960, University of California, Berkeley.
- †Calen E. Clothier (1962).....Professor of Biology  
B.A., 1955, Fresno State College; M.S., 1957; Ph.D., 1960, Oregon State University.
- Norman I. Cohn (1971).....Assistant Professor of Management  
B.S., 1962, University of Southern California; J.D., 1965, University of San Francisco.
- Michael D. Coleman (1970).....Assistant Professor of Philosophy,  
Hutchins School of Liberal Studies  
B.A., 1965; M.A., 1967, University of California, Santa Barbara.

†Sabbatical leave spring semester 1971–72.

\*On leave spring semester 1971–72.

## Faculty

- \*Ronald F. Coles (1969).....Assistant Professor of Management  
B.A., 1966; J.D., 1969, University of California, Berkeley. Member of the California Bar.
- William O. Cord (1963).....Professor of Spanish  
B.S., 1943, Southeast Missouri College; M.A., 1948, Washington University; Ph.D., 1958, University of Colorado.
- Carlos Cordero (1971).....Instructor in Psychology  
B.A., 1969, Sonoma State College.
- \*Mary M. Covington (1969).....Assistant Professor of Physical Education  
B.A., 1964, San Francisco State College; M.A., 1971, Sonoma State College.
- Eleanor C. Criswell (1969).....Assistant Professor of Psychology  
B.A., 1961; M.A., 1962, University of Kentucky; Ed.D., University of Florida.
- William K. Crowley (1969).....Assistant Professor of Geography  
B.A., 1964, University of California, Riverside; M.A., 1966, University of Cincinnati.
- Victor Daniels (1968).....Assistant Professor of Psychology  
B.A., 1962, San Francisco State College; M.A., 1964; Ph.D., 1966, University of California, Los Angeles.
- B. Jean Day (1968).....Documents Librarian  
B.A., 1950; B.S., 1951, University of Washington.
- \*\*Nirmal Singh Dhesi (1964).....Associate Professor of English  
B.A., 1950; M.A., 1953, Punjab University, India; Ph.D., 1968, Michigan State University.
- Mildred Dickeman (1968).....Associate Professor of Anthropology  
B.A., 1950, University of Michigan; Ph.D., 1958, University of California, Berkeley.
- Marvin N. Dillon (1962).....Coordinator, International Education Services  
B.A., 1949; M.A., 1950; Ph.D., 1955, University of Denver. Certified Psychologist.
- \*Robert E. Donlan (1966).....Assistant Professor of Physical Education  
B.S., 1964; M.Ed., 1966, University of Nevada.
- Margaret A. Donovan-Jeffry (1964).....Professor of Music  
B.A., 1955; M.A., 1960, University of California; D.M.A., 1964, Stanford University.
- James P. Driscoll (1971).....Assistant Professor of Sociology  
B.S., 1948, Rutgers University; M.A., 1968, San Francisco State College.
- Stephen A. Dubov (1969).....Instructor in Art  
B.F.A., 1965, Kansas City Art Institute; M.F.A., 1967, Stanford University.
- Raymond N. Duggan (1963).....Personnel Officer  
B.A., 1947; M.A., 1956, San Francisco State College.
- Donald G. Duncan (1963).....Professor of Mathematics  
B.A., 1942; M.A., 1944, University of British Columbia; Ph.D., 1951, University of Michigan.
- John R. Dunning, Jr. (1969).....Associate Professor of Physics  
B.S., 1960; M.S., 1961, Yale University; Ph.D., 1965, Harvard University.

\* On leave 1971-72.

\*\* On leave spring semester 1971-72.



- Sandra R. Dunwoody (1963)..... Associate Professor of Dance  
B.S., 1957, University of California, Los Angeles; M.F.A., 1959 Womans College—University of North Carolina.
- C. Douglas Earl (1969)..... Assistant Professor of Physical Education  
B.A., 1961; M.A., 1963, Chapman College; Ph.D., University of New Mexico.
- Wesley W. Ebert (1964)..... Professor of Biology  
B.S., 1961, University of Minnesota; M.S., 1963; Ph.D., 1964, University of California, Davis.
- David L. Eck (1970)..... Assistant Professor of Chemistry  
B.A., 1963, University of Montana; Ph.D., 1967, Washington State University.
- Gerald V. Egerer (1965)..... Associate Professor of Economics  
B.Sc. (Econ.), 1952, University of London; D. en Droit, 1957, University of Lyons, France.
- F. George Elliott (1968)..... Assistant 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.
- James B. Enochs (1963)..... Executive Vice President and Professor  
of Education  
B.A., 1934, Arizona State College; M.A., 1937, University of Colorado; Ph.D., 1948, University of Chicago.
- Rolfe C. Erickson (1966)..... Associate Professor of Geology  
B.S., 1959, Michigan Technological University; M.S., 1962; Ph.D., 1968, University of Arizona.
- John A. Ewell (1970)..... Associate Professor of Mathematics  
B.S., 1948, Morehouse College; M.A., 1955; Ph.D., 1966, University of California, Los Angeles.
- Sally L. Ewen (1964)..... Assistant 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)..... Acting Provost, Old School and Professor of French  
B.A., 1948, University of California, Los Angeles; M.A., 1949, University of Oregon; Ph.D., 1957, University of California, Los Angeles.
- \*Joann E. Feldman (1966)..... Assistant Professor of Music  
B.A., 1963, Queens College; M.A., 1966, University of California, Berkeley.
- Norman Feldman (1967)..... Assistant Professor of Mathematics  
B.Sc., 1959; M.Sc., 1961, McGill University, Canada.
- Robert F. Fletcher (1969)..... Associate Professor of Education  
B.A., 1939; M.A., 1960, San Diego State College; Ed.D., 1965, Stanford University.
- Kenneth W. Flynn (1968)..... Associate Professor of Physical Education  
B.S., 1956, Springfield College; M.S., 1961, Ithaca College; Ed.D., 1967, University of Oregon.
- Joseph J. Fortier (1965)..... Associate Professor of Psychology  
B.A., 1950, Fresno State College; M.S., 1951, University of Oregon; Ph.D., 1953, Stanford University.

\* On leave 1971-72.

## Faculty

- ††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.
- \*Stephen A. Fraser (1969).....Assistant Professor of Political Science  
B.A., 1961, University of Rochester; M.A., 1962, University of Michigan; Ph.D., 1966, Johns Hopkins University.
- 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).....Associate Professor of Anthropology  
B.A., 1948, University of California, Berkeley; M.A., 1966, Cand. in Phil., 1969, University of California, Davis.
- William E. Frenaye (1969).....Director of Financial Aids  
B.A., 1949, Kenyon College.
- Adele C. Friedman (1970).....Assistant Professor of French  
B.A., 1960, Barnard College; Ph.D., 1969, Yale University.
- Johanna E. Fritzsche (1963).....Music Librarian  
B.A., 1936 Hunter College; B.S. in L.S., 1939, Columbia University.
- Robert Y. Fuchigami (1968).....Professor of Education  
B.A., 1956; M.A., 1958, San Jose College; Ed.D., 1964, University of Illinois.
- James B. Gale (1969).....Assistant Professor of Physical Education  
B.S., 1962; M.Ed., 1964, University of Miami; Ph.D., 1970, University of Wisconsin.
- Francisco Gaona (1964).....Professor of Spanish  
B.A., 1953, Yale University; Ph.D., 1963, Tübingen University, Germany
- Jesus Garcia (1971).....Assistant Professor of American Ethnic Studies  
B.A., 1966, San Francisco State College; M.A., 1971, University of California, Berkeley.
- Susan B. Garfin (1970).....Assistant Professor of Sociology  
B.A., 1964, Stanford University; M.A., 1965, The Fletcher School of Law and Diplomacy.
- Victor A. Garlin (1970).....Assistant Professor of Economics  
B.A., 1956; M.A., 1961; Ph.D., 1965, University of California, Berkeley.
- Evangeline A. Geiger (1968).....Associate Professor of Education  
B.S.E., 1936, Lowell Teacher's College; M.A., 1954, San Francisco State College; Ed.D., 1967, University of California, Berkeley.
- David W. Gibbs (1970).....Assistant Professor of Health Sciences  
and Physical Education  
B.S., 1965; M.S., 1966, University of California, Los Angeles.
- Duncan V. Gillies (1963).....Professor of Education and Psychology  
B.A., 1942, San Francisco State College; M.A., 1948; Ed.D., 1952, Stanford University. Certified Psychologist.
- Helga E. Gillies (1971).....Instructor in Education  
A.B., 1934, San Francisco State College.
- Barry W. Godolphin (1969).....Assistant Professor of Psychology  
B.A., 1960; M.A., 1966, University of California, Los Angeles.

\* On leave 1971-72.

\*\* On leave spring semester 1971-72.

†† Sabbatical leave 1971-72.

- Stanley M. Goertzen (1963).....Professor of Psychology  
B.S., 1948, Lewis and Clark College; M.Ed., 1950, Oregon State College;  
Ed.D., 1955, University of Oregon. Certified Psychologist.
- Bernice Goldmark (1966).....Associate Professor of Education  
B.S.Ed., 1945, College of the City of New York; M.Ed., 1957; Ph.D., 1963,  
University of Arizona.
- Leland W. Gralapp (1964).....Professor of Art  
B.S., 1943, University of Oregon; M.F.A., 1948; Ph.D., 1953, State University  
of Iowa.
- James E. Gray (1970).....Assistant Professor of American Ethnic Studies  
B.A., 1967, San Francisco State College.
- Samuel L. Greene, Jr. (1966).....Associate Professor of Physics  
B.S., 1956, Polytechnic Institute of Brooklyn; Ph.D., 1962, Syracuse University.
- Robert G. Greenway (1969).....Assistant Professor of Psychology  
B.S., 1955, University of Washington; M.A., 1963, Brandeis University.
- †Theodore Grivas (1962).....Professor of History  
B.A., 1952; M.A., 1953; Ph.D., 1958, University of Southern California.
- Robert K. Gronendyke (1968).....Assistant Professor of Art  
B.A., 1955; M.A., 1956, California State College, Long Beach.
- William H. Guynn (1968).....Assistant Professor of French  
B.A., 1963, University of California, Berkeley; M.A., 1964, Middlebury College.
- Betty W. Halpern (1968).....Assistant Professor of Education  
B.A., 1949; M.A., 1960; Ed.D., 1968, University of California, Berkeley.
- David F. Hanes (1969).....Assistant Professor of Biology  
B.A., 1959, Wittenberg University; M.S., 1961, University of Michigan; Ph.D.,  
1971, Oregon State University.
- Dennis E. Harris (1965).....Associate Professor of History  
B.A., 1960; M.A., 1962; Ph.D., 1969, University of California, Santa Barbara.
- Gerald W. Haslam (1967).....Associate Professor of English  
B.A., 1963; M.A., 1965, San Francisco State College.
- Daniel L. Haytin (1971).....Assistant Professor of Sociology  
B.A., 1966; M.A., 1968; D.Crim., 1969, University of California, Berkeley.
- Richard H. Hendrickson (1970).....Associate Professor of English  
B.A., 1959, University of California, Santa Barbara; B.S., 1960, University of  
Wisconsin; Ph.D., 1963, University of Connecticut.
- Colin O. Hermans (1969).....Assistant Professor of Biology  
B.A., 1958, Pomona College; M.S., 1964; Ph.D., 1966, University of Wash-  
ington.
- Wyman W. Hicks (1968).....Associate 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.
- Arthur Hills (1969).....Assistant Professor of Music  
B.A., 1953, Cascade College; M.A., 1955, University of Portland.
- Vincent D. Hoagland, Jr. (1969).....Assistant Professor of Chemistry  
B.A., 1962, Wesleyan University; Ph.D., 1967, Florida State University.

† Sabbatical leave spring semester 1971-72.

## Faculty

- LeVell Holmes (1969).....Associate Professor of Afro-American Studies  
B.A., 1957; M.A., 1961, San Francisco State College.
- Robert E. Holmes (1965).....Associate Professor of Chemistry  
B.S., 1958, St. Mary's College; Ph.D., 1965, Oregon State University.
- John D. Hopkirk (1969).....Associate Professor of Biology  
B.A., 1957, Sacramento State College; M.A., 1962; Ph.D., 1967, University of California, Berkeley.
- Laurence J. Horowitz (1969).....Associate 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.
- Michael Howard (1970).....Assistant Professor of Art  
B.A., 1958, Emerson College; M.A. (Economics), 1961, University of Stockholm; M.A. (Film), 1966, University of California, Los Angeles.
- Leon M. Hunsaker (1969).....Associate Professor of Geography  
B.S., 1950, St. Louis University; M.S., 1955, Massachusetts Institute of Technology.
- Donald E. Isaac (1963).....Associate Professor of Biology  
B.A., 1949, Chico State College; M.A., 1953; Ph.D., 1967, University of California, Berkeley.
- George A. Jackson, Jr. (1970).....Associate Professor of Philosophy,  
Hutchins School of Liberal Studies  
B.S., 1946, New Mexico State University; M.S., 1948, University of Illinois; Ph.D., 1968, Claremont Graduate School.
- Robin C. Jackson (1970).....Associate Professor in Theatre Arts, Drama  
B.A., 1955; M.A., 1965, San Francisco State College.
- Bernd Jager (1969).....Associate Professor of Psychology  
B.A., 1962; M.A., 1963, San Francisco State College; Ph.D., Duquesne University.
- \* Velesta Jenkins (1969).....Assistant Professor of Afro-American Studies  
B.S., 1963, Central State College; M.A.T., 1967, San Francisco College for Women.
- Donald O. Johnson (1966).....Associate Professor of History  
B.A., 1952, University of Minnesota; M.A., 1957; Ph.D., 1960, Columbia University.
- William T. Johnson (1969).....Assistant Professor of Music  
B.A., 1964, Princeton University; M.A., 1966, University of California, Berkeley.
- George L. Johnston (1969).....Assistant 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.
- Frederick H. Jorgensen (1968).....Registrar  
B.A., 1961, California State College, Long Beach; M.A., 1967, University of New Mexico.
- 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.
- Jonathan L. Kamin (1968).....Assistant Professor of Sociology  
B.A., 1963, Brandeis University; M.A., 1965, Wesleyan University.

\* On leave 1971-72.

- †Bjorn Karlsen (1966)..... Professor of Education  
B.A., 1949, State Teachers College of Oslo, Norway; M.A., 1951, University of Nebraska; Ph.D., 1954, University of Minnesota.
- Robert A. Karlsrud (1970)..... Assistant Professor of History  
B.A., 1961, University of California, Berkeley; M.A., 1965, University of California, Los Angeles.
- Alexander F. Karolyi (1962)..... Head, Acquisitions Department  
B.A., 1926; S.J.D., 1930, University of Budapest; M.A.L.S., 1957, University of Michigan.
- Eli Katz (1970)..... Assistant Professor of American Ethnic Studies  
B.S.S., 1949, College of the City of New York; M.A., 1959; Ph.D., 1963, University of California, Los Angeles.
- Marvin L. Kientz (1967)..... Associate Professor of Chemistry  
B.A., 1958; M.A., 1959, Fresno State College; Ph.D., 1966, University of Western Ontario, Canada.
- Chris K. Kjeldsen (1966)..... Associate Professor of Biology  
B.A., 1960; M.S., 1962, University of Pacific; Ph.D., 1966, Oregon State University.
- Kathryn L. Klein (1971)..... Assistant 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)..... Assistant Professor of English  
B.A., 1951, University of California, Berkeley; M.A., 1962, San Francisco State College.
- John F. Kramer (1970)..... Associate 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)..... Associate Professor of Art  
B.A., 1941, University of Minnesota; Certificate, California School of Fine Arts;  
Certificate, Académie de la Grande Chaumière.
- †Bill Kwong (1970)..... Instructor in Psychology
- Albert A. Laferriere (1967)..... Assistant Professor of History  
B.A., 1956; M.A., 1958, Fresno State College.
- John D. Lawrence (1966)..... Professor of Education  
B.A., 1939, University of California, Los Angeles; M.A., 1945, Ed.D., 1961, University of Southern California.
- Hector H. Lee (1961)..... Professor of English  
B.A., 1936, University of Utah; M.A., 1938, University of California, Berkeley,  
Ph.D., 1947, University of New Mexico.
- William R. Lee (1969)..... Assistant Professor of English  
B.A., 1964; M.A., 1966, Wayne State University.
- Raymond G. Lemieux (1970)..... Assistant Professor of French  
B.A., 1958, Northeastern University; M.A., 1960, University of Iowa; Certificate, 1961, University of Paris; Ph.D., 1969, University of Iowa.
- Wingham John H. Liddel, Jr. (1971)..... Lecturer in Management  
B.A., 1954; M.A., 1967; M.B.A., 1967; Ph.D., 1969, University of California, Berkeley.

† On leave fall semester 1971-72.

## Faculty

- Howard Limoli (1966).....Assistant Professor of French  
B.A., 1954, Rutgers University; M.A., 1963, University of California, Berkeley.
- Han-sheng Lin (1969).....Associate Professor of History  
B.A., 1954, National Taiwan University; M.A., 1958, University of South Carolina; Ph.D., 1964, University of Pennsylvania.
- Ching L. Liu (1971).....Assistant Professor of Biology  
B.S., 1955, National Taiwan Normal University; M.S., 1964; Ph.D., 1970, University of Oklahoma.
- F. Russell Lockner (1969).....Assistant Professor of Biology  
B.S., 1963, University of Redlands; M.A., 1965, California State College, Los Angeles; Ph.D., 1968, University of Montana.
- Wallace M. Lowry (1969).....Assistant Professor of Management  
B.A., 1955, Stanford University; M.B.A., 1969, University of California, Berkeley.
- Frederick W. Luttmann (1970).....Assistant Professor of Mathematics  
B.A., 1961, Amherst College; M.S., 1963, Stanford University; Ph.D., 1967, University of Arizona.
- Robert E. Lynde (1969).....Assistant Professor of Health Sciences  
and Physical Education  
B.A., 1954; M.A., 1960, Sacramento State College; M.S., 1968; Ed.D., 1969, University of Oregon.
- Nancy E. Lyons (1971).....Lecturer in Dance  
B.A., 1966, University of California, Berkeley; M.A., 1968, Mills College.
- Duncan M. MacInnes (1970).....Assistant Professor of Education  
B.A., 1960, University of British Columbia; M.A., 1966, San Francisco State College.
- Gerd M. Mairandres (1970).....Instructor in Drama  
B.A., 1969; M.A., 1970, San Francisco State College.
- Antoinette O. Maleady (1968).....Catalog Librarian  
B.S., 1940, West Virginia Wesleyan; M.L.S., 1968, University of California, Berkeley.
- Jerry S. Mandel (1969).....Assistant Professor of Sociology  
B.A., 1955, Columbia University; M.A., 1969, University of California, Berkeley; Ph.D., 1970, University of California, Berkeley.
- §Robert B. Marberry (1963).....Head, Circulation Department  
B.A., 1934; B.S. in L.S., 1940, University of Illinois.
- Kenneth K. Marcus (1967).....Professor of Political Science  
B.A., 1952; M.A., 1953, University of Michigan; Ph.D., 1955, University of Illinois.
- Daniel W. Markwyn (1970).....Assistant Professor of History  
B.A., 1959, University of Colorado; M.A., 1967, San Jose State College; Ph.D., 1970, Cornell University.
- Donald D. Marshall (1966).....Associate Professor of Chemistry  
B.A., 1957, University of California; M.S., 1958, University of Nevada; Ph.D., 1965, Washington State University.
- Ernest A. Martinez (1969).....Assistant Professor of Mexican-American Studies  
B.A., 1963, New Mexico Highlands University; M.A., 1970, Sonoma State College.

§ Retired January 1, 1972.

- Marylu C. Mattson (1970).....Assistant 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.
- \*George E. McCabe (1961).....Professor of Education and Psychology  
B.A., 1941, University of California, M.A., 1952; Ed.D., 1953, Teachers Col-  
lege, Columbia University.
- William E. McCreary (1966).....Professor of Psychology, School of Expressive Arts  
B.A., 1951, Westminster College; M.A., 1955, Columbia University; Ph.D.,  
1962, University of Wisconsin.
- Stanley V. McDaniel (1966).....Assistant Professor of Philosophy  
B.A., 1953, University of California, Santa Barbara; M.A., 1964, University of  
California, Los Angeles.
- Thomas H. McGrath (1971).....President  
B.A., 1941 University of California, Santa Barbara; M.A., 1947 Claremont  
Graduate School. Licensed Psychologist.
- Peter J. D. Mellini (1970).....Assistant Professor of History  
B.A., 1962; M.A., 1965; Ph.D., 1971, Stanford University.
- Herminia Q. Menez (1970).....Associate Professor of American Ethnic Studies  
B.A., 1955, St. Scholastica's College; M.A., 1956, Dominican College.
- Edith P. Menrath (1964).....Assistant Professor of Psychology  
Higher School Certificate, Cambridge University; License-ès-Lettres, University  
of Paris, France.
- Charles H. Merrill (1969).....Associate Dean of Students—Counseling and  
Testing; Assistant Professor of Psychology  
B.S., 1961; M.S., 1962, East Texas State University; Ed.D., 1968, University  
of Florida. Licensed Psychologist.
- Louallen F. Miller (1971).....Assistant Professor of Political Science,  
Hutchins School of Liberal Studies  
B.A., 1963, Occidental College; M.A., 1968, University of California, Santa  
Barbara.
- Claude R. Minard, Jr. (1968).....Associate Professor of Geography  
B.S., 1953; M.S., 1954; Stanford University; Ph.D., 1971, University of Cali-  
fornia, Berkeley.
- Carroll V. Mjelde (1968).....Dean of Instructional Services and  
Continuing Education and Associate Professor of Education  
B.A., 1955; M.A., 1962; Ph.D., 1964, University of Washington.
- Gary W. Molitor (1970).....Instructor in Art  
B.A., 1964; M.A., 1965, San Francisco State College.
- Edward F. Mooney (1968).....Associate Professor of Philosophy  
B.A., 1962, Oberlin College; M.A., 1966; Ph.D., 1968, University of California,  
Santa Barbara.
- Jeanne L. Moore (1969).....Assistant Coordinator of the Hidden Talent Program  
Assistant Professor of Afro-American Studies  
B.A., 1947, Roosevelt College.
- William P. Morehouse (1967).....Associate Professor of Art  
B.F.A., 1955, San Francisco Art Institute; M.A., 1956, San Francisco State  
College.

\* On leave 1971-72.

## Faculty

- Edgar W. Morse (1970).....Assistant Professor of History,  
Hutchins School of Liberal Studies  
B.S., 1951, Illinois Institute of Technology; M.A., 1965, University of California, Berkeley.
- J. Anthony Mountain (1970).....Assistant Professor of English,  
Hutchins School of Liberal Studies  
B.A., 1961, Columbia University; M.A., 1966; Ph.D., 1970, University of Washington.
- Thomas C. Nelson (1969).....Assistant Professor of Mathematics  
B.S.E.E., 1961; M.S.E.E., 1963, Santa Clara University; Ph.D., 1969, Oregon State University.
- Ambrose R. Nichols, Jr. (1961).....Professor of Chemistry  
B.S., 1935, University of California; Ph.D., 1939, University of Wisconsin.
- \* Robert F. Nicholson (1967).....Assistant Professor of Sociology  
B.A., 1963; M.A., 1966, University of California, Berkeley.
- Marion L. Nielsen (1962).....Professor of German  
B.S., 1935, Utah State University; M.A., 1936, Stanford University; Ph.D., 1945, Stanford University.
- William A. Nighswonger (1966).....Associate Professor of Political Science  
B.A., 1951, Oklahoma City University; B.D., 1954, Southern Methodist University; M.A., 1965; Ph.D., 1966, The American University.
- Philip T. Northen (1970).....Assistant Professor of Biology  
B.A., 1963, Grinnell College; M.A., 1968; Ph.D., 1970, University of Wisconsin.
- Warren E. Olson (1962).....Provost, Hutchins School of Liberal Studies  
and Professor of Philosophy  
B.A., 1948, University of Denver; M.A., 1950, University of Washington; Ph.D., 1954, University of Minnesota.
- Myron W. Ort (1968).....Instructor in Art  
B.A., 1964, University of California, Berkeley; M.A., 1968, San Francisco State College.
- Dorothy Overly (1961).....Professor of English  
B.A., 1939; M.A., 1941, University of Alabama; Ph.D., 1949, University of Chicago.
- Elizabeth C. Owens (1970).....Instructor in English, School of Expressive Arts  
B.A., 1964; M.A., 1966, San Francisco State College.
- Cecile O. Pace (1969).....Assistant Professor of Political Science  
B.A., 1963, Vassar College.
- John T. Palmer (1967).....Dean of Students and Professor of Psychology  
B.S., 1943, University of Southern Mississippi; M.A., 1947, Teachers College, Columbia University; Ph.D., 1957, University of Southern California. Certified Psychologist.
- Don R. Patterson (1970).....Assistant Professor of English  
B.A., 1959, North Texas State College; M.A., 1965, North Texas State University.
- Richard W. Paul (1969).....Associate 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.

\* On leave 1971-72.



- William A. Payne (1971).....Associate Professor of Anthropology  
B.S.F.S., 1955, Georgetown University; M.A., 1960, Northwestern University;  
M.S., 1962, Columbia University.
- Leonard Pearson (1968).....Associate Professor of Psychology  
M.A., 1949; Ph.D., 1956, University of Chicago.
- David W. Peri (1969).....Assistant 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.
- Carl D. Peterson (1968).....Assistant Professor of Physical Education  
B.S., 1966; M.S., 1967; Ed.D., 1970, University of California, Los Angeles.
- Charles J. Phillips (1968).....Associate 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.
- \*Stanley J. Piascik (1970).....Assistant Professor of Management  
B.S., 1967; M.B.A., 1968, University of California, Berkeley.
- A. S. Pickett (1961).....College Librarian  
B.A., 1949; B.L.S., 1954, University of California.
- Thomas R. Plowright (1966).....Director, Student Health Service  
B.S., 1942, University of New Hampshire; M.D., 1946, University of Vermont.
- William H. Poe (1970).....Assistant 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).....Associate Professor of Physics  
B.S., 1957, University of Michigan; Ph.D., 1963, University of Wisconsin.
- Joseph H. Powell (1968).....Associate Professor of Biology  
B.S., 1959, Whitworth College; Ph.D., 1964, University of Washington.
- 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.
- Glenn W. Price (1967).....Professor of History  
B.A., 1940, La Verne College; A.M., 1950; Ph.D., 1966, University of Southern  
California.
- Deborah R. Priddy (1971).....Assistant 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 Studies  
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, Penn-  
sylvania State University.
- Charles F. Quibell (1970).....Assistant Professor of Biology  
B.A., 1958, Pomona College.
- Lenore S. Radtke (1962).....Head, Catalog Department  
B.A., 1947, University of California; M.S.L.S., 1962, Florida State University.

\* On leave 1971-72.

## Faculty

- Gerald W. Redwine (1964)..... Professor of Psychology  
B.A., 1950, Sacramento State College; M.A., 1952; Ph.D., 1959, University of Southern California. Certified Psychologist.
- Charles H. Rhinehart (1961)..... Associate Professor of Education  
B.A., 1948, San Jose State; M.A., 1955, Stanford University.
- Mary M. Rich (1967)..... Assistant Professor of English  
B.A., 1940, Skidmore College; M.A., 1942, Columbia University; Ph.D., 1948, University of Minnesota.
- Rueben T. Robbins (1971)..... Assistant Professor of Economics  
B.A., 1963, University of Colorado; M.A., 1968, Case-Western Reserve University.
- Violet B. Robinson (1971)..... Assistant Professor of Education  
B.A., 1953; M.A., 1958, San Francisco State College; Ed.D., 1969; Stanford University.
- John G. Rohrman, Jr. (1967)..... Associate Professor of Management  
B.A., 1961, Franklin & Marshall College; M.A.S., 1965, University of Illinois. C.P.A.
- Pablo J. Ronquillo (1968)..... Associate Professor of Spanish  
B.A., 1954; M.A., 1958, Tulane University; Ph.D., 1969, Louisiana State University.
- R. Thomas Rosin (1970)..... Assistant Professor of Anthropology  
B.A., 1960, Reed College; Ph.D., 1966, University of California, Berkeley.
- G. Edward Rudloff (1961)..... Professor of Health Science 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)..... Associate Professor of Psychology  
B.S., 1954; M.S., 1956, University of Wisconsin; Ed.D., 1967, University of Oregon.
- E. Gardner Rust (1967)..... Associate Professor of Music  
B.A., 1957, University of California, Los Angeles; M.A., 1964; Ph.D., 1970, University of California, Berkeley.
- Douglas S. Rustad (1969)..... Assistant Professor of Chemistry  
B.S., 1962; M.S., 1964, University of Washington; Ph.D., 1967, University of California, Berkeley.
- Ralph B. Rustigan (1965)..... Director of Placement  
B.S., 1946, University of New Mexico; M.A., 1958, San Francisco State College; Ed.D., 1965, Colorado State College.
- John R. Sandberg (1970)..... Assistant Professor of Art  
B.A., 1959; M.A., 1962, Yale University.
- Alan F. Sandy, Jr. (1971)..... Associate Professor of English  
B.A., 1954, Amherst College; Diplôme de langue, 1958, Sorbonne, Paris; M.A., 1961; Ph.D., 1965, University of California, Berkeley.
- \*Gene D. Schaumberg (1965)..... Associate Professor of Chemistry  
B.S., 1961, Pacific Lutheran University; Ph.D., 1965, Washington State University.
- Anatol I. Schlosser (1971)..... Assistant Professor of English  
B.A., 1958; M.A., 1962; Ph.D., 1970, New York University.

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- 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.
- Brian T. Shears (1970).....Associate Professor of Education  
B.A., 1958, University of Wales; M.A., 1960; Ph.D., 1969, University of Minnesota.
- Robert J. Sherman (1970).....Assistant Professor of Biology  
B.A., 1962, Coe College; Ph.D., 1968, Oregon State University.
- William M. Sherman (1969).....Professor of Drama  
B.F.A., 1949, Pratt Institute.
- Shirley K. Silver (1970).....Associate Professor of American Ethnic Studies  
B.A., 1949; Ph.D., 1966, University of California, Berkeley.
- Thalia Silverman (1969).....Assistant Professor of Education  
B.S., 1949; M.A., 1956, Northwestern University.
- Frederick Sion, Jr. (1971).....Assistant Professor of Afro-American Studies  
B.A., 1961, New Mexico Highlands University.
- Frank R. Siroky (1964).....Associate Professor of Psychology  
B.S., 1952, John Carroll University; M.A., 1954, Fordham University; Ph.D., 1964, Duquesne University.
- Harold R. Skinner (1965).....Coordinator, Audio-Visual Services  
and Associate Professor of Education  
B.A., 1949, Earlham College; M.S., 1958; Ed.S., 1960; Ed.D., 1963, Indiana University.
- Robert W. Slagle (1970).....Assistant Professor of Psychology  
B.S., 1963, University of New Mexico; Ph.D., 1968, University of California, Berkeley. Licensed Psychologist.
- David L. Sloss (1970).....Assistant Professor of Music  
B.A., 1962, Harvard University; M.A., 1968, Stanford University.
- John W. Smaby (1969).....Assistant Professor of Philosophy  
B.S., 1954; M.A., 1964; Ph.D., 1968, University of Minnesota.
- Robert A. Smith (1969).....Assistant Professor of Political Science  
B.A., 1962, Yale University; M.A., 1964, Ph.D., 1971, University of California, Berkeley.
- Larry A. Snyder (1971).....Professor of Music  
B.A., 1950, Whittier College; M.A., 1952, University of Rochester.
- Harold J. Soeters (1966).....Associate Dean of Students, Admissions and Records  
B.A.Ed., 1946, Albion State Normal School.
- Robert P. Sorani (1966).....Associate Professor of Physical Education  
B.S., 1958; M.S., 1959; Ph.D., 1967, University of Southern California.
- Eugene H. Soules (1965).....Associate Professor of English  
B.A., 1957; M.A., 1958, San Francisco State College; Ph.D., 1965, University of the Pacific.
- Garrison Sposito (1965).....Associate Professor of Physics  
B.S., 1961; M.S., 1963, University of Arizona; Ph.D., 1965, University of California, Berkeley.

## Faculty

- \*John R. Staude (1970).....Associate Professor of Sociology  
B.A., 1958, Georgetown University; M.A., 1959, University of Paris; Ph.D., 1963, University of California, Berkeley.
- John M. Steiner (1968).....Associate Professor of Sociology  
B.A., 1952, University of Melbourne; A.M., 1956, University of Missouri; Ph.D., 1967, University of Freiburg.
- Kenneth M. Stocking (1963).....Provost, School of Environmental Studies  
and Professor of Biology  
B.A., 1933; M.A., 1942, University of the Pacific; Ph.D., 1950, University of Southern California.
- Clarice S. Stoll (1970).....Assistant Professor of Sociology  
B.A., 1962, Douglass College; M.A., 1964, University of Wisconsin; Ph.D., 1967, Rutgers University.
- Jacqueline Strain (1970).....Associate 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.
- † Warren R. Tappin, Jr. (1963).....Associate Dean of Students  
B.A., 1940, Massachusetts State; M.Ed., 1947, Boston University; Ph.D., 1957, University of Washington.
- Robert W. Tellander (1971).....Assistant Professor of Sociology  
B.A., 1960, Princeton University; M.A., 1966, University of California, Berkeley.
- Philip O. Temko (1964).....Associate Professor of Philosophy  
B.A., M.A., 1950, Columbia University; Ph.D., 1968, Stanford University.
- Joseph S. Tenn (1970).....Assistant Professor of Physics  
B.S., 1962, Stanford University; M.S., 1966; Ph.D., 1970, University of Washington.
- David A. Thatcher (1969).....Assistant Professor of Education  
B.A., 1947, Swarthmore College; M.A., 1949, University of Pennsylvania; Ed.D., 1965, University of California, Berkeley.
- Nore F. Thiesfeld (1962).....Building and Planning Coordinator  
B.A., 1957, Fresno State College; Associate Member, American Institute of Planners.
- Hobart F. Thomas (1961).....Provost, School of Expressive Arts  
and Professor of Psychology  
B.A., 1947, Southern Methodist University; M.A., 1948; Ph.D., 1951, Stanford University. Certified Psychologist.
- Elaine Towns (1970).....Assistant Professor of American Ethnic Studies  
B.A., 1960; M.A., 1962, University of California, Los Angeles.
- Dale B. Trowbridge (1969).....Assistant Professor of Chemistry  
B.A., 1961, Whittier College; M.S., 1964; Ph.D., 1970, University of California, Berkeley.
- William R. Trumbo (1970).....Assistant Professor of Health Sciences  
and Physical Education  
B.A., 1961; M.A., 1962, Chapman College.

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† On leave.

- Ella M. Trussell (1965).....Associate Professor of Health Science  
and Physical Education  
B.A., 1950; M.A., 1952; Ed.D., 1966, University of California, Berkeley.
- Ann M. Tucker (1970).....Catalog Librarian  
B.A., 1968, Sonoma State College; M.L.S., 1970, University of California,  
Berkeley.
- Jerry L. Tucker (1966).....Associate Professor of Political Science  
B.A., 1962, Adams State College; M.A., 1965, The American University.
- 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).....Assistant Professor of Economics  
B.A., 1958, Sacramento State College.
- David W. Van Nuys (1971).....Assistant 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).....Assistant 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.
- Augustus O. Vidal (1971).....Assistant Professor of Music  
B.A., 1967, University of California, Los Angeles.
- Thomas R. Volk (1966).....Associate Professor of Mathematics  
B.A., 1961; M.A., 1963, San Francisco State College.
- Sommai Vongsuri (1967).....Associate Professor of Mathematics  
B.S., 1960; M.S., 1963; Ph.D., 1967, Oregon State University.
- Albert L. Wahrhaftig (1969).....Assistant Professor of Anthropology  
B.A., 1957, Stanford University; M.A., 1960, University of Chicago.
- Charles E. Wallace (1971).....Coordinator of Extension Services and  
Associate Professor of Education  
B.A., 1939, Whittier College; M.A., 1949; Ed.D., 1959, University of Southern  
California.
- Sandra D. Walton (1970).....Catalog Librarian  
B.A., 1961; M.L.S., 1963, University of California, Berkeley.
- Arthur L. Warmoth (1970).....Assistant Professor of Psychology  
B.A., 1959, Reed College; Ph.D., 1967, Brandeis University.
- Eva V. Washington (1966).....Professor of Education  
B.A., 1945, San Jose State College; M.A., 1956, Stanford University; Ed.D.,  
1962, University of California, Berkeley.
- Stephen D. Watrous (1968).....Associate Professor of History  
B.A., 1961; M.A., 1965, University of Wisconsin; Ph.D., 1970, University of  
Washington.
- D. Anthony White (1968).....Associate Professor of History  
B.A., 1958, Stanford University; M.B.A., 1961, University of California,  
Berkeley; Ph.D., 1968, University of California, Los Angeles.
- Katherine H. Wiley (1962).....Coordinator of Academic Advising and Assistant  
Professor of Psychology, School of Expressive Arts  
B.A., 1960, Los Angeles State College; M.A., 1966, San Francisco State College.
- Donald C. Wilkinson (1971).....Assistant Professor of Psychology  
B.A., 1968, University of Michigan.

## Faculty

- Lionel H. Williams (1969)..... Assistant Professor of English  
B.A., 1958; M.A., 1964, San Francisco State College.
- Janice L. Wilson (1969)..... Assistant Professor of English  
B.A., 1957, Stanford University; M.A., 1962; Ph.D., 1969, University of California, Berkeley.
- Bruce E. Woelfel (1969)..... Assistant Professor of Political Science  
B.A., 1953, Ohio State University; Master of City Planning, 1956, University of California, Berkeley.
- Patricia M. Wollter (1970)..... Periodicals Librarian  
B.A., 1966, San Francisco State College; M.L.S., 1967, 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.
- William H. Wright, III (1969)..... Assistant Professor of Geology  
B.A., 1965, Middlebury College; M.A., 1967, Indiana University; Ph.D., 1970, University of Illinois.
- Martha M. Yates (1968)..... Associate Professor of Physical Education  
B.S., 1960, University of North Carolina; M.A., 1963, San Jose State College; Ph.D., 1969, University of Wisconsin.
- Jean Ann Young (1965)..... Associate 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.
- Caroline H. Zainer (1967)..... Assistant Professor of English  
B.E., 1942, Northern Illinois State Teachers College; M.A., 1948, Northwestern University.
- David A. Ziblatt (1969)..... Associate Professor of Political Science  
B.A., 1959, Reed College; M.A., 1961; Ph.D., 1965, University of Oregon.
- Richard A. Zimmer (1971)..... Assistant 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, University of California, Los Angeles.

## PART-TIME FACULTY

- Mary S. Anderson (1969).....Lecturer in Art  
B.A., 1961, Smith College.
- Gerald Bol (1969).....Lecturer in Art  
B.F.A., 1962, San Francisco Art Institute; M.A., 1967, San Francisco State College.
- Elizabeth S. Bright (1968).....Lecturer in English  
B.A., 1933, New Mexico State University; M.A., 1959; Ph.D., 1967, University of California, Berkeley.
- Meg Broughton (1970).....Lecturer in Music  
B.A., 1953, Whitman College.
- Leo E. Christiansen (1971).....Lecturer in Music
- Albert J. Cognata (1971).....Lecturer in Music  
B.A., 1953; M.A., 1959, San Francisco State College.
- Anne W. P. Crowden (1971).....Lecturer in Music  
L.R.A.M., 1952, Royal Academy of Music, London.
- Dale E. Cutler (1971).....Lecturer in Music  
B.A., 1950, University of California, Berkeley.
- James M. Dalrymple (1971).....Lecturer in Music  
B.A., 1959; M.A., 1971, San Francisco State College.
- Richard L. Dieterle (1971).....Lecturer in Philosophy
- Helen D. Dunn (1970).....Lecturer in English  
B.A., 1962, Mount Mary College; M.A., 1967, Fordham University.
- Randal Elmore (1971).....Lecturer in Mathematics  
B.A., 1971, Sonoma State College.
- Philip F. Elwood (1967).....Lecturer in Music  
B.A., 1945, University of California, Berkeley.
- Mary L. Felstiner (1971).....Lecturer in History  
B.A., 1963, Radcliffe College; M.A., 1965, Columbia University; Ph.D., 1970, Stanford University.
- Diane F. Flindt (1971).....Assistant in English  
B.A., 1971, Sonoma State College.
- Mary T. Godwin (1971).....Assistant in English  
B.A., 1965, San Francisco State College.
- William H. Gray (1968).....Lecturer in Health Sciences and Physical Education  
B.A., 1960, University of California, Berkeley.
- George Gunter (1969).....Lecturer in Art  
B.A., 1953, San Jose State College; M.A., 1962, Peabody College for Teachers.
- Susan G. M. Gutting (1971).....Lecturer in Art  
B.A., 1966, University of California, Davis; M.A., 1969, Stanford University.
- Valerie A. Hardy (1971).....Lecturer in Art  
B.F.A., 1967; M.F.A., 1969, San Francisco Art Institute.
- Alice R. Holmes (1970).....Reference Librarian  
B.A., 1959, San Francisco State College; M.L.S., 1961, University of California, Los Angeles.
- Phyllis A. Holup (1971).....Lecturer in Art  
B.F.A., 1965, San Francisco Art Institute; M.F.A., 1971, Mills College.

## Part-Time Faculty

- Lygia A. Johnson (1970).....Lecturer in English  
B.A., 1946, Connecticut College; M.A., 1966, Cand. in Phil., 1970, University of California, Berkeley.
- Janice H. Kalbaugh (1971).....Lecturer in Psychology  
B.A., 1966; M.A., 1967, Sonoma State College.
- Sally Kell (1971).....Lecturer in Music  
B.A., 1957, Mills College.
- George A. Kovatch (1971).....Lecturer in Economics  
B.A., 1965, California State College, Long Beach.
- Herbert J. Kutchins (1970).....Lecturer in Sociology  
B.A., 1955, University of Chicago; M.S.W., 1970, University of California, Berkeley.
- Norma J. Lyman (1968).....Assistant Professor of Psychology  
B.A., 1965, Sonoma State College; M.S.W., 1967, University of California, Berkeley.
- Jeanne L. Martin (1971).....Lecturer in Political Science  
B.A., 1966, University of Michigan; M.A., 1968; Ph.D., 1971, Michigan State University.
- Jeremy J. Merrill (1971).....Lecturer in Music
- O. Virginia Mitchell (1971).....Assistant Professor of Education  
B.A., 1970; M.A., 1971, Sonoma State College.
- Paul J. Molinari (1970).....Lecturer in Psychology  
B.A., 1968; M.A., 1969, Sonoma State College.
- Walter W. Oster (1968).....Lecturer in Music  
San Francisco Conservatory of Music.
- Charles A. Pease (1967).....Lecturer in Physical Education  
B.A., 1963, University of California, Berkeley.
- Karen D. Petersen (1971).....Assistant in English  
B.A., 1965, University of California, Berkeley.
- Robert E. Porter (1971).....Lecturer in Physics  
B.S., 1971, Sonoma State College.
- Thomas R. Porter (1968).....Associate Professor of Biology  
B.A., 1934; M.A., 1936, University of Nebraska; Ph.D., 1938, University of California, Berkeley.
- Margaretta B. Redwine (1971).....Lecturer in Music  
B.A., 1949, University of California, Berkeley; M.A., 1953, Sacramento State College.
- Lorna F. Romano (1971).....Lecturer in Dance  
B.A., 1971, Mills College.
- Sandra A. Roos (1971).....Lecturer in Art  
B.A., 1964, San Jose State College; M.A., 1970, University of California, Berkeley.
- 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.
- Frank Scalercio, Jr. (1970).....Lecturer in Health Sciences and  
Physical Education



- Norma H. Schlesinger (1971).....Lecturer in Art  
B.A., 1952, Vassar College; M.A., 1968, New York University.
- Yola E. Schlosser (1971).....Lecturer in French  
B.A., 1964, Barnard College; M.A., 1969, Columbia University Teachers College.
- Barbara J. Schneiderhan (1970).....Lecturer in Health Sciences and Physical Education  
B.A., 1970, San Fernando Valley State College.
- William L. Sheets (1971).....Lecturer in Art  
B.F.A., 1964; M.F.A., 1966, San Francisco Art Institute.
- Lynn W. Shelton (1970).....Lecturer in Art  
B.S.E.E., 1963, University of Colorado; M.A., 1968, Stanford University.
- Marie B. Smith (1971).....Lecturer in Biology  
B.A., 1966, San Francisco State College.
- Dorothy Steinmetz (1971).....Lecturer in Foreign Languages  
B.A., 1959; M.A., 1960, Middlebury College.
- Jean Stevens (1971).....Lecturer in Music  
B.M., 1956, University of Southern California.
- Richard A. Stewart (1971).....Lecturer in Management  
B.S., 1951, Mississippi Southern College; M.S., 1956, Virginia Polytechnic Institute and State University.
- Richard D. Stoops (1970).....Lecturer in Philosophy  
B.A., 1965; M.A., 1965, Brown University.
- Llewelyn A. Swan (1970).....Lecturer in Sociology  
LL.B., 1966, Blackstone School of Law; B.Sc., 1967, Oakwood College; M.A., 1968, Columbia University.
- Sherry L. Tuttle (1970).....Lecturer in Health Sciences and Physical Education  
B.A., 1969, Sonoma State College.
- Walter R. Vennum (1971).....Lecturer in Geology  
B.A., 1964, University of Montana; Ph.D., 1971, Stanford University.
- Lawrence T. Vogt (1971).....Lecturer in Music
- Shane Weare (1971).....Lecturer in Art  
A.R.C.A., 1963, Royal College of Art, London.
- Melvin D. Weitsman (1971).....Lecturer in Psychology
- Carl S. Werthman (1971).....Lecturer in Sociology  
B.A., 1960, University of Chicago; M.A., 1963; Ph.D., 1968, University of California, Berkeley.

## VISITING TEACHERS (1971-72)

- Keith E. Dwyer (1971).....Lecturer in Economics  
B.S., 1952, Arizona State University.
- James E. LeBoeuf (1971).....Lecturer in Economics





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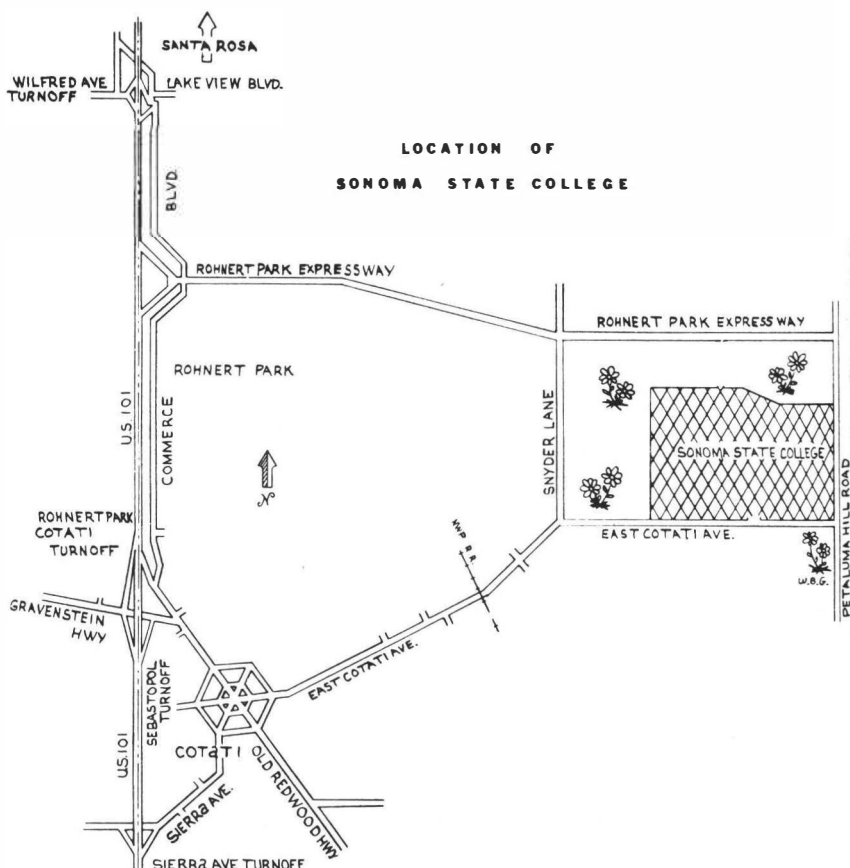
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