

ACADEMIC PROGRAMS • UNIVERSITY CURRICULA

Course Numbering System

0-99 No academic credit/prebaccalaureate course.

100-299 Lower division.

300-499 Upper division/may be acceptable for graduate program.

For more information, please see the Provisional Unclassified Graduate Status for Senior Students in the Degree Requirements section.

500-599 Graduate courses.

Academic Department Abbreviations and Course Prefixes

AMCS	American Multicultural Studies
ANTH	Anthropology
ArH and ArtS	Art History and Art Studio
ASTR	Astronomy
BIOL	Biology
BUS	Business Administration
CALS	Chicano and Latino Studies
CHEM	Chemistry
COMS	Communication Studies
CS	Computer Science
COUN	Counseling
CCJS	Criminology and Criminal Justice
EDCT	Education: Curriculum and Teaching
EDEC	Education: Early Childhood Education
EDEL	Education: Leadership
EDMS	Education: Multiple Subject
EDRL	Education: Reading and Language
EDSS	Education: Single Subject
EDSP	Education: Special Education
ECON	Economics
EDUC	Education

ENGL	English
ENSP	Environmental Studies and Planning
ES	Engineering Science
FILM	Film Studies
FR	French
GEOG	Geography
GEOL	Geology
GER	German
GERN	Gerontology
GLBL	Global Studies
HD	Human Development
HEBR	Hebrew
HIST	History
ITDS	Special Major/Interdisciplinary Studies
JWST	Jewish Studies
LIBS	Hutchins School of Liberal Studies
KIN	Kinesiology
LING	Linguistics
MATH	Mathematics
MSCES	Computer and Engineering Science (M.S.)
MUS	Music
NAMS	Native American Studies
NURS	Nursing
OD	Organization Development
PHIL	Philosophy
PHYS	Physics
POLS	Political Science
PORT	Portuguese
PSY	Psychology
SOCI	Sociology
SPAN	Spanish
THAR	Theatre Arts
UNIV	University Courses
WGS	Women's and Gender Studies

AMERICAN MULTICULTURAL STUDIES

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Programs Offered

Bachelor of Arts in American Multicultural Studies

Minor in American Multicultural Studies

American Multicultural Studies (AMCS) is devoted to the interdisciplinary study of ethnic and racial minority groups in the United States. A variety of courses focus on the historical, sociological, cultural, and ideological aspects of American ethnicity.

The program is designed to equip students with the knowledge and skills they will need to meet the ongoing challenge of living in a culturally and ethnically diverse society. AMCS students receive basic instruction in how to recognize and engage the underlying assumptions that guide our thinking about race, ethnicity, and multiculturalism. They will explore arts and literature, language, and philosophy. Additionally, they will examine historical, political, social, educational, economic, and cultural developments that affect ethnic and racial minority communities in the United States.

Through a critical study of the significance of the constructions of ethnicity and race in shaping social relationships in the United States, AMCS students are introduced to modes of intercultural learning and understanding that help them to develop the knowledge and sensitivities needed for the enhancement of multicultural communication. By examining the arts, literature, language, and philosophy of ethnic groups, students learn to appreciate the moral and aesthetic values of others. Moreover, through an interdisciplinary approach, they come to a clearer view of the historical importance of ethnic identity in America and to a deeper understanding of the impact ethnic groups have had on America generally, and on social policy, practice, and institutions.

Careers in American Multicultural Studies

AMCS offers a pathway to the teacher credentialing program. Students must begin this path during their first or second semester of their freshman year and consult with a faculty advisor in order to ensure that the program requirements can be fulfilled in the appropriate time frame. The faculty advisor to this pathway coordinates with the School of Education and provides guidance to the students so they are prepared and qualified to apply to the teacher credential program after they finish their AMCS degree. They will have the preparation needed to instruct and mentor an increasingly diverse student population.

The major prepares individuals to function effectively in the fields of education, personnel administration, business, law, human resources, public health, public relations, social services, and environmental planning. It provides a sound foundation for graduate work in many traditional disciplines and in emerging multidisciplinary fields of inquiry. The Department of American Multicultural Studies, through its major and minor, has the following goals:

- To equip students with the knowledge, skills, and sensitivity to function effectively in a culturally diverse society;
- To provide knowledge of the contributions that ethnic and racial minorities have made to American society and culture;
- To make students sensitive and aware of the problems and issues facing ethnic and racial minorities;
- To develop within students an appreciation of the richness and diversity of ethnic arts and humanities;
- To develop students' skills in research methods, computer applications, and basic social statistics, thereby enabling students to analyze the problems and issues facing ethnic and racial minorities;
- To develop students' skills in communication, particularly in intercultural settings, and to demonstrate the application of these skills as tools in research, in pedagogy, and in real-life situations;
- To develop a diverse pool of teachers to meet the needs of an increasingly multicultural student population;
- To provide students with research, community internship, and editing/teaching facilitation opportunities focused on ethnic studies, multicultural education, and multicultural studies; and
- To provide the expertise in areas that will allow students to pursue professional and graduate training so they can serve diverse communities, act as a bridge between different cultural groups, and affect constructive social change.

Bachelor of Arts in American Multicultural Studies

Admission into the Major

Each student majoring in AMCS is assigned a faculty advisor and consults with the advisor on progress toward the degree. Upon acceptance into the major, a transfer student's records will be reviewed to articulate the courses that are equivalent to those offered within AMCS, CALS, or NAMS at Sonoma State University. A maximum of ten lower-division units may be transferred toward the AMCS major. Upper-division courses from four-year institutions may be transferred above and beyond the ten units of lower-division transfer toward the AMCS major, based on advisor approval. Students should use www.assist.org to view official articulation agreements between SSU and other California colleges.

Degree Requirements	Units
General education	51
Major core requirements	17
Major electives	19
General electives	33
Total units needed for graduation	120

Students graduating with a B.A. in American Multicultural Studies must take a minimum of 36 units within AMCS or supporting courses from CALS, NAMS, or related course work in other departments in order to fulfill the requirements of the major. The majority of the courses must be fulfilled within AMCS. Please see the course catalog description for any prerequisites and fulfillment requirements.

Major Core Requirements

Complete the Following 17 Units:

AMCS 210 Ethnic Groups in America	4
AMCS 255 Ethnicity in the Humanities	3
AMCS 350 Ethics, Values, and Multiculturalism	3
AMCS 395 Community Involvement Program (CIP)	3
AMCS 480 Research and Methodology	4
Total Units In the Major Core	17
Total Elective Units	19
Total Major	36

CIP/Service Learning

Students are required to complete at least 3 units of credit by being involved in a Community Involvement Program (CIP) or service-learning opportunity. Departmental CIP advisors can provide information to students about service-learning opportunities. Departmental CIP policy is as follows:

1. Students will do 30 hours of community service per unit received. Students may count a maximum of 4 units of CIP credit toward the AMCS major.
2. CIP advisors will request that students get a letter (on official letterhead) from their supervisors indicating their duties and the amount of time worked.

3. Students will submit a journal or a paper, two double-spaced pages per unit of CIP credit received, describing their experiences as a CIP volunteer.
4. Students are expected to keep a log of the dates and times they worked.
5. CIP advisor can give additional assignments if necessary.

Major Electives and Repeated Courses

Any course within AMCS may serve as an elective course. Students may count one class (up to 4 units) of AMCS 399: Student Instructed Course for major elective credit. Students may repeat courses such as AMCS 470 and AMCS 476 for major elective credit provided that the subject matter varies. Students should check with their advisors or the department chair if they have questions.

Optional Courses in Related Fields and Departments

A maximum of three classes (up to 12 units) may come from outside AMCS to fulfill the unit requirement of the major. These courses may be taken from CALS, NAMS, WGS, or other departments and programs at Sonoma State University upon consent of the faculty major advisor. Courses in CALS, NAMS, and other academic programs and departments may be considered for elective credit for the degree upon consent of the major advisor, especially for those students pursuing a double major.

Lower-Division Units

A maximum of ten lower-division units may be used toward the AMCS major.

Grading Minimums

Students must earn a grade of C- or above to get AMCS major credit. All courses with grades below C- must be retaken in order to be eligible for major credit. Courses must be taken for a grade in order to be eligible for major credit. Courses for major credit may not be taken CR/NC.

Sample Four-Year Program for Bachelor of Arts in AMCS

FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (GE A2) (3)	AMCS 255 (GE C4) (3)
PHIL 101 (GE A3) (3)	AMCS 200 (GE A1) (3)
Elective (GE B1,C1,C2) (9)	Electives (GE B4, D2, D3) (9)
SOPHOMORE YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
AMCS 210 (GE D1) (4)	Elective (GE B3) (3)
Elective (GE B2) (3)	Elective (GE D4) (3)
Electives (8)	Electives (GE) (9)
JUNIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
AMCS Elective (4)	AMCS 480 (4)
AMCS 350 (C3) (3)	AMCS Electives (8)
Electives (GE D5, E) (6)	Elective (3)
Electives (2)	
SENIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
AMCS 395 (3)	AMCS Elective (4)
Electives (12)	Electives (11)
TOTAL SEMESTER UNITS:: 120	

Integrated Program

Bachelor of Arts / Teaching Certification in AMCS

For admission into the program, please see requirements for admission into the major.

Degree Requirements	Units
General education	51
Major requirements	36
Education classes	33
Total units needed for graduation	120

The Integrated B.A./Credential Program is very unit-intensive. This program may only be completed by students who begin the program during their first or second semester of their freshman year. Students are required to consult with a faculty advisor during their freshman year in order to ensure that the program requirements can be fulfilled in the appropriate time frame. Students must also pass the CBEST/CSET exam in order to gain admission to the credential program.

Sample Four-Year Program for Multiple Subject Waiver/Certificate Program

FRESHMAN YEAR:: 33 Units	
<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (3) (GE A2)	AMCS 255 (3) (GE C4) (MAJ)
MATH 150 (3) (GE B4)	PHIL 101 (3) (GE A3)
AMCS 210 (4) (GE D1) (MAJ)	EDUC 250 (3)
BIOL 110 (4) (GE B2)	LING 200 (3) (GE D5)
GEOL 107 (3) (GE B1)	CHEM 107 (3)
	EDUC 295 or equivalent (1) (MAJ)
SUMMER SESSION: Study for CBEST exam	
SOPHOMORE YEAR:: 33 Units	
<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
Students apply for admission to credential program	
AMCS 200 (3) (GE A1) (MAJ)	POLS 200 (3) (GE D4)
MATH 300A (3)	AMCS 350 (3) (GE C3) (MAJ)
HIST 201 (3) (GE D2)	HIST 252 (3)
HIST 251 (3) (GE D3)	AMCS 460 (4) (MAJ)
THAR 101 (3)	CALS 366 (3) (MAJ)
EDUC 295 or AMCS 395 (2) (MAJ)	
JUNIOR YEAR:: 32 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (17 Units)</i>
ANY AMCS 300-level COURSE (3 or 4)	AMCS 445 (3) (MAJ)
MATH 300B (3)	AMCS 480 (4) (MAJ)
KINS 400 (3)	EDMS 420 (3) (GE E)
EDMS 470 (3) (MAJ)	EDUC 417 (3) (GE D1)
AMCS 360 (3) (GE C2) (MAJ)	AMCS 431 (4) (MAJ)
SENIOR YEAR:: 34 Units	
<i>Fall Semester (17 Units)</i>	<i>Spring Semester (17 Units)</i>
ART 101 or 202 (3)	EDMS 464 (2)
EDMS 463 (3)	EDMS 475 (3)
EDMS 411 (3)	EDMS 482F (10)
EDMS 474 (3)	EDMS 482S (2)
EDMS 471 (2)	
EDMS 476F (3)	
TOTAL UNITS FOR BA AND CREDENTIAL:: 131-132	

Notes

1. Students must take the CBEST prior to the beginning of the junior year.
2. Students need to apply for admission to the credential program during November of the sophomore year.

3. Once students enroll in the credential program, they must have an education advisor.

Minor in American Multicultural Studies

Students must complete 20 units to fulfill requirements for a minor in American Multicultural Studies. Courses graded CR/NC are not applicable to minors awarded by the AMCS Department. Students must receive grades of C- or better to receive minor credit for courses.

Core requirements:

AMCS 210 Ethnic Groups in America	4
AMCS 255 Ethnicity in the Humanities	3
AMCS 350 Ethics, Values, and Multiculturalism	3

Total Units In the Minor Core **10**

Minor Electives **10**

Total Units In the Minor **20**

ANTHROPOLOGY

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Programs Offered

Bachelor of Arts in Anthropology

Master of Arts in Cultural Resources Management

Minor in Anthropology

Special Emphasis B.A. in Anthropology

Of all the human sciences, anthropology is the broadest and most holistic. Anthropologists study how human beings have come to be as they are, a physically distinct species, communicating through language, adapted to every habitat on earth, and living an amazing variety of lives. As anthropologists have become increasingly engaged with the contemporary world, they have led in the development of a global focus on how culturally different peoples interact and how humans change their customary ways of life.

Anthropology consists of four subfields:

- Biological Anthropology deals with the evolution of the human body, mind, and behavior as inferred through study of fossils and human remains and comparisons with behavior of other primate species.
- Archaeology examines our past ways of life through the interpretation of material remains, written records, and oral traditions.
- Cultural Anthropology explores the diversity of existing human ways of life, how they work, how they change, and how they interrelate in the modern world.
- Linguistic Anthropology examines the structure and diversity of language and related human communication systems, and how language plays a key role in culture and society.

In addition to the four traditional subfields, some have suggested that Applied Anthropology constitutes a distinct subfield. Applied Anthropology emphasizes how the theories, techniques, and methods of anthropology can be employed to understand and address problems in real world situations.

For the members of the Sonoma State University anthropology faculty, research and teaching are inseparable. The Anthropology Department encourages both graduate and undergraduate students to meet professional standards of achievement in their work and research. The faculty assists students in developing and executing individual research projects. Students often present the results of their work in professional meetings, juried research publications, and public documents.

Through training in anthropology, students learn of many different cultures throughout the world, how they developed, the significance of their differences, and how they change. Students are thus equipped with a broad perspective for viewing both themselves and others.

Careers in Anthropology

Inevitably, students of anthropology face being asked what they can do with their degrees. For professional anthropologists, many of whom are not academics in universities and research institutions, opportunities for employment in government, in the business world, in education, and in social service are surprisingly diverse. For example:

- Cultural anthropologists are employed in a wide range of settings including government agencies from the local to national levels, international organizations such as the World Bank, non-governmental agencies, private industry, academia, and others. They work on issues including economic development, natural resource management, tourism, environmental preservation, globalization, and many others.
- Archaeologists, while uncovering prehistoric cultivation systems, have suggested how techniques from the past may be re-employed in the present to achieve sustainable agricultural systems. Archaeologists are employed by a host of federal and state agencies charged with locating and preserving sites that contain information about our own prehistoric and historic past.
- Biological anthropologists work in a variety of settings, including medical schools (as anatomists), medical research facilities (as medical geneticists and physiologists), in cultural resources management (as osteologists), in crime laboratories (as forensic anthropologists and expert witnesses), and in zoos and nature conservancies (as keepers and students of primates).

- Linguistic anthropologists are active and helpful in the design, evaluation, and implementation of curricula for teaching languages, whether to linguistic minorities who do not speak dominant languages or to those whose linguistic capacities differ. In Nicaragua, the emergence of a new sign language helps us to understand how innate human predispositions to acquire language combine with social and cultural factors to produce a new sign language used by deaf Nicaraguans.
- Applied anthropologists work for government agencies such as the National Park Service, where their work gives voice to living peoples linked to the parks by tradition, deep historical attachment, subsistence use, or other aspects of their culture; others work for the National Marine Fisheries Service, where they assess the impacts of regulatory policies on fishing communities. Outside government, they work for private firms as in-house experts on social issues of the work place. Cultural anthropologists in many settings contribute to formulating policies, conducting research, and consulting with stakeholder groups.

At a more general level, students of anthropology acquire skill in the formulation of both theoretical and practical questions regarding human life, in collecting and organizing data on many levels of human biology and behavior, and in constructing appropriate interpretations and generalizations based on well thought out procedures. The combination of knowledge about human ways of life and training in analytic skills affords experiences that are crucial to any field dealing with human society and culture. This perspective is invaluable in preparing students for careers either in research professions or in vocations involving human services or planned change. Some of these are cultural resources management, environmental planning, nursing, teaching, public health administration, business, public relations, law, community development, and international service.

The bachelor of arts in anthropology provides a balanced grounding in the theoretical approaches and the body of knowledge central to the discipline of anthropology. The general major may be modified through a special emphasis in the anthropology major, which provides students with an opportunity to design an individualized course of study emphasizing a particular subfield of anthropology. The minor in anthropology recognizes basic training in anthropology as an adjunct to a major in other subjects.

The department also offers a master of arts degree in cultural resources management (CRM). This is a professional field that involves the identification, evaluation, and preservation of cultural resources within legal and planning contexts. The primary objective of the master's program is to produce professionals competent in research design and data collection and analysis, as well as the legal mandates of North American CRM. Program graduates work as historic preservation specialists, environmental planners, and archaeologists for government agencies and as private consultants.

Anthropology Department Resources

Anthropological Studies Center

The department's Anthropological Studies Center (ASC) provides students with the opportunity to participate in prehistoric and historical archaeology, geoarchaeology, the conservation and analysis of archaeological materials, local history, and public outreach in the context of grant and contract-aided research projects. The Center has more than 5,000 square feet of archaeological laboratory and curation facilities and is supported by a professional staff. Internships are offered annually.

Anthropology Laboratory

The department's anthropology laboratory has a computer configured for linguistic applications, including the analysis and transcription of audio and video data. In addition, the department's human skeletal material and fossil cast collections (which include cranial and post-cranial material) are also housed in the anthropology lab and are regularly used in biological anthropology courses. This lab is often used for methods courses.

Other resources include an active Anthropology Club, an anthropology lounge and library, and computer services.

Anthropology Scholarships

The David Fredrickson Research Grant is a competitive award funded by the staff of the Anthropological Studies Center and is offered annually to graduate students in Cultural Resources Management. Contact the ASC for details. The University offers another anthropology scholarship, the Conni Miller Memorial Scholarship. ASC also funds an annual scholarship in Cultural Resources Management. Contact the Scholarship Office for information.

Bachelor of Arts in Anthropology

Degree Requirements	Units
General education	51
Major core requirements	37
Major electives	3
General electives	29
Total units needed for graduation	120

Note: A maximum of 12 transfer units in lower-division courses can be used to complete the 40-unit anthropology major options and advisory plans.

** Students must earn a C- or better in any course applied to the major.*

Major Core Requirements

Complete the following four introductory courses. The introductory course should be completed prior to enrolling in the respective upper division subfield course.

ANTH 200 Introduction to Linguistic Anthropology	3
ANTH 201 Introduction to Biological Anthropology	3
ANTH 202 Introduction to Archaeology	3
ANTH 203 Introduction to Cultural Anthropology	3

Complete the following synthesis courses during the first year of upper-division instruction:

ANTH 300 Nature, Culture, and Theory: The Growth of Anthropology	4
ANTH 342 Organization of Societies	4

Complete one course from each of the four subfields of anthropology as listed below. At least one subfield course must be a methods course and at least one must not be a methods course. The respective introductory course listed above should be completed prior to enrolling in an upper division course.

Complete one of the following courses in Biological Anthropology*:

ANTH 301 Human Fossils and Evolution	4
ANTH 302 Biological Basis of Sex Differences	4
ANTH 305 Topics in Biological Anthropology	4
ANTH 412 Human Osteology	4‡
ANTH 414 Primate Behavior Laboratory	4‡
ANTH 415 Forensic Anthropology Methods	4‡

Complete one of the following courses in Archaeology*:

ANTH 322 Historical Archaeology	4
ANTH 325 World Prehistory	4
ANTH 326 Topics in Archaeology	4
ANTH 327 Archaeology of North America	4
ANTH 392 Research in California Prehistory	4
ANTH 420/421 Archaeology Methods: Lecture	3
and Archaeology Methods: Laboratory	1‡

Complete one of the following courses in Cultural Anthropology*:

ANTH 345 Nature and Society: Topics in Anthropology and the Environment	4
ANTH 352 Global Issues	4
ANTH 354 Quest for the Other: Tourism and Culture	4
ANTH 358 Topics in Sociocultural Anthropology	4
ANTH 451 Applied Ethnographic Methods	4‡
ANTH 454 Ethnographic Field School	4‡

Complete one of the following courses in Linguistic Anthropology*:

ANTH 380 Language, Culture, and Society	4
ANTH 382 Language Change	4
ANTH 383 Language in Sociopolitical Context	4
ANTH 384 Topics in Linguistic Anthropology	4
ANTH 386 Sign Languages and Signing Communities	4
ANTH 480 Studies of Language Use	4‡

Complete the following course the spring semester prior to graduation:

ANTH 491 Senior Seminar	1
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Total Units In Major Core 37

*At least one such course offered each semester.

‡ Methods Course

Major Electives

To complete the 40-unit requirement for the major, students must choose the remaining units from other anthropology courses. Anthropology units in internship and the community involvement program may be included.

Total Units In Major Electives 3

Total Units In the Major 40

Sample Four-Year Program for Bachelor of Arts in Anthropology

In this sample study plan, we either recommend specific general education courses or suggest select courses. In the major we require an upper-division (u.d.) course in each of the distinct subfields of anthropology, which are archaeology (AR), biological anthropology (BA), linguistic anthropology (LA), and cultural anthropology (CA). Specific offerings vary each semester; some occur on alternate years. This sequence and selection of specific courses are suggestive; please see your advisor each semester.

FRESHMAN YEAR:: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
GE (A2) (3)	GE (A3) (3)
GE (B3) (4)	GE (D3) (3)
GE (C1) (3)	ANTH 201 (B2) (3)
ANTH 203 (D1) (3)	University Elective (4)
University Elective (3)	University Elective (3)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
ANTH 202 (3)	ANTH 200 (3)
GE (B1) (3)	ANTH 341 (D2) (3)
GE (B4) (4)	GE (D4) (3)
GE (C2) (3-4)	GE (C3) (3)
GE (D5) (3)	University Elective (4)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ANTH 300 (4)	ANTH 342 (4)
U.D. ANTH AR/BA/LA/CA (4)	U.D. ANTH AR/BA/LA/CA (4)
U.D. ANTH AR/BA/LA/CA (4)	U.D. ANTH AR/BA/LA/CA (4)
U.D. GE (3)	U.D. GE (3)

SENIOR YEAR:: Minimum of 29 Units

<i>Fall Semester (15-23 Units)</i>	<i>Spring Semester (14-16 Units)</i>
U.D. GE (3-4)	ANTH Elective (4)
ANTH Electives (4)	ANTH Elective (4)
ANTH Special Studies (1-4)	ANTH Elective (4)
ANTH Internship (1-3)	ANTH 491 (1)
University Elective (3-4)	ANTH Special Studies/Internship (1-2)
University Elective (3)	

TOTAL UNITS:: 120

Bachelor of Arts in Anthropology with a Special Emphasis

Degree Requirements	Units
General education	51
Major core requirements	19
Special emphasis courses	12-18
Supporting courses	3-9
General electives	38-53
Total units needed for graduation	120

The special emphasis B.A. in anthropology is designed for students whose academic and/or professional aims are not satisfied by the department's existing degree program. The purpose of the special emphasis major is to provide students with an opportunity to design, in consultation with an advisor, an individualized course of study emphasizing a particular subfield of anthropology, leading to a bachelor of arts degree. In this respect, the program provides students with the option to pursue special intellectual directions in anthropology and to respond to career and employment potentialities.

For example, such directions include linguistic anthropology, applied economic and ecological anthropology, prehistory, forensic anthropology, human biology, and primate behavior. The special emphasis major consists of 40 units selected from three course areas: 19 units in core courses, 12 to 18 units in special emphasis courses, and 3 to 9 units in supporting courses. All courses are selected in consultation with and approved by a faculty advisor.

Procedures

Students should carefully review their reasons for pursuing the special emphasis major, identify a special interest, and make a tentative selection of courses (application forms are available from the department office). Students should then select appropriate advisors, who will review the proposed program. Upon approval by the advisor, the program will be submitted to the department for action. Special Emphasis Proposals must be submitted to the department for approval prior to the student's senior year. Consultation with the faculty advisor is mandatory. Any changes to an authorized course of study must meet with the advisor's approval.

Course Requirements

Requirements consist of:

- Core courses;
- Special emphasis courses within anthropology; and
- Supporting courses from outside anthropology.

Core Courses (15 Units)

Two of the Following Introductory Courses: (6 Units)

ANTH 200 Introduction to Linguistic Anthropology	3
ANTH 201 Introduction to Biological Anthropology	3
ANTH 202 Introduction to Archaeology	3
ANTH 203 Introduction to Cultural Anthropology	3

History and Theory (4 units)

ANTH 300 Nature, Culture, and Theory: The Growth of Anthropology	4
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Cultural Analysis and Theory (4 units)

ANTH 342 Organization of Societies	4
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Senior Seminar (1 unit)

ANTH 491 Senior Seminar	1
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Special Emphasis Courses (12 Units Minimum)

The special emphasis component of the anthropology major must include a minimum of 12 units of special emphasis anthropology courses.

Supporting Courses (3 Units Minimum)

The supporting course component of the anthropology major must include a minimum of 3 units of courses taken outside the major.

Minor in Anthropology

The anthropology minor consists of 20 units chosen by the student in consultation with a faculty advisor. Students must earn a C- or better in any course applied to the minor.

Master of Arts in Cultural Resources Management

The master of arts in Cultural Resources Management (CRM) involves the identification, evaluation, and preservation of cultural resources, as mandated by cultural resources legislation and guided by scientific standards within the planning process. A goal of the master's program in Cultural Resources Management is to produce professionals who are competent in the methods and techniques appropriate for filling cultural resources management and related positions, and who have the theoretical background necessary for research design, and data collection and analysis.

Persons with an M.A. in CRM will be qualified to hold positions within the United States and its territories. Some individuals will also be qualified to serve outside of the United States in an advisory capacity in establishing and managing cultural resources management programs within environmental protection and preservation contexts of other nations.

The CRM program emphasizes:

1. Experience in developing projects and programs in cultural resources management;
2. Experience in conducting analyses of archaeological, osteological, linguistic, and sociocultural data for purposes of assisting public and private sectors in the implementation of environmental protection and historic preservation legislation;
3. Training in the professional traditions of inquiry within anthropology and history to enable the student to assess the research significance of archaeological and ethnohistoric resources;
4. Experience with anthropological techniques of field and laboratory analysis, and archival and museum preparation; and

5. Experience with existing cultural resources management data-keeping facilities.

Students in the program, under the supervision of a primary faculty advisor, develop a plan of study and thesis project that reflects their special interest in cultural resources management. In addition, students are encouraged to present the results of their work and research in professional meetings, research publications, and public documents.

Facilities and Faculty

The department's Anthropological Studies Center houses an archaeology laboratory and a cultural resources management facility. ASC maintains collections of artifacts, archaeological site records and maps, photographs, manuscripts and tapes, and a specialized research library. The Anthropological Studies Center website can be found at www.sonoma.edu/projects/asc/. The Northwest Information Center, an adjunct of the State Office of Historic Preservation, manages historical records, resources, reports, and maps; supplies historical resources information to the private and public sectors; and compiles and provides a referral list of qualified historical resources consultants. In addition to archaeologists and other anthropologists, participating faculty in the CRM program include historians, biologists, geographers, soil scientists, and geologists.

Requirements for the Degree

The design of the course of study as a 2 and a 1/2-year program presumes that students are full-time and not working. Experience with the program so far indicates that working students cannot successfully carry full graduate loads; consequently, it takes three years or more for working students to complete our program of study. Departmental policy stipulates that no more than 10 units of the 30 unit program may be revalidated beyond the 7-year limit defined by the CSU.

ANTH 500 Proseminar	4
HIST 472 California History I	4
ANTH 502 Archaeology: History and Theory	3
ANTH 503 Seminar in Cultural Resources Management	3
ANTH 592 Practicum in National Register of Historic Places	2
ANTH 596/597 Internships*	3
ANTH 599A/B Thesis	4
Supporting Courses	7
Total units in the CRM degree	30

**Internships are decided upon by discussion between the student and his or her advisor. Students will normally take both on-campus and off-campus internships. On-campus internships are available at the Cultural Resources Facility, the Interpretive and Outreach Services Office, the Northwest Information Center, and the Archaeological Collections Facility and Ethnography Lab. Off-campus agencies include the State Office of Historic Preservation, the National Park Service, the Sonoma County Museum, and many others.*

Admission to the Program

Applications must be submitted separately in the fall to the Anthropology Department and to the Office of Admissions and Records for possible acceptance into the program the following academic year. Consult with

the program's graduate coordinator for departmental requirements and submissions, as updated in the fact sheet *Admission to the Cultural Resources Management Program in Conditionally Classified Status* (available on the department website). While archaeology is a focus, the program emphasizes CRM as an interdisciplinary profession. Students with degrees in history, geography, and planning, as well as anthropology, are frequently accepted.

APPLIED ARTS

PROGRAM ADVISORS AND OFFICES

Jeff Langley / Performing Arts
Ives Hall 207
(707) 664-4404

Tim Wandling / English Department
Nichols Hall 362
(707) 664-2140

Gregory Roberts / Department of Art and Art History
Art Building 128
(707) 664-2364

Program Offered

Minor in Applied Arts

The applied arts curriculum provides practical and theoretical training in at least three of the following arts areas: art, English (with an emphasis on creative writing), music, and theatre arts (drama and/or dance). The minor is intended for students interested in acquiring a broad background in the arts, but is particularly appropriate for liberal studies majors who intend to complete the Multiple Subject Credential Program. The applied arts minor provides these students with practical skills appropriate to their future work as classroom teachers at the elementary grade level.

Minor in Applied Arts

The minor in applied arts consists of 18 units. At least 6 of these units must be upper division. To fulfill the minor, students are expected to complete 9 units of activity courses (3 units in each of three fields selected from art, English, music, and theatre arts), as well as a concentration consisting of 9 additional units in one of three fields.

Activity Courses

Select three fields from the following four (art, English, music, and theatre arts) and complete 3 units in each field selected.

Art

ARTS 202-298 (Any beginning-level faculty-instructed studio course) 2-4

English

ENGL 342 Children's Literature 3

One literary genre course selected from the following: 3

ENGL 367 Introduction to Short Story 3

ENGL 369 Introduction to Poetry 3

ENGL 371 Introduction to Novel 3

ENGL 373 Introduction to Drama 3

Music

MUS 105 Music Theory for Non-Majors 3

Any combination of the following, to total 3 units: 3

MUS 325 SSU Chorus (1). May be repeated for credit.

MUS 327 Symphonic Wind Ensemble (1) May be repeated for credit

MUS 400 Music for the Classroom (2)

MUS 115/415 Voice Methods (1)

MUS 118/418 Guitar Methods (1)

Theatre Arts

THAR 101 Making Theatre 3

THAR 300 Theatre in Action 3

THAR 460 Drama for Children 2 and

THAR 120 Acting: Fundamentals 2

THAR 470 Dance for Children 2 and

THAR 110 Dance Fundamentals 1

Total units in activity courses 9

Concentration Courses

To earn the minor in Applied Arts, students must also complete a 9-unit concentration in one of the three fields previously selected. The following are concentration courses:

Art

ARTS 400 Art in the Classroom 3

ARTH 210 or 211 Introduction to Art History 3

ARTS Additional activity courses 3

English

Any three upper-division creative writing courses, including at least two genres, and ENGL 342 if not taken previously.

Music

MUS 105 Music Theory for Non-Majors 3

One of the following

MUS 150 Survey of US Music 3

MUS 250 Survey of Western Music 3

MUS 350 Survey of World Music 3

3 units of the following (each may be repeated for credit)

MUS 323 Chamber Singers 1

MUS 324 Sonoma County Bach Choir 1

MUS 325 SSU Chorus 1

MUS 326 Classical Guitar Ensemble 1

MUS 327 Symphonic Wind Ensembles 1

MUS 329 Chamber Music Ensembles 1

MUS 330 Music Theatre Production 1-3

MUS 379 Contemporary Jazz Ensemble 1

MUS 391 Concert Jazz Ensemble 1

Theatre Arts

THAR 102 Introduction to the History of Drama and Dance: Origins to 1800	3
THAR 103 Introduction to the History of Drama and Dance: 1800 to the Present	3
THAR 300 Theatre in Action	3
THAR 301 Dance Ensemble	3
THAR 302 Drama Ensemble Workshop	3
THAR 110 Dance Fundamentals	1
THAR An appropriate selection of technique courses chosen in consultation with an advisor	3
Total units in concentration	9
Total units in minor	18

Students embarking on the applied arts minor are expected to develop and file a contract indicating the courses they wish to take to fulfill the minor. Certain course substitutions to the above-stated requirements may be allowed with sufficient justification and approval of the student's advisor and department chair, both of whom will be members of the department of the student's concentration.

ART AND ART HISTORY

DEPARTMENT OFFICE

Art Building 128
(707) 664-2364
www.sonoma.edu/art/

DEPARTMENT CHAIR

Gregory Roberts

ADMINISTRATIVE COORDINATOR

Cindy Menghini

Faculty

Stephen Galloway
Nathan Haenlein
Kurt Kemp
Susan Moulton
Jann Nunn
Mark Perlman
Jennifer Roberson
Gregory Roberts
Michael Schwager
Jennifer Shaw
Carlos M. de Villasante

Programs Offered

Bachelor of Arts in Art History
Bachelor of Arts in Art: Studio Concentration
Bachelor of Fine Arts: Studio Concentration
Minor in Art
 Studio concentration
 Art History concentration
Minor in Film Studies (see: Film Studies Minor elsewhere in this catalog)
Career Minor in Arts Management
Teaching Credential Preparation
Master of Arts through Interdisciplinary Studies

Majors pursue studies leading to the bachelor of arts degree in art history or the bachelor of arts degree in art with a studio concentration. Within the art studio concentration emphases are available in painting, printmaking, photography, works on paper, sculpture, and ceramics. Minors in art history, film studies, studio art, and arts management are also available. A program for students working toward a teaching credential is included within the curriculum and available through the Education Department. Several art and film history courses meet general education requirements.

Designed specifically for the pursuit of studio art practices and the study of art history and arts management, the department

facilities are located in one of the best equipped physical plants in the country. The programs are directed by a faculty of professional artists and scholars dedicated to their students and to the pursuit of their own creative and scholarly work. Students also have access to developing new technologies in a number of areas.

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

Art history is an interdisciplinary major within the department, with a core of period and survey courses that provide an integrative investigation of art and culture using both traditional and new approaches and technologies. The curriculum provides a broad overview of Western art, Asian art, and other art outside the European tradition. Our core is enhanced by periodic offerings of specialized upper-division classes that have included in-depth studies of artists, themes, and post-modern theory, and of current issues, such as gender and multiculturalism. As a demonstration of mastery of skills and knowledge in the field, art history requires students to write a senior thesis, which indicates original research or interpretation. With prior approval from the faculty, students may write a more elaborate honors thesis in place of the senior thesis. Reading competency in a foreign language is required for admission to most graduate programs.

The art studio curriculum is designed to develop the ability to create, analyze, interpret, and evaluate art. Students learn to express their concepts in a variety of visual forms. The department strives to stimulate creativity and competency as students develop their skills and knowledge of materials and technologies. Fundamental to the study of art is a belief in its potential to communicate ideas, emotions, and values necessary for understanding and functioning effectively within the contemporary world. Faculty are committed to the recognition of individuality and unique accomplishment. They work closely with each student to encourage personal direction and ideas.

Students in the Bachelor of Art: Studio Art who desire a more in-depth, professionally directed preparation in studio art may apply the Bachelor of Fine Art (BFA) degree in studio art. This more intensive degree program is open to students through competitive application, usually during the junior year. Please see your advisor for details regarding the application process.

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

Upon successful application to the University, students wanting to major in art or art history may choose one of the following areas:

Art History - Courses In Western And Non-Western Art

Art history, including courses in gallery and museum studies

Art Studio (Areas Of Emphasis Below)

Ceramics
Painting
Photography
Printmaking

Sculpture
Works on paper

Bachelor of Fine Arts (Areas Of Emphasis Below)

Painting
Photography
Printmaking
Sculpture

Entering freshmen or lower-division transfer students will be accepted by the University in the status of art majors or art history majors in the B.A. program. Upper-division transfer students who have fulfilled requirements equivalent to those for lower-division art majors at Sonoma State University will be accepted as art or art history majors in the B.A. program.

Courses for the majors cannot be taken for Cr/NC. A maximum of three courses may be challenged for credit toward the major: two lower-division and one upper-division. Most studio courses require payment of lab fees at time of class registration.

Careers in Art and Art History

Whether in art history, art studio, or gallery and museum management, programs in the Department of Art and Art History are committed to academic excellence and the acquisition of skills of visual analysis and synthesis. We offer basic skills and access to new technologies as sound preparation for graduate study and teaching, as well as for professional careers in the arts. In addition, as preparation for entering a diversity of related fields, students may combine knowledge of the arts with expertise in a second area, such as business, film and television; or museum, gallery or archival management. Consult a department advisor for specific advice about career planning.

Advising

Students are required to consult their advisors in the department before beginning work as an art studio or art history major and each semester thereafter. Not all courses are offered every semester. Consultation with an art advisor will allow for timely completion of art or art history major requirements. An advising handbook is available through the department's website: www.sonoma.edu/art/advising

Bachelor of Arts in Art History

Many of the courses required for the degree have prerequisites. Consult course descriptions for details.

Degree Requirements	Units
General education	51
Major core requirements	43
General electives	26
Total units needed for graduation	120

Note: Although the Department of Art and Art History does not specify a unit requirement, reading comprehension of at least one foreign language is considered essential for students who plan to pursue master's or doctoral degrees in the field of art history. Such students are advised to develop competence in French, German, Italian, and/or Spanish;

however, the prospect of eventual specialization may make other languages advisable in particular instances. Art history majors are required to write at least two papers in upper-division courses before being admitted to the proseminar (490H).

Requirements for the Major

Foundation Courses / Freshman And Sophomore Years (12 Units)

Art History (6 lower-division units)

ARTH 210 Introduction to Art History, Ancient to Medieval	3-4
ARTH 211 Introduction to Art History, Renaissance to Modern	3-4

Studio Courses (5 lower-division units)

ARTS 101 or 102, Fundamentals. In addition, one course in drawing, a beginning course in any medium, or a second Fundamentals course.

Minimum total lower-division units 11

Core Courses / Junior And Senior Years (15 - 20 Units)

Period Courses: Students must complete requirements A, B, and C

A) One upper-division course from three of the five categories listed below (three courses total):

- Ancient
- Medieval
- Renaissance/Baroque
- 18th through 19th Centuries
- History of Photography

B) Modern/Contemporary: one upper-division course required

C) Non-Western: One upper- or lower-division course required

Recommended Electives For All Art History Majors (7 - 12 Units)

In consultation with the advisor, the art history major will choose additional upper-division courses from any of the following:

1. A, B and C above; and Gallery and Museum Methods (ARTH 494).
2. Special topic courses (ARTH 480).
3. Course in a related field outside the Art Department with approval of the faculty and the department chair. Students with a special interest in film should choose the film emphasis, which has specific requirements (please see film history emphasis).

Capstone Experience (4 - 5 Units)

All students must complete a senior project consisting of the following:

- A. ARTH 490H Pro-Seminar on Art Historical Method (3 units). Students must complete two papers in upper-division courses before being admitted to the pro-seminar.
- B. Senior Thesis: With prior approval, students may write a scholarly paper overseen by two art history faculty. The student receives assistance in preparing this paper by enrolling in one of the following courses:
 1. ARTH 491H Senior Thesis (1 unit). Student must enroll with two different advisors.
 2. ARTH 492 Honors Thesis (2 units), by consent of art history faculty. Student must enroll with two different advisors.

Total upper-division units 32

Total units in the major 43

Sample Four-Year Program for Bachelor of Arts in Art History

FRESHMAN YEAR:: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
ARTH 210 (3-4)*	ARTH 211 (3-4)*
ARTS 101 or 102 (3)	Any beginning Art Studio Course (2)
GE courses (6), Elective (3)	GE courses (9)

SOPHOMORE YEAR:: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
Upper-Division ARTH Period Course (3-4)	ARTH Non-Western (3-4)
GE courses (12)	GE courses (12)

JUNIOR YEAR:: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
Upper-Div. ARTH Period Course (3-4)*	Upper-Div. ARTH Period Course (3-4)
Upper ARTH Period Course (3-4)	Upper-Division ARTH Elective (3-4)
Upper-Division GE (4)	Upper-Division GE (4)
Upper-Division ARTH Special Topic (1-4)	Electives (3-4)
Elective (2-4)	

SENIOR YEAR:: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
ARTH 490H (3-4)	ARTH 491H or 492 (Advisor #1) (1-2)
Upper-Division ARTH Elective (3-4)	ARTH 491H or 492 (Advisor #2) (1-2)
Upper-Division ARTH Elective (3-4)	Upper-Division ARTH Elective (3-4)
Other Electives (3-4)	Upper-Division ARTH Elective (3-4)
	Other Electives or Internships (5)

TOTAL UNITS:: 120

* also counts for GE requirements

Minor in Art History

Complete All Of the Following

ARTS 101-245 Any beginning studio course	2-3
ARTH 210 Introduction to Art History	3-4
ARTH 211 Introduction to Art History	3-4
ARTH Upper-division courses (except modern)	8
ARTH Upper-division modern or non-Western course	3-4

Total units needed for the minor 20

Recommended Electives for Art History Minors

Upper-division art history or criticism courses.

Minor in Film Studies

Please see Film Studies section for a description of the film studies minor program, elsewhere in this catalog.

Course Rotation: Art History

Foundation Courses

Introductory Surveys (210, 211) All semesters

Period Courses

Ancient, Medieval, Renaissance, Baroque/Early Modern (420, 422, 424, 430, 432, 440, 442, 444, 450, 454) At least one course per year from each period

Film courses (361, 363) All semesters

Modern: Two courses (460, 464, 465, 466) All semesters

Non-Western: One course (470, 474, 476) Every year, usually each semester

Gallery and Museum Methods (494) Fall semesters

Pro-Seminar in Methods (490H) Fall semesters

Senior Thesis (by approval) All semesters

Note: Additional period courses and special topic courses will be offered each academic year to enable students to enrich their areas of interest and specialization.

Bachelor of Arts in Art: Studio Concentration

Many of the courses required for the degree have prerequisites. Please consult course descriptions for details.

Degree Requirements	Units
General education	51
Major requirements	45
General electives	24
Total units needed for graduation	120

Requirements for the Major

The art major with studio concentration is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course offerings in studio and associated areas that allow for the development of an emphasis in one or more of the following: painting, sculpture, printmaking, works on paper, photography, and ceramics. Six units must be at the advanced (400) level.

Major Core Requirements

Complete the following four courses for 12 units:

ARTS 101 Art Fundamentals	3
ARTS 102 Art Fundamentals	3
ARTH 210 Introduction to Art History	3-4
ARTH 211 Introduction to Art History	3-4

Complete the following two courses to total 4 units:

ARTS 202 Beginning Drawing	2
ARTS 204 Beginning Life Drawing	2

Choose at least **three** of the following studio courses to total a minimum of 6 units; at least one course must be taken in a 2-D medium and a 3-D medium: 6-9

ARTS 208 Basic Black and White Photography	2-4
ARTS 210 Introduction to Digital Imaging	
ARTS 220 Beginning Painting	2-3
ARTS 229 Beginning Ceramics	2-3
ARTS 236 Beginning Sculpture	2-3
ARTS 245 Beginning Printmaking	2-3
ARTS 298 Selected Topics in Art Studio	1-4

Total lower-division core units 22

Complete 5 units of upper-division studio coursework outside of emphasis area. At least two units must be taken from the list below: 5

ARTS 302 Intermediate Drawing	2-4
ARTS 304 Intermediate Life Drawing	2-4
ARTS 402 Advanced Drawing	2-4
ARTS 404 Advanced Life Drawing	2-4

Choose two courses from the following five courses to total 6 units. 6

ARTH 454 Nineteenth Century Art	3
ARTH 460 History of American Art	3
ARTH 464 Modern Art from 1850 to 1945	3
ARTH 465 Modern Art from 1945 to 1979	3
ARTH 466 Contemporary Art	3

Total upper-division core units 11

Areas of Emphasis

To complete a specialized concentration in the major, select a minimum of 12 units from one of the areas of emphasis below. (When works on paper is the student's area of emphasis, the 5 upper-division units required in drawing must be concentrated instead in another emphasis, such as painting, printmaking, sculpture, photography, or ceramics.) At least 6 units must be at the advanced level.

Painting (12)	Printmaking (12)	Works on Paper (12)
Sculpture (12)	Photography (12)	Ceramics (12)

Specific content of concentrations is detailed below.

Total units in major emphasis 12

Total units in the major 45

Painting Emphasis

Complete 12 units of the following two courses (including repeats); 6 units must be at advanced level: 12

ARTS 320 Intermediate Painting	2-4
ARTS 420 Advanced Painting	2-4

A maximum of 3 units may be applied from one or more of the following: 0-3

ARTS 382 Intermediate Monoprint	1-4
ARTS 482 Advanced Monoprint	1-4

Sculpture Emphasis

Complete 12 units of the following two courses (including repeats); 6 units must be at advanced level: 12

ARTS 336 Intermediate Sculpture	2-4
ARTS 436 Advanced Sculpture	2-4

A maximum of 3 units from the following may be applied to the 12-unit Sculpture Emphasis: 3

ARTS 335 Intermediate Bronze Foundry	2-4
ARTS 435 Advanced Bronze Foundry	2-4
ARTS 329 Intermediate Ceramics	2-4
ARTS 429 Advanced Ceramics	2-4
ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture	2-4

Ceramics Emphasis

Complete 12 units of the following four courses (including repeats); 6 units must be at advanced level: 3

ARTS 329 Intermediate Ceramics	2-4
ARTS 429 Advanced Ceramics	2-4
ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture	2-4
ARTS 432 Ceramic Materials	2-4

A maximum of 3 units from the following may be applied to the 12-unit Ceramics Emphasis: 3

ARTS 336 Intermediate Sculpture	2-4
ARTS 436 Advanced Sculpture	2-4
ARTS 335 Intermediate Bronze Foundry	2-4
ARTS 435 Advanced Bronze Foundry	2-4

Printmaking Emphasis

Complete 9-12 units of the following four courses (including repeats); 6 units must be at the advanced level: 9-12

ARTS 340 Intermediate Etching and Woodcut	2-4
ARTS 440 Advanced Etching and Woodcut	2-4
ARTS 342 Intermediate Lithography	2-4
ARTS 442 Advanced Lithography	2-4

A maximum of 3 units may be applied from the following: 0-3

ARTS 382 Intermediate Monoprint	1-4
ARTS 482 Advanced Monoprint	1-4

Works On Paper Emphasis

When drawing is the student's area of emphasis, the 5 upper-division units required in drawing must be concentrated instead in another emphasis, such as painting, printmaking, sculpture, photography, or ceramics. Advanced courses may be repeated for credit.

Choose a total of 12 units from the following four courses (including repeats); 6 units must be at the advanced level: 12

ARTS 302 Intermediate Drawing	2-4
ARTS 402 Advanced Drawing	2-4
ARTS 304 Intermediate Life Drawing	2-4
ARTS 404 Advanced Life Drawing	2-4

Photography Emphasis

Complete 12 units of the following two courses (including repeats); 6 units must be at the advanced level: 12

ARTS 308 Photographic Darkroom Processes	2-4
ARTS 457 Advanced Photography	1-4

Recommended Electives For All Studio Majors

ARTS 492 B.A. Professional Artists' Practices	1-3
ARTH 420-476 Art History Period Courses	3-4 each
ARTH 466 Contemporary Art	3
ARTH 480 Selected Topics and Lecture/Seminar	1-4
ARTH 494 Gallery and Museum Methods	4
ARTS 382 Intermediate Monoprint	1-4
ARTS 482 Advanced Monoprint	1-4
ARTS 491 Visiting Artists' Lecture Series	1
ARTS 498 Selected Topics - Studio	1-4

Course Rotation: Art Studio

Foundation Courses:

Art Fundamentals (101 and 102)	Every semester
Safety and Shop Practices (103)	Every semester

Beginning Studio Courses:

All courses (202, 204, 208, 220, 229, 236, 245)	Every year; most every semester.
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Intermediate/Advanced Studio Courses:

All courses (302, 304, 308, 320, 329, 335, 336, 340, 342, 382, 402, 404, 420, 429, 430, 432, 435, 436, 440, 442, 482)	Every year; most every semester.
B.F.A. Seminar (465)	1 unit fall, 2 units spring
Professional Practices - B.F.A. & B.A. (466/492)	Fall semesters
Directed Field Research Experience (496)	Most semesters

Note: Additional special topics courses will be offered each academic year to enrich and expand on the Studio curriculum.

Sample Four-Year Program for Bachelor of Arts in Art

Studio Concentration, Painting Emphasis

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
ARTS 101 2-D Fundamentals (3)	ARTS 102 3-D Fundamentals (3)
ARTH 210 Art History (3)*	ARTH 211 Art History (3)
GE courses (9)	GE courses (9)

SOPHOMORE YEAR:: 30 Units

Fall Semester (14 Units)	Spring Semester (16 Units)
ARTS 202 Beg. Drawing (2)	ARTS 204 Beg. Life Drawing (2)
Lower-Division Studio course (3)	Lower-Division Studio course (2)
GE courses (9)	GE courses (12)

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
Upper-Div. studio emphasis (3)	Upper-Div. studio emphasis (3)
ARTS 302 Int. Drawing (3)	Upper-Div. studio elective (3)
ARTH 465 History of Mod. Art (3)*	Upper-Div. studio course (3)
GE courses (9)	GE courses (6)

* also counts for GE requirements

SENIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
Upper-Div. studio emphasis (3)	Upper-Div. studio emphasis (3)
ARTH 466 Contemporary Art (3)	Art Electives (6)
Art Electives (6)	General Electives (6)
General Electives (3)	

TOTAL UNITS:: 120

Bachelor of Fine Arts

The B.F.A. degree is a 132-unit program requiring 70 units of course work in art. The B.F.A. Degree differs from the B.A. degree in its requirements and rigor. The B.F.A. is often considered to be the degree of choice for students wishing to pursue graduate or professional studies. It enhances the artists' opportunities to perform at a higher level and fulfills the need for additional artistic growth in an intensive studio situation. The B.F.A. affords time for concentrated work within a specific art emphasis (painting, photography, printmaking, or sculpture).

Admission Requirements

Students may apply only during or after the spring semester of the sophomore year. Thereafter students may reapply as many times as desired. It is recommended that students work with their advisors to complete the application process. Applicants must meet University requirements for admission and must first be admitted to the bachelor of arts program. In addition, they must meet the following requirements to qualify for application to the program:

1. Students must complete all lower-division requirements in art; take lower-division courses before upper-division courses in area of emphasis; take Fundamentals 101/102, or equivalents, before any upper-division art course and before most lower-division art courses; maintain a 3.00 GPA in art, exclusive of GE courses; and complete all lower-division GE requirements by the end of the junior year.
2. To be considered for the B.F.A. admission review, applicants must submit a portfolio of digital images of their artwork, two letters of recommendation (or two department faculty signatures if currently enrolled as a student), and a short statement including their reasons for applying. These will be reviewed and the candidates may be interviewed by the studio faculty to help determine if their work demonstrates the creative level expected of B.F.A. candidates. Official applications, instructions and guidelines for the digital portfolio are available in the Art Department office. Applications will be reviewed in spring semester for possible admission the following fall semester and in fall semester for possible admission for the following spring semester.

Bachelor of Fine Arts in Art: Studio Concentrations

Degree Requirements	Units
General education	51
Major core requirements	70
Electives in art	11
Total units needed for graduation	132

The B.F.A. is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course requirements in studio arts, art history, a B.F.A. seminar, and a B.F.A. professional practices course. Students accepted into the program

decide on an area of emphasis from the following choices: painting, photography, printmaking, and sculpture.

1. Throughout the B.F.A. program, candidates must maintain a 3.00 GPA in art and a high level of performance and will be subject to review at all times. Advisors will direct students in their specific course of study based on regular critiques.
2. To complete the program, candidates will meet all course work for the degree and participate in the B.F.A. art exhibition, which will be reviewed by the art faculty to determine the candidate's professional competence in a chosen area of emphasis.
3. In order to receive the B.F.A. Degree, students must complete 24 upper-division units in art in residence. (May be included within the University's unit residency requirement.)

Major Core Requirements

Freshman and Sophomore Years

Complete the following four courses:

ARTS 101 Art Fundamentals	3
ARTS 102 Art Fundamentals	3
ARTH 210 Introduction to Art History	3
ARTH 211 Introduction to Art History	3

Choose a combination of the following to total 4 units:

ARTS 202 Beginning Drawing	2-4
ARTS 204 Beginning Life Drawing	2-4

Total lower-division core units 16

Junior and Senior Years

Complete the following 5 courses:

ARTH 464 Modern Art from 1850 to 1945	3
ARTH 465 Modern Art from 1945 to 1979	3
ARTH 466 Contemporary Art	3
ARTS 465 B.F.A. Seminar	3
ARTS 466 B.F.A. Professional Artists' Practices	3

Choose any combination of the following to total 5 units:

ARTS 302 Intermediate Drawing	2-4
ARTS 304 Intermediate Life Drawing	2-4
ARTS 402 Advanced Drawing	2-4
ARTS 404 Advanced Life Drawing	2-4

Total upper-division core units 20

Areas of Emphasis

In addition to the major core requirements, each B.F.A. student must complete one of the following 34-unit concentrations:

Painting

Complete at least three lower-division courses from three different studio emphases (excluding painting and drawing) to total 6 units: 6-9

ARTS 220 Beginning Painting	3
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Complete 5 units in intermediate and advanced auxiliary studio courses (may include 3 units of Advanced Monoprint): 5

Complete 20 units in the following courses, including at least 8 units at the 400 level: 20

ARTS 320 Intermediate Painting	2-4
ARTS 420 Advanced Painting	2-4

Total units in the emphasis 34

Photography

Complete at least three lower-division courses from three different studio emphases (excluding photography and drawing) to total 6 units: 6-9

Complete 5 units in intermediate and advanced auxiliary studio courses: 5

ARTS 208 Basic Black and White Photography	2-3
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Complete at least 21 units from the following courses, including at least 8 units at the 400 level: 21

ARTS 308 Photographic Darkroom Processes	2-4
ARTS 457 Advanced Photography	1-4

Total units in the emphasis 34

Printmaking

Complete at least three lower-division courses from three different studio emphases (excluding printmaking and drawing) to total 6 units: 6-9

ARTS 245 Beginning Printmaking	2-3
--------------------------------	-----

Complete 5 units in intermediate and advanced auxiliary studio courses (one upper-division course in photography is recommended): 5

Complete 20 units in the following courses, including a maximum of 12 units in any one printmaking area: 20

ARTS 340 Intermediate Etching and Woodcut	2-4
ARTS 440 Advanced Etching and Woodcut	2-4
ARTS 342 Intermediate Lithography	2-4
ARTS 442 Advanced Lithography	2-4

Total units in the emphasis 34

Sculpture

Complete at least three lower-division courses from three different studio emphases (excluding sculpture and drawing) to total 6 units: 6-9

ARTS 236 Beginning Sculpture	2-3
ARTS 229 Beginning Ceramics (Recommended)	2-4

Complete 5 units in intermediate and advanced auxiliary studio courses: 5

Complete 21 units in the following courses, including at least 8 units at the 400 level: 21

ARTS 336 Intermediate Sculpture	2-4
ARTS 436 Advanced Sculpture	2-4

Units from the following may be applied to the 21-unit Sculpture Emphasis: 3

ARTS 335 Intermediate Bronze Foundry	2-4
ARTS 435 Advanced Bronze Foundry	2-4
ARTS 329 Intermediate Ceramics	2-4
ARTS 429 Advanced Ceramics	2-4
ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture	2-4

Total units in the emphasis 34

Total units in the major 70

Minor in Art: Studio Concentration

Complete all of the following:

ARTS 101 Art Fundamentals	3
ARTS 102 Art Fundamentals	3
ARTH 210 Introduction to Art History	3
or ARTH 211 Introduction to Art History	3
Studio courses at any level	5
Upper-division studio courses	6

Total units in the minor 20

Teaching Credential Preparation

The art major with a studio concentration generally fulfills the California Commission for Teacher Preparation and Licensing guidelines for the Single Subject Credential. For the Multiple Subject (elementary) Credential, students must pass the general knowledge portion of the National Teachers Examination. Students interested in a teaching career are encouraged to consult with coordinators in the Art Department as well as the Education Department with reference to legally required education courses, along with field experience, leading to graduate or second degree studies in art and education with a teaching credential. The public school art instructor usually is expected to possess a vast range of aptitudes in 2- and 3-dimensional art forms, materials, and techniques, and to have a strong sense of the conceptualization and philosophies for art education for younger learners. A broadly based studio arts, art history, and Education Department coursework program, including field experience in a concurrent pattern, is recommended after arrangements are made with both the Art Department and the Education Department. For further information, please see the Education section in this catalog. Contact departmental advisors and review the University's special bulletin, *Programs in Teacher Education*. Students seeking the Multiple Subject Credential may also wish to pursue a minor in applied arts (please see the Applied Arts section in this catalog).

Career Minor in Arts Management

The career minor in arts management provides students of the arts with education, training, and experience in the practical, business side of their fields. Art majors completing this career minor will be in much stronger positions to find work and support themselves in fields within or closely related to their majors. The arts management career minor, combined with a minor in art history or art studio, also serves the needs of business administration majors who wish to specialize in the arts. Internships are available at local and regional art galleries, museums, nonprofit organizations, and other groups that provide services for artists. Please see the section on Career Minors for a description of the arts management minor program.

ASTRONOMY

DEPARTMENT OFFICE

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Jeremy S. Qualls
Saeid Rahimi
Scott A. Severson
Hongtao Shi

Program Offered

Minor in Astronomy

Astronomy, offered as a minor in the Department of Physics and Astronomy, is the study of the planets, stars, and galaxies in the universe beyond the earth's atmosphere. The fields of astronomy and astrophysics, the application of physics principles to astronomical observations, today deal with essential questions, such as the origin and nature of the "Big Bang," the subsequent creation of matter and the chemical elements; the eventual formation and evolution of structure in the universe; and the life cycles of stars, including the tremendous explosions which are often their death knells and can lead to the formation of black holes. Modern astronomy leans heavily on the concepts and techniques of physics and mathematics. Astronomers use ground- and space-based instruments that detect photons spanning the electromagnetic spectrum, as well as particles such as cosmic rays or neutrinos. An emerging branch of astronomy seeks to correct the effect of the Earth's turbulent atmosphere using adaptive optics, thus providing "sharper" views of the universe. As a result of astronomy's cosmic scope and dependence on physics, degrees in astronomy are generally granted at the graduate level. The minor in astronomy, with a B.S. in physics, is an excellent preparation for graduate study in astronomy or astrophysics.

Careers in Astronomy

Career fields for which an astronomy minor would be beneficial include aerospace, astronomy, atmospheric science, education, planetary geology, and geophysics.

A variety of courses are available within the minor, including intermediate and advanced laboratory work that utilizes the department's two observatories, and a number of descriptive courses for students whose major interests lie in other fields.

The SSU Campus Observatory, in operation since 1976, houses two telescopes, a 14-inch Schmidt-Cassegrain and a 10-inch Newtonian, with auxiliary instrumentation for CCD imaging and spectroscopy. Both telescopes are computer controlled. The observatory is used by students in laboratory and lecture courses, and is also available for faculty and student research projects. A NASA-funded research observatory, which saw "first light" in 2004, is located in the darker skies of northern Sonoma County. It includes a remotely controlled and operated 14-inch telescope mounted on a computer-controlled Paramount and equipped with a high quantum efficiency CCD detector and filter wheel. Equipment available for observational work in astronomy at SSU is ideally suited for studying objects that vary in time and space. This includes objects that vary in brightness such as pulsating, eclipsing, and cataclysmic star systems. This also includes the variable nuclei of active galaxies such as quasars and blazars, Gamma-ray Bursts (GRBs), and extrasolar planetary systems that exhibit planetary transits. Our equipment is also ideally suited for follow-up observations of Near Earth Objects (NEOs), which may threaten Earth.

The department is designing and constructing a remotely operable, approximately 1-meter telescope in southern Mendocino county: the Galbreath Wildlands Preserve Observatory. This will be a sustainable and ecologically sensitive facility, making the project innovative and cross-disciplinary. The department also houses a laboratory for experimental astrophysics research, where students can test and build cameras, spectrometers, and other equipment for SSU's telescopes.

All students are strongly encouraged to participate in the ongoing research programs of the department, and/or to propose student-initiated research programs.

Minor in Astronomy

Completion of a minimum of 20 units in astronomy and physical or life science courses, at least 12 of which must be in astronomy, constitutes a minor in astronomy. Courses that are used to meet requirements in a student's major may not be used toward the minor in astronomy. Supporting courses for the major may be used. Interested students should consult with an advisor in the Department of Physics and Astronomy.

BIOLOGY

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Joseph Lin
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Nathan E. Rank
Richard Whitkus

Programs Offered

Bachelor of Arts in Biology
Bachelor of Science in Biology
Master of Science in Biology
Minor in Biology

The Department of Biology offers two broadly based bachelor's degree programs and a master of science degree. Within each undergraduate degree program, there are opportunities for selecting a concentration. A congenial atmosphere allows students to develop a close relationship with peers, graduate students, and faculty. An emphasis is placed on laboratory and field courses and on participation in research.

The master's program is comprised of an active cohort of graduate students engaged in original research with faculty members in all areas of research specialization covered in the department. Graduate research is often supported by external funding and graduate student support includes teaching associateships that involve close mentoring relationships with instructional faculty.

Laboratory instruction provides students with hands-on opportunities with physiological equipment, ultracentrifugation, PCR, electrophoresis, epifluorescence and confocal microscopy, and microbiological techniques. Excellent laboratory and greenhouse facilities, such as the Raymond Burr Greenhouse and orchid collection,

exist for maintaining live material for classroom use and research. A radioisotope laboratory is also available.

Field courses draw upon the unparalleled diversity of habitats in the North Bay region. They also capitalize on two spectacular nature preserves: Fairfield Osborn Preserve and Galbreath Wildlands Preserve, administered by Sonoma State University. In addition, the department maintains museum collections of local plants, algae and fungi (North Coast Herbarium of California), vertebrates (Jack Arnold Vertebrate Collection), and insects and other invertebrates.

Careers in Biology

Biology graduates are prepared to enter the job market in a variety of careers, including government agencies, park service, biological research, teaching, biotechnology and pharmaceutical research, and health care. Students seeking a teaching credential may elect biology as their major within the teaching credential preparation program in science. Graduates from the department have an outstanding record of acceptance in advanced degree programs at health profession and graduate programs.

The biology curriculum, supported by physical sciences and mathematics, is designed to provide students with a strong background in the principles of biology and rigorous upper-division instruction. This combination of breadth and in-depth instruction allows students to develop the intellectual foundations and the skills necessary to deal with the specific biological concerns of today and the flexibility to meet the future needs of the profession.

Biology Degree Concentrations

Bachelor of Arts

Botany
Zoology

Bachelor of Science

Physiology
Molecular and Cell Biology
Ecology and Evolution and Conservation
Marine Biology
Microbiology

Many students are well served by the basic B.A. plan without a concentration. Some, however, select one of two concentrations for a B.A. Both the B.A. and B.S. share a common lower-division core, hence beginning students need not select a degree plan immediately. Students should contact the department and their assigned advisor for specific information on requirements of various concentrations.

Preparation for Applying to Health Professions Programs

Students majoring in biology and intending to pursue careers in the health care profession may follow the guidelines for a B.S. degree or a B.A. degree (with the addition of MATH 161, CHEM 335B, and PHYS 210AB and 209AB). They are encouraged to enroll in SCI 150,

Introduction to Careers in the Health Professions, during their first fall semester.

For admission to most health profession schools, regardless of major, it is typically recommended or required that specific upper-division biology courses be incorporated into the B.A. or B.S. degree. These include:

BIOL 328 Vertebrate Evolutionary Morphology

BIOL 340 General Bacteriology

BIOL 344 Cell Biology

BIOL 342 Molecular Genetics

BIOL 349 Animal Physiology

BIOL 472 Developmental Biology

BIOL 480 Immunology

An upper-division biochemistry course (e.g. CHEM 446) is often required/recommended.

Secondary Education Teaching Credential Preparation in Life Science

Contact the department chair for information on completing a biological sciences concentration for a Single Subject Credential Preparation Program.

Degree Requirements

	<i>B. A.</i>	<i>B. S.</i>
General Education (51 units, 12 units covered by major requirements in math and science)	39	39
Lower-Division Biology (BIOL 121, 122, 123)	12	12
Upper-Division Biology Core (1 course from each of 4 core areas)	16	16
Upper-Division Biology Electives (as specified by concentration)	15-16	20
Senior Research (BIOL 494 and 496)	--	3
Physical Sciences and Mathematics:		
CHEM 115AB	10	10
CHEM 335A	5	5
CHEM 335B	--	3
MATH 165	4	4
MATH 161	--	4
B. A.		
PHYS 210A/209A or GEOL 102	4 or 3	--
B. S.		
PHYS 210A/209A and 210B (PHYS 114/116/214 may substitute)	--	7
General Electives	15-16	3
Total units needed for graduation	120	126

Upper-Division Biology Core

Complete one course from each of the following areas (additional courses from each area may be used as electives or may be required for particular concentrations):

Organismal Biology (4 Units)

BIOL 322 Invertebrate Biology (4)

BIOL 323 Entomology (4)

BIOL 327 Vertebrate Biology (4)

BIOL 329 Plant Biology (4)

BIOL 340 General Bacteriology (4)

BIOL 382 Parasitology (4)

Physiology (4 Units)

BIOL 328 Vertebrate Evolutionary Morphology (4)

BIOL 347 Environmental Physiology (4)

BIOL 348 Plant Physiology (4)

BIOL 349 Animal Physiology (4)

Molecular And Cell Biology (4 Units)

BIOL 342 Molecular Genetics (4)

BIOL 343 Molecular Microbiology (4)

BIOL 344 Cell Biology (4)

BIOL 383 Virology (4)

Ecology And Evolution (4 Units)

BIOL 333 Ecology (4)

BIOL 335 Marine Ecology (4)

BIOL 337 Behavioral Ecology (4)

BIOL 341 Evolution (4)

Upper-Division Biology Electives

Biology major electives are upper-division courses beyond those used to fulfill the upper-division core and the B.A. or B.S. concentration specific requirements. Major electives are used to meet the total upper-division unit requirement for the B.A. (31 units) or B.S. (36 units). Major electives are chosen from among the following:

1. Additional courses from the upper-division core areas and alternative courses in a concentration.
2. Any Biology course numbered greater than 320. This list is subject to revision following this catalog edition. Students should check with their academic advisor for updates. Seniors may also take graduate courses (500 level) with permission of the instructor.
3. Supervisory courses in biology. These courses are: BIOL 395, 495, 496, 498, and 499 (see **Restrictions**, below, for unit limits for these courses).
4. Biology colloquium, BIOL 390, may be taken twice (2 units) for major credit.
5. A maximum of 4 units from courses related to biology from other departments or from the department's non-majors courses unless specified in an approved concentration. To apply the units to the major, students are required to obtain written permission from their advisor **before taking these courses, unless the course is listed as part of a concentration.** (Obtain forms from the department office.) Following is the current list of acceptable courses: ANTH 301, 302, 318, 345, 414; BIOL 220, 224, 243, 307; CHEM 441, 445, 446; ENSP 315, 321, 322, 323; GEOG 416; GEOL 413; KIN 360; PSY 451.

Restrictions

1. A maximum of 4 units taken in the Cr/NC grading mode may be applied to the major from the following courses: BIOL 390, 395, 498, 499. All other courses in the biology major must be taken in the traditional grading mode (A-F).
2. A maximum of 7 units from the following list of courses may be applied to the major: BIOL 390, 395, 494, 495, 496, 498, and 499.

Sample Four-Year Program for Bachelor's Degree in Biology

FRESHMAN YEAR:: 31 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (3) (A2)	PHIL 101 or 102 (3) (A3)
BIOL 121 or 122 (4) (B2)	BIOL 121 or 122 (4) (B3)
MATH 165 (4) (B4)	CHEM 115B (5)
CHEM 115A (5) (B1)	Electives (3)
	GE
SOPHOMORE YEAR:: 32-33 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16-17 Units)</i>
BIOL 123 (4)	G.E. Group A1 (3)
CHEM 335A (5)	BIOL UD Core (4)
Electives (7)	Electives (9-10)
GE (3)	GE (6-7)
Support (4)	Support (3)
JUNIOR YEAR:: 31-32 Units	
<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
Two BIOL UD core (8)	One BIOL UD core (4)
Electives (7-8)	Electives (11-12)
GE (3-4)	GE (3-4)
Support (4)	BIOL conc. (4)
	Support (4)
SENIOR YEAR:: 26-31 Units	
<i>Fall Semester (14-17 Units)</i>	<i>Spring Semester (12-14 Units)</i>
Electives (14-17)	Electives (12-14)
GE (6-8)	GE (3-4)
BIOL conc. (8-9)	BIOL conc. (4)

Bachelor of Arts in Biology: Concentrations

The lower-division core is structured so that switching between the B.A. and B.S. programs in the first two years will not delay completing either degree program. The B.A. does not require a concentration. However, students may wish to focus their upper-division course work in a particular area. Botany and zoology are approved concentrations in the B.A., which may be designated on

the diploma. Courses from all 4 core areas are included in each concentration. The upper-division major requirements for each are:

B.A. Botany Concentration (31 units)

BIOL 329 Plant Biology	4
BIOL 348 Plant Physiology	4
BIOL 330 Plant Taxonomy	4
BIOL 331 Aquatic Botany	4
BIOL 333 Ecology	4
BIOL 341 Evolution	4
<i>One of the following 2 courses:</i>	4

- BIOL 342 Molecular Genetics, or
- BIOL 344 Cell Biology

Additional upper-division major electives 3

B. A. Zoology Concentration (31-32 units)

BIOL 322 Invertebrate Biology	4
BIOL 327 Vertebrate Biology	4
BIOL 328 Vertebrate Evolutionary Morphology	4
BIOL 323 Entomology	4
<i>One of the following 2 courses:</i>	4

- BIOL 347 Environmental Physiology or
- BIOL 349 Animal Physiology

One of the following 3 courses: 4

- BIOL 463 Herpetology, or
- BIOL 468 Mammalogy, or
- BIOL 472 Developmental Biology

One course from the Molecular and Cell Biology Core Area 4

One course from the Ecology and Evolution Core Area 4

Bachelor of Science in Biology

Students must specify a particular concentration for the B.S. and meet its requirements. The lower-division core is structured so that switching between the B.A. and B.S. programs in the first two years will not delay completing either degree program. Students normally complete the additional physical science and mathematics for the B.S. after the first two years.

Courses from all 4 core areas are included in each concentration. The following are approved concentrations in the B.S., which will be designated on the diploma. The upper-division major requirements for each are:

B. S. Marine Biology Concentration (39 units)

BIOL 322 Invertebrate Biology	4
BIOL 331 Aquatic Botany	4
BIOL 335 Marine Ecology	4
BIOL 341 Evolution	4
BIOL 347 Environmental Physiology	4
BIOL 485 Biometry	4
<i>One course from the Molecular and Cell Biology Core Area</i>	4
<i>Additional upper-division major electives</i>	8
BIOL 494 Independent Research Design	1
BIOL 496 Senior Research	2

B.S. Molecular and Cell Biology Concentration (39 units)

BIOL 340 General Bacteriology	4
BIOL 342 Molecular Genetics	4
BIOL 344 Cell Biology	4
BIOL 341 Evolution	4

One of the following 2 courses:

BIOL 348 Plant Physiology	
BIOL 349 Animal Physiology	

Two of the following 4 courses:

BIOL 343 Molecular Microbiology	
BIOL 383 Virology	
BIOL 472 Developmental Biology	
BIOL 480 Immunology	

One of the following 2 courses:

CHEM 445 Structural Biochemistry	
CHEM 446 Metabolic Chemistry	

One of the following 3 courses:

CHEM 441 Biochemical Methods	
BIOL 544 Advanced Cell Biology	
BIOL 545 Recombinant DNA Laboratory	

Additional upper-division major electives

BIOL 494 Independent Research Design	1
BIOL 496 Senior Research	2

B. S. Ecology, Evolution, and Conservation Concentration (39 units)

BIOL 333 Ecology	4
BIOL 341 Evolution	4
ENSP 322 Conservation Biology	4
BIOL 342 Molecular Genetics	4
BIOL 485 Biometry	4

One course from the Organismal Biology Core Area

One of the following 4 courses:

BIOL 335 Marine Ecology	
BIOL 337 Behavioral Ecology	
BIOL 338 Environmental Microbiology and Biotechnology	
GEOG 365 Biogeography and Landscape Ecology	
GEOL 413 Paleontology	

One course from the Physiology Core Area

Additional upper-division major electives

BIOL 494 Independent Research Design	1
BIOL 496 Senior Research	2

B. S. Physiology Concentration (39 units)

BIOL 344 Cell Biology	4
BIOL 472 Developmental Biology	4
CHEM 446 Metabolic Chemistry	3

Three of the following 4 courses:

BIOL 328 Vertebrate Evolutionary Morphology	
BIOL 347 Environmental Physiology	
BIOL 348 Plant Physiology	
BIOL 349 Animal Physiology	

One of the following 3 courses:	4
BIOL 322 Invertebrate Biology	
BIOL 327 Vertebrate Biology	
BIOL 329 Plant Biology	

One course from the Ecology and Evolution Core Area

Additional upper-division major electives

BIOL 494 Independent Research Design	1
BIOL 496 Senior Research	2

B.S. Microbiology Concentration (39 units)

BIOL 340 General Bacteriology	4
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One of the following 3 courses:

BIOL 347 Environmental Physiology	
BIOL 349 Animal Physiology	
BIOL 348 Plant Physiology	

One of the following 3 courses:

BIOL 342 Molecular Genetics	
BIOL 343 Molecular Microbiology	
BIOL 344 Cell Biology	

One of the following 2 courses:

BIOL 333 Ecology	
BIOL 341 Evolution	

Two of the following 3 courses:

BIOL 382 Parasitology	
BIOL 480 Immunology	
BIOL 481 Medical Microbiology	

One of the following 2 courses:

CHEM 255 Quantitative Analysis+	
BIOL 338 Environmental Microbiology and Biotechnology	

Additional upper-division major electives

BIOL 494 Independent Research Design	1
BIOL 496 Senior Research	2

+ If waived by completion of CHEM 125A/B these 4 units must be completed by taking other advisor approved courses.

Minor in Biology

The minor consists of a minimum of 20 units in the Department of Biology with a GPA of 2.00 or higher. The purpose of the minor is to provide the student with a rigorous background in biology that supplements the student's major.

Students must develop a program in consultation with a faculty advisor in the Biology Department. Requirements of the biology Minor are:

Take two of the 3 lower-division major's courses listed below

BIOL 121 Diversity, Structure, and Function	
BIOL 122 Genetics, Evolution, and Ecology	
BIOL 123 Molecular and Cell Biology	

Twelve additional units in Biology

At least eight of these units must be upper-division courses for majors and at least one of those must have a laboratory. One GE course in biology or a third lower-division biology major's course can be applied, as well as one unit of Biology Colloquium (BIOL 390). All courses applied to the minor must be taken for a letter grade, except BIOL 390.

Master of Science in Biology

The Master of Science degree in the Department of Biology is a thesis program. Students complete 30 units of course work to master the concepts and techniques in their chosen area. They also conduct original research under the direction of a member of the graduate faculty and write up their findings as a Master's Thesis.

Graduate students in the Department of Biology are supported through a variety of sources. The Department has a limited number of paid teaching associateships available each semester. The University offers a limited number of tuition fee waivers for qualified teaching associates. In addition, students may receive research associateships through their faculty mentor's research grants. Students can also obtain academic scholarships as well as financial aid (usually in the form of low-interest loans).

The Department of Biology graduate faculty are actively involved in research in a wide range of disciplines, including ecology and evolutionary biology, molecular and cell biology, physiology, functional morphology, and organismal biology. Additional faculty from other departments on campus have expertise in biology and are adjunct members of the graduate program.

Graduates of this program find themselves with an enhanced understanding of biology and first-hand experience in the practice of science. Many of our students go on to doctoral programs; others pursue careers in teaching, research, environmental consulting, resource management, industry, and various health care professions.

Admission to the Program

To apply, you must submit: A) items 1-3 to SSU's Admissions and Records Office, and B) copies of items 2 and 3 and originals of items 4 and 5 to the Department of Biology Graduate Coordinator. The application deadline in the department is January 31 for the Fall semester and October 31 for the Spring semester. The SSU Admissions and Records Office will notify students about the status of their applications.

1. University application obtained from the Admissions and Records Office.
2. Official copies of all undergraduate transcripts.
3. One-to-two page Statement of Purpose essay detailing your background in biology, objectives for graduate school, and career goals.

4. Two letters of recommendation from individuals familiar with the student's background in biology and able to comment on the potential for conducting original work.
5. Graduate Record Examination (GRE) scores for the General test. Biology Subject scores are recommended, but not required.

IMPORTANT: The complete application package must be received in the Admissions and Records Office and by the Biology Graduate Coordinator before an applicant will be considered for admission.

Admission to the program requires:

- I. Meeting California State University admissions requirements.
- II. Acceptance by a biology graduate faculty member to serve as a faculty advisor. Students are strongly encouraged to review the information on faculty members and contact them prior to completing an application.
- III. Approval of the Graduate Committee. Applications will be reviewed for evidence that the prospective student is capable of initiating and performing original research. Applicants deficient in undergraduate course preparation will be expected to demonstrate competency before being advanced to candidacy. As a general guideline, the Department uses the following criteria to determine this potential:

An undergraduate degree in biology or equivalent, including:

- A. One course in calculus or statistics;
- B. One year of general chemistry and one semester of organic chemistry;
- C. At least one other course in physical sciences;
- D. Upper-division coursework demonstrating competence in three of four core areas (organismal biology; physiology; molecular or cellular biology; ecology or evolutionary biology);
- E. GPA of 3.00 or higher in the last 60 units;
- F. A score at or above the 50th percentile on each section of the General Examination of the GRE; and
- G. Evidence in letters of recommendation of potential for conducting independent research in biology.

BUSINESS ADMINISTRATION

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*James Robertson

Michael Santos

Elizabeth Stanny

Janeira Sutanonpaiboon

Elizabeth Thach

Karen Thompson

Torben Thomsen

John Urbanski

Zachary Wong

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Science in Business Administration

Minor in Business Administration

Master of Business Administration

General

Wine Business

Executive Master of Business Administration

Additional Professional Business Programs

Department Mission

The Department of Business Administration at Sonoma State University offers high-quality, relevant education in business to aspiring and practicing professionals, managers, and entrepreneurs in the private and public sectors. It does this in a small liberal arts and sciences environment in which faculty emphasize the development and continuous improvement of the skills of critical thinking, effective communication, ethical reasoning, maintaining a global perspective, and applying disciplinary tools.

Careers in Business Administration

The Department of Business Administration offers a wide selection of specialized courses designed to meet a variety of career objectives. These career objectives include, but are not limited to, management-level accounting positions in business, government or public accounting; financial management, financial analysis and planning, investment banking, and insurance; general management, personnel, labor relations, public relations, wage and salary administration, training and international business; advertising and promotion, product development, marketing research and sales management; and positions in sales and management within the wine industry.

Bachelor of Science in Business Administration

The Bachelor of Science in Business Administration includes a pre-business program, a core of course requirements, and a broad range of fields of concentration. All majors take preparatory courses and lower-division core requirements and then select concentrations based on individual interest and career plans. The fields of concentration include: accounting, finance, financial management, management, marketing, wine business strategies, and a special concentration designed by the student with the approval of the department chair. A Bachelor of Science in Business Administration with an emphasis in one or more areas of concentration prepares students for innovative and responsible citizenship and leadership in society—domestic and worldwide.

Degree Requirements

General Education (freshmen)	51 or
General Education (transfer)	48

Pre-Major Preparatory Courses

GE-A1	
Take MATH 131 or MATH 161 in GE category B4	
Take ECON 204 in GE category D5	
Non-general education prerequisite: ECON 205	4
Major requirements [minimum]	55
General electives (to meet minimum degree requirements)	14
Minimum units needed for graduation:	124

A minimum of 124 semester units is required to graduate with a bachelor of science degree in business administration. A total of 55 units with a minimum 2.00 GPA is required for the major; 14-15 additional units are needed in preparatory courses, some of which might apply toward general education requirements. In addition to general education and the major, some students need to take other coursework to fulfill unit requirements for the degree. Such courses may be selected from the entire University curriculum and may be used to explore other disciplines, complete a minor, or take more classes in the major.

Advising

The Department of Business Administration believes that advising is essential for students' success. Students are encouraged to meet regularly with their advisor and are required to seek advising at certain critical junctures. These junctures are when creating a 4-year plan, when changing status from pre-business to business and planning a concentration, when applying for graduation, and when experiencing academic difficulties.

The department maintains an active advising function in a two-tier system. Business administration employs a full-time academic advisor with whom each student in pre-major status should consult on matters regarding general education, University requirements, the pre-major program, and routine major issues. When students move from pre-major to the business administration major they are assigned a faculty advisor. Every full-time faculty member actively advises students, especially on matters relating to the major and careers.

Pre-Business Administration Program

All students enter the business administration program as pre-business majors. Pre-business students must meet the computer competency requirement, complete all pre-major coursework, and attain junior status prior to being admitted to business administration major status. Business major status is required to take upper-division business courses.

Computer Competency

All business majors must demonstrate computer competency prior to taking BUS 211, BUS 230A, or any upper-division business core class. Competency can be demonstrated by passing the Practical

Computer Competency Requirement (PCCR) examination administered by the Department of Business Administration. Students should plan carefully and consult with the school website, www.sonoma.edu/sbe/students, for test and registration information.

Pre-Major Courses

Pre-major coursework consists of both preparatory courses and the lower-division portion of the business major. Preparatory courses and lower-division core courses together constitute the pre-major. A letter grade of C or better is required in each pre-major course. In addition to demonstrating computer competency, all the following coursework must be completed as part of the pre-major program:

Preparatory Courses (units that are necessary but do not count toward the major)

GE A-1
ECON 204 Introduction to Macroeconomics (4)
ECON 205 Introduction to Microeconomics (4)
MATH 131 Introduction to Finite Mathematics (3) or MATH 161 Calculus (4)

Lower-Division Business Core (units count in major)

BUS 211 Business Statistics (4) or MATH 165 Elementary Statistics (4)
BUS 225 Legal Environment of Business (4)
BUS 230A Financial Accounting (4)
BUS 230B Managerial Accounting (4)

When the pre-major courses listed above are completed with a C or better, students have to file a Change of Status ("blue") form along with all corresponding unofficial transcripts in order to change to Business Administration. Then the student will be able to register for upper-division business major classes.

Major in Business Administration

Major Component	Normal Unit Distribution
Lower-division business core (4 courses)	12-16
Upper-division business core courses (6 courses)	24
Concentration (5 courses)	15-20
Electives in major	As needed
Total units needed for major:	55

Transfer students may complete the Business Administration course requirements (10-course core and 5-course concentration) with fewer than 55 units; however, additional business electives must be taken to complete the 55-unit major requirement. Such students may elect to take additional coursework from their own or another area of concentration or from other approved courses offered within the business curriculum, such as BUS 295, 296, 385, 495, and 499, as long as they meet the prerequisites for such courses. It is recommended that students familiarize themselves with course requirements and consult with a faculty advisor prior to choosing elective courses intended to meet the major requirements. At least one-half of the courses, including a minimum of 3 courses in the concentration, must be completed at SSU.

Upper-Division Business Core

All business students must complete these core requirements (coursework in the selected area of concentration usually may be taken concurrently):

- BUS 316 Production/Operations Management (4)
- BUS 319 Management Information Systems (4) or BUS 334* Accounting Information Systems
- BUS 344 Organizational Behavior (4)
- BUS 360 Introduction to Marketing (4)
- BUS 370 Introduction to Managerial Finance (4)
- BUS 491** Seminar in Management Strategy and Policy (4)

* BUS 334 is required for accounting concentration students.

** BUS 491 is the capstone course in the business administration major designed to be taken in the student's final semester. Prerequisite: all business core requirements, a passing score on the WEPT, and application for award of degree.

Concentrations for Business Administration Majors

Every business student must complete an area of concentration within the major. Each concentration consists of five courses. Each of these courses will be of 3 or more units. Students should plan carefully and consult their faculty advisor regularly and before enrolling in concentration courses. Those wishing to complete a double concentration must take at least eight concentration courses beyond the core. Many concentration courses can be taken while completing core requirements. Most courses in the concentrations have prerequisites. At times, appropriate courses from other majors, such as psychology, sociology, public administration, economics and environmental studies, may be substituted in a concentration with the approval of the concentration advisor and the department chair. Except for the special concentration, at least 3 of the concentration courses must be taken at SSU.

Concentration Advisors

Accounting: Anderson, Stanny, Richman, Ely, Thomsen

Finance: Hu, Jordan, Santos

Financial Management: Anderson, Stanny, Hu, Jordan, Richman, Lease, Santos, Ely, Thomsen

Management:

Girling, Thach, Thompson, Gilinsky, Dove, Newton, Urbanski, Sutanonpaiboon

Marketing: Olsen, Atkin, Campbell, Horowitz

Wine Business Strategies: Thach, Gilinsky, Olsen, Atkin

Special: Wong, Department Chair

Accounting Concentration: 5 Courses

Five courses are required. This prepares students for management-level accounting positions in business and government or public accounting. Specialized courses are offered in financial accounting, cost accounting, auditing, and taxation. Students who intend to sit for the CPA exam should take all upper-division accounting courses listed below.

BUS 330A Intermediate Accounting	4
BUS 330B Intermediate Accounting	4
BUS 430 Advanced Accounting	4
BUS 433A Individual Taxation	4

BUS 433B Corporation and Estate Taxation	4
BUS 434 Auditing	4
BUS 435 Cost Accounting	3
BUS 436 Business Law	4
BUS 437 Governmental Accounting	4

Finance Concentration: 5 Courses

Five courses are required. The concentration prepares the student for a career in financial management, financial analysis and planning, investment banking, or insurance.

Required Courses

BUS 472 Investments	4
BUS 474 Computer Applications in Finance	4

Select three courses from Group A OR select two courses from Group A and one course from Group B.

Group A

BUS 377 Financial Institutions (or ECON 375 Money and Banking)	4
BUS 385 Special Topics (with concentration advisor consent)	3-4
BUS 470 Managerial Finance	4
BUS 471 Financial Planning and Strategy	4
BUS 473 International Finance	4
BUS 476 Risk Management and Insurance	4

Group B

BUS 330A Intermediate Accounting	4
BUS 433B Corporate Tax for Financial Management	4
BUS 475W Wine Accounting and Finance	4
BUS 499F Internship in Finance	3-4
ECON 311 Public Economics	4
ECON 411 Seminar in Public Finance	4

Financial Management Concentration: 5 Courses

Five courses are required. The financial management concentration prepares students for financial management-level positions in business or government. Because the disciplines of accounting and finance are closely related, this concentration gives the student exposure to courses from both disciplines. Students planning to take the CPA exam are strongly encouraged to take the accounting courses BUS 330B, BUS 433A, and BUS 433B as preparation for the exam. The coursework will prepare the student for some of the areas covered on the Certified Management Accountant (CMA) exam.

Required Courses:

BUS 330A Intermediate Accounting	4
BUS 435 Cost Accounting	4
BUS 472 Investments	4
BUS 474 Computer Applications in Finance	4

Select one of the following courses:

BUS 330B Intermediate Accounting	4
BUS 377 Financial Institutions (or ECON 375 Money and Banking)	4
BUS 437 Governmental Accounting	4
BUS 470 Managerial Finance	4
BUS 471 Financial Planning and Strategy	4
BUS 473 International Finance	4
BUS 475W Wine Accounting and Finance	4
BUS 476 Risk Management and Insurance	4

Management Concentration: 5 Courses

Five courses are required. The management concentration is designed to prepare students for entry-level management positions.

Required Courses:

BUS 340 Survey of Human Resource Management (4) or BUS 340W*	4
BUS 350 Management	4
BUS 452 Leadership in Organizations	4

Select at least two courses:

BUS 385 Special Topics (with concentration advisor consent)	3-4
BUS 391 Cross Cultural Communication and Negotiation	4
BUS 393 Introduction to International Business	4
BUS 446 Government Regulation of Human Resources	4
BUS 453 Small Business Analysis	4
BUS 499MG Internship in Business Management	3-4

Marketing Concentration: 5 Courses

Five courses are required. The marketing concentration provides creative careers in advertising and promotion, product development, sales, and retailing, as well as marketing research and sales management.

Required Courses:

BUS 367 Consumer Behavior	4
BUS 462 Marketing Research	4
BUS 469 Marketing Management	4

Select at least two courses:

BUS 366 Retail Management	4
BUS 368 International Marketing	4
BUS 385 Special Topics (with concentration advisor consent)	3-4
BUS 396W The Global Wine Industry	3
BUS 453 Small Business Analysis	4
BUS 461 Promotion Management	4
BUS 463 Sales Management and Personal Selling	4
BUS 464W Production, Operations, and Distribution (Wine)	4
BUS 465W Wine Marketing	4
BUS 468 Marketing Decision Making	4
BUS 499MK Internship in Marketing	3-4

Wine Business Strategies (WBS): 5 Courses

Five courses are required. This concentration is most ideal for students seeking a general management position within the wine industry. A viticulture and/or enology academic background is not required.

Required Courses:

BUS 305W Introduction to Wine Business Strategy	4
BUS 464W Production, Operations, and Distribution (Wine)	4
BUS 465W Wine Marketing	4
BUS 499W Internship in Business (Wine)	3-4

Select at least one of the following courses:

BUS 340 Human Resource Management	4
BUS 366 Retail Management	4
BUS 396W Global Wine Industry	3
BUS 397W The Global Marketplace for Wine	4
BUS 475W Wine Accounting and Finance	4
BUS 467W Wine E-Commerce and Direct Sales	4

Special Concentration: 5 Courses

The Special concentration is intended for those in either of the following categories:

First, the special concentration is for those who wish to have a general B.S. degree in business administration. To complete this concentration a student must, with the approval of a faculty advisor, select five business courses from at least two areas of concentration. At least two of the five courses would normally be chosen from among those listed as required within the various concentrations.

Second, it is for those students who wish, with the approval of the department chair, to design a concentration in an area not covered sufficiently within the department, using courses outside of the department. To complete this concentration, five upper-division courses, at least three-unit, should be selected with approval from an advisor and the chair.

Undergraduate Program Special Requirements

Residency

At least one-half of the courses of the major, including three of the courses in the concentration, must be completed at Sonoma State University.

Change of Major

The catalog year for a student declaring a major in Business Administration will be the catalog in effect at the time of such declaration.

Change of Status from Pre-Business to Business Administration Major

Pre-Business students must file a Change of Status ("blue form") in the department to request change of status to the business administration major. This request should be submitted as soon as the student has completed, with a C or better, all required courses in the pre-major program. A faculty advisor will be assigned to assist the student with matters related to the major program. The change to business administration status will not become effective until completion of pre-major requirements (with minimum "C" grades) has been verified.

Sample Four-Year Program for Bachelor of Science in Business Administration

Select a lab with B1 or B2 GE; select an Ethnic Studies course for C1, C2, C3, C4, D1 or E.

FRESHMAN YEAR:: 32-33 Units

Take PCCR*

[Avoid UD GE until Junior year]

Practical Computer Competency Requirement (PCCR) exam should be taken in freshman year

Fall Semester (16-17 Units)

ENGL 101 (A2) (3)
ECON 204 (D5) (4)
Math 131 or 161 (B4) (3-4)
GE (B3) (3)
Elective: UNIV 102 (3)

Spring Semester (16 Units)

PHIL 101 or 102 (A3) (3)
ECON 205 (4)
GE (C1 or C4) (3)
Pols 200 (D4)(3)
GE (D1 or D2) (3)

SOPHOMORE YEAR:: 31-32 Units

[Avoid UD GE until Junior year]

Fall Semester (14-15 Units)

BUS 230A (4)
BUS 225 (4)
GE (B1 or B2 with lab) (3-4)
GE (A1) (3)

Spring Semester (17 Units)

BUS 230B (4)
BUS 211 (4)
GE (D3) (3)
GE (B2 or B1) (3)
Elective (3)

JUNIOR YEAR:: 31-32 Units

[Take WEPT]

Fall Semester (17 Units)

UD BUS Core** (4)
UD BUS Core*** (4)
GE (C2 or C3) (3)
GE (D2 or D1)(3)
Elective (3)

Spring Semester (14-15 Units)

UD BUS Core (4)
UD BUS Core (4)
BUS Concentration (3-4)
UD GE (C3 or C2) (3)

SENIOR YEAR:: 27-30 Units

[Apply for graduation at beginning of senior year]

Fall Semester (14-15 Units)

BUS concentration (3-4)
BUS concentration (3-4)
UD BUS Core (4)
UD GE (C4 or C1) (3)
Electives as needed

Spring Semester (13-15 Units)

UD BUS Core: 491**** (4)
BUS concentration (3-4)
BUS concentration (3-4)
UD GE (E) (3)
Electives if needed

TOTAL SEMESTER UNITS:: 124 [refer to catalog and consult advisor(s) for additional information]

*PCCR examination is a prerequisite for BUS 211, BUS 230A, or any upper-division business core class.

**Choose BUS 344 first if planning management concentration; 360 first if marketing; 370 first if finance or financial management.

***For information systems, students should select BUS 334 if planning accounting or financial management; otherwise, select BUS 319.

****BUS 491, designed to be taken in the last semester of the program (prerequisite: all other core courses, passing score on the WEPT, and application for award of degree).

Minor in Business Administration

A minor in business administration shall consist of a minimum of 20 units in business administration. In addition to the required courses listed below, additional coursework, chosen with consent of a faculty advisor, may be selected as needed to obtain the 20-unit minimum. The upper-division coursework must be completed at Sonoma State University.

BUS 230A Principles of Accounting	4
BUS 230B Principles of Accounting	4
BUS 344 Organizational Behavior	4
BUS 360 Introduction to Marketing	4
BUS 370 Introduction to Managerial Finance	4

The lower division accounting courses must be completed before taking the upper-division courses. Transfer courses must have an equivalent course offered in our catalog. BUS 150, 211, 219, 270, 292, 295, 296, 388, 495, and 499 may not be counted in the minor. Students must complete a Business Administration Minor Declaration Form in consultation with their department faculty advisor. Minors must be approved by the department chair.

Master of Business Administration

The Master of Business Administration degree (M.B.A.) is intended to prepare graduates for positions of leadership in organizational settings in both the private and public sectors. The program is an evening program designed primarily to meet the needs of the working student in Sonoma County and the North Bay region. Students seeking a full-time day program are advised to apply to one of the other CSU schools. The M.B.A. degree program has two concentrations: general and wine business.

M.B.A. Admissions

All documentation required for admission must be received by the University and department no later than the last day of the relevant application period.

The M.B.A. application periods are as follows:

Fall semester - November 1 to March 30

Spring semester - August 1 to September 30

You can apply online at <http://www.sonoma.edu/ar/prospective/gs/apply.shtml>.

To be admitted to the M.B.A. program, a candidate must meet the requirements of both the University and the Department of Business Administration. In addition, all candidates for the Wine Business concentration will be expected to have completed 24 units of wine related coursework or 24 months of wine industry work experience, or any combination thereof.

University Requirements

The requirements for admission to graduate study (work beyond the bachelor's degree) at Sonoma State University are in accordance with Title 5, *California Administrative Code*. For admission, students must:

- Hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed academic preparation as determined by an appropriate campus authority;
- Have attained a grade point average of at least 2.50 (A = 4.00) in the last 60 semester (90 quarter) units attempted;
- Have been in good standing at the last college attended; and
- Applicants who have not spent at least three years of school at the secondary level (or beyond) where English is the principal language of instruction must have earned a minimum score of 550 on the paper version or 213 on the computerized version of the Test of English as a Foreign Language (TOEFL).

Department Of Business Administration Requirements

An individual may apply for admission to the M.B.A. program with or without an academic background in business administration. Applicants will not be considered without a current Graduate Management Admissions Test (GMAT) score (less than 5 years old). The department considers the candidate's application, academic background, and performance on the GMAT in evaluating high promise of success in the program. The department requires a minimum formula score of 1050 obtained from a combination of the total GMAT score and the grade point average for the last 60 semester (90 quarter) units attempted. The formula is calculated as follows:

$$\text{Formula Score} = (200 \times \text{Grade Point Average}) + \text{Total GMAT score}$$

To illustrate, if a candidate has a 3.20 grade point average for the last 60 units and a total GMAT score of 500, the total formula score would be 1140.

$$\text{Example Computation: } 200(3.20) + 500 = 1140$$

In this case, the candidate would meet the minimum formula score for admission.

In addition, applicants must have a minimum total score on the GMAT of 450, and a score on the quantitative portion of the exam at the 20th percentile or above, and either a score on the verbal at the 20th percentile or above or at least a 4 on the analytical writing portion.

A candidate with a minimum formula score of 1000 who otherwise demonstrates high promise of success in the program may be considered by the department for alternative admission into the M.B.A. program. To be considered, the candidate must clearly demonstrate a record of at least five years of appropriate managerial experience since receipt of the bachelor's degree.

A candidate who is not accepted may appeal to the Graduate Program Committee for admission reconsideration. Such appeals are not routinely granted.

Documentation Needed to Apply

The following documentation is required for consideration of acceptance into the M.B.A. Program. All documentation required for admission must be received by the University and department no later than the last day of the relevant application period.

1. A California State University Application for Graduate and Postbaccalaureate Admission, Part A and Part B. International students must submit the Sonoma State University *International Student Application for Admission-Readmission* (instead of the CSU standard form), and a copy of the Test of English as a Foreign Language (TOEFL) score with a minimum of 550 on the paper version or 213 on the computerized version. For more information on applying, visit the Office of Admissions and Records online or in person.
2. Two copies of official transcripts should be ordered from each college attended. All community college and university transcripts that provide evidence of completion of M.B.A. foundation courses must be included.
3. An official copy of the GMAT score should be ordered from:
GMAT
Educational Testing Service
PO Box 6101
Princeton, NJ 08541-6101

Testing sites for the GMAT and preparation materials can be obtained at this website: <http://www.MBA.com/MBA>.

The documents detailed in items 1 and 2 above must be sent to:

Office of Admissions and Records
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609

The GMAT score, item 3 above, should be sent directly to:

Director of M.B.A. Programs
School of Business and Economics
Department of Business Administration
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609
(707) 664-2377

Students who are currently eligible to enroll in classes at Sonoma State University in postbaccalaureate status may apply for admission to the M.B.A. program directly to the M.B.A. Coordinator. A current copy of Part A and B of the California State University Graduate and Postbaccalaureate Admission form will be required as well as a GMAT score.

Graduate Student Status

A candidate admitted into the M.B.A. program will be admitted in one of two categories:

- **Conditionally Classified Graduate Status.** A student admitted to the M.B.A. program as a Conditionally Classified Graduate Student can take only foundation courses. This student may not take M.B.A. required or elective courses without permission of the Director of M.B.A. Programs. A student who begins as a Conditionally Classified Graduate Student will be eligible

for advancement to Classified Graduate Status upon successful completion of the foundation courses. Such a request should be submitted to the Director of M.B.A. Programs.

- Classified Graduate Status. A student admitted to the M.B.A. program as a Classified Graduate Student will have completed the foundation courses at the time of admission. This student may take M.B.A. required or elective courses.

Admissions Process

The Office of Admissions and Records performs the initial evaluation of the application and transcripts and determines eligibility for admission to the University. If the candidate is not eligible for admission to the University, the candidate is notified and the process stops.

If the candidate is eligible for admission to the University, Part B of the application along with a copy of the transcripts is forwarded to the Director of M.B.A. Programs for the department recommendation. When the GMAT score is received, eligibility for admission to the M.B.A. program is determined and a recommendation for status of admission is returned to the Office of Admissions and Records, which will notify the candidate of the results.

Students who have not taken the GMAT will not be accepted for entrance into the program.

Transfer Credits

A maximum of 6 units of transferred graduate level work may be used to satisfy the 30 units needed for the degree plan. Transfer courses will usually be accepted only from AACSB accredited universities. Transfer courses must be approved by the Director of M.B.A. Programs. Be sure to get approval for transfer courses prior to taking them.

Eligibility for M.B.A. Courses

Courses offered in the M.B.A. program have restricted enrollment.

- For M.B.A. foundation courses, a student must be at least a Conditionally Classified M.B.A. student or a Classified Graduate student in another graduate program at the University or obtain written permission from the Director of M.B.A. Programs.
- For M.B.A. required or elective courses, a student must be a Classified M.B.A. student or a Classified Graduate student in another graduate program at the University or obtain written permission from the Director of M.B.A. Programs.

Readmission

Students taking more than one semester off must reapply and meet current admission standards as presented above. In addition, the GMAT used to determine that admission can not be more than 5 years old. Students readmitted may have to recertify courses. Recertification is necessary for any course that will be more than 7 years old the semester the degree is granted.

M.B.A. Program Curriculum with a General Concentration

The M.B.A. program consists of the following set of courses:

- M.B.A. foundation courses (32 semester units)
- M.B.A. required courses (21 semester units)
- M.B.A. elective courses (9 semester units)

A student who has completed the M.B.A. foundation courses (see below) prior to admission need only complete the M.B.A. required and elective courses (a total of 30 semester units).

M.B.A. Foundation Courses (32 units)

The M.B.A. foundation courses provide the fundamental knowledge of business principles to prepare students for the study of business at the graduate level. The foundation courses include the following:

BUS 230A and 230B	8
BUS 344 Organizational Behavior	4
BUS 360 Introduction to Marketing	4
BUS 370 Introduction to Managerial Finance	4
BUS 211 Business Statistics	4
ECON 204 and 205 Introduction to Economics	8

Foundation courses may be waived for competencies demonstrated by the undergraduate courses or their equivalent listed above or by examination. All courses listed at the 200 level may be taken at a junior college. All courses listed at the 300 level must be taken at a four-year institution at the upper-division level. If acceptable equivalents of these courses have been taken at another institution, but the total units earned do not sum to 30 semester units, the student must take supplementary business courses to achieve the 30-unit minimum. A student needing one or more foundation courses will be admitted as a Conditionally Classified Student.

M.B.A. Required Courses (21 units)

As the title signifies, the M.B.A. required courses are a cluster of graduate business courses that must be taken by all students. These 3-unit courses are intended to provide the graduate with those skills necessary to become an effective leader and manager in today's business environment. The required courses include the following:

BUS 516 Seminar in Operations Management	3
BUS 519 Management Information Systems	3
BUS 530 Financial Statement Analysis	3
BUS 540 Strategic Human Resource Management	3
BUS 560 Seminar in Marketing Management	3
BUS 570 Seminar in Managerial Finance	3
BUS 591 Seminar in Strategic Management	
or BUS 592 Entrepreneurship and New Venture Creation	3

M.B.A. Elective Courses (9 Units)

An M.B.A. student must complete 9 units of elective courses to graduate. Elective courses are typically worth 3 units each.

BUS 550 Seminar in Organizational Behavior and Management Theory	3
BUS 552 Leadership and Team Building	3
BUS 554 Social Entrepreneurship	3
BUS 559 Seminar in Advanced Management Topics	3
BUS 581 Research Methods for Managers	3
BUS 593 Seminar in International Management	3
BUS 595 Special Studies in Business Administration	1-3
BUS 596 Graduate Internship	1-3
BUS 599 Master's Degree Directed Research	3

Analytical Writing Requirement

All candidates entering SSU as graduate students who do not score at least 4.00 on the analytical writing portion of the GMAT must pass the CSU Written English Proficiency Test (WEPT) either during their first semester or before completing the foundation courses.

Transfer Credits

Up to 6 units of approved graduate level work may be transferred to meet part of the 30 units for the M.B.A.. Graduate courses equivalent to our foundation courses will not be accepted to meet elective or required M.B.A. courses. Transfer credits will normally be accepted only from AACSB accredited universities. Transfer courses must be approved by the M.B.A. Coordinator. Be sure to get approval prior to taking any transfer courses.

Grades

All courses applied to the program must be completed with an overall GPA of 3.00, and no course for which a final grade below C is assigned may be used to satisfy this requirement. Graduate programs must be completed in no more than 7 years, which is computed as 14 semesters.

Culminating Project

All candidates for the masters in business administration must complete a culminating project. The culminating project will be a group project completed as part of the capstone course (BUS 591 or BUS 592). This culminating project should show evidence of originality and independent thinking. A project report and public defense of the project are required.

M.B.A. Program Curriculum with a Concentration in Wine Business

The M.B.A. in wine business consists of the following set of courses:

- M.B.A. foundation courses (32 semester units)
- Wine Business M.B.A. required courses (24 semester units)
- Wine Business M.B.A. elective courses (6 semester units)

A student who has completed the M.B.A. foundation courses (see below) or their equivalents prior to admission need only complete the Wine Business M.B.A. required and elective courses (a total of 30 semester units).

M.B.A. Foundation Courses (32 units)

The M.B.A. foundation courses provide the fundamental knowledge of business principles to prepare students for the study of business at the graduate level. This set of courses is taken at the undergraduate level. The foundation courses include the following:

BUS 230A and 230B Principles of Accounting	8
BUS 344 Organizational Behavior	4
BUS 360 Introduction to Marketing	4
BUS 370 Introduction to Managerial Finance	4
BUS 211 Business Statistics	4
ECON 204 and 205 Introduction to Economics	8

Foundation courses may be waived for competencies demonstrated by the undergraduate courses or their equivalents listed above or by examination. All courses listed at the 200 level may be taken at a junior college. All courses listed at the 300 level must be taken at a four-year institution at the upper-division level. If acceptable equivalents of these courses have been taken at another institution, but the total units earned do not sum to 30 semester units, the student must take supplementary business courses to achieve the 30-unit minimum. A student needing one or more foundation courses will be admitted as a Conditionally Classified Student.

Wine Business M.B.A. Required Courses (24 units)

As the title signifies, the required courses for the Wine Business M.B.A. are a cluster of graduate business courses that must be taken by all students in the Wine Business M.B.A.. These 3-unit courses are intended to provide the graduate with those skills necessary to become an effective leader and manager in today's business environment. The required courses include the following:

BUS 516 Seminar in Operations Management
BUS 519 Management Information Systems
BUS 530 Financial Statement Analysis
BUS 540 Strategic Human Resource Management
BUS 545W Global Wine Business
BUS 560 Seminar in Marketing Management
BUS 570 Seminar in Managerial Finance
BUS 591 Seminar in Strategic Management
or BUS 592 Entrepreneurship and New Venture Creation

Wine Business M.B.A. Elective Courses (6 units)

A Wine Business M.B.A. student must complete 6 units of Wine Business M.B.A. elective courses to graduate. Elective courses are typically worth 3 units each. All directed studies and internships in the Wine M.B.A. concentration (BUS 595, 596, and 599) are required to focus on wine business related topics.

BUS 555W Sustainability in the Wine and Hospitality Industry
BUS 565W Marketing and Sales Strategies for Wine
BUS 595 Special Studies in Business Administration
BUS 596 Graduate Internship
BUS 599 Master's Degree Directed Research

Wine M.B.A. Program Special Requirements

Analytical Writing Requirement

All candidates entering SSU as graduate students who do not score at least 4.00 on the analytical writing portion of the GMAT must pass the CSU Written English Proficiency Test (WEPT) either during their first semester or before completing the foundation courses.

Transfer Credits

Up to 6 units of approved graduate-level work may be transferred to meet part of the 30 units for the M.B.A.. Graduate courses equivalent to our foundation courses will not be accepted to meet elective or required M.B.A. courses. Transfer credits will normally only be accepted from AACSB-accredited universities. Transfer courses must be approved by the Director of M.B.A. Programs. Be sure to get approval prior to taking any transfer courses.

Grades

All courses applied to the program must be completed with an overall GPA of 3.00, and no course for which a final grade below C is assigned may be used to satisfy this requirement. Graduate programs must be completed in no more than 7 years, which is computed as 14 semesters.

Wine Industry Experience

All candidates for the M.B.A. program in Wine Business will be expected to have completed 24 units of wine-related coursework or 24 months of wine industry work experience, or any combination thereof, before being admissible to the M.B.A. program in Wine Business.

Culminating Project

All candidates for the masters in business administration with a concentration in Wine Business must complete a culminating project. The culminating project will be a group project completed as part of the capstone course (BUS 591 or BUS 592). This culminating project should be a faculty-approved topic relating to Wine Business and show evidence of originality and independent thinking. A project report and public defense of the project are required.

Executive Master of Business Administration

The EMBA, designed for professionals already advanced or poised for advancement in their career, consists of fourteen courses in a cohort-style, modular curriculum, beginning and ending with assessing students as leaders, not just managers. The first module is a skills-driven set of courses, starting with financial statement analysis, marketing, production and human resource management, similar to the current M.B.A. program but adding how to use these skills to manage multiple functional areas of business. During the first module, there is an off-site, leadership development experience. The second module is about reacting to external shocks and optimizing the firm's infrastructure the second module's global business course and includes international travel and learning as a co-curricular exercise. The third module consists of elective courses. The final module revisits leadership and strategic planning as foci of the EMBA program.

Executive M.B.A. Required Courses (30 units)

The Executive M.B.A. consists of the following specific courses. All students must take all the courses listed below which are scheduled in modules for the given cohort.

BUS 516E Operations Management Strategies
BUS 519E Strategic Networking and Information Management
BUS 530E Financial Statement Analysis for Leaders
BUS 540E Strategic Human Resource Leadership
BUS 552E Leadership Intelligence
BUS 554E Social Entrepreneurship and Leadership
BUS 560E Strategic Marketing Management
BUS 565E Cohort-Specific Elective
BUS 570E Financial Markets and Business Strategy
BUS 581E Analyzing Business Research
BUS 591E Strategy in Practice
BUS 592E Putting It All Together: Business Policy and Strategy
BUS 593E Global Business Operations: "The World is Flat"
BUS 590E Leading Change in Organizations

Admissions Information

The Executive M.B.A. is a self-support program that is run in conjunction with the School of Extended Education. Some special admissions requirements and application procedures apply.

For detailed information please visit the EMBA website at www.sonoma.edu/sbe/emba

CAREER MINORS

Programs Offered

- Career Minor in Arts Management
- Career Minor in Health Systems Organizations
- Career Minor in Women's Health

The career minors program allows students from a variety of majors to pursue a coherent sequence of courses in order to acquire insight into the ways the undergraduate degree may be applied in particular careers. Each career minor culminates in an internship giving the student practical experience in the field.

Information about a career minor may be obtained from the faculty advisor. Students interested in pursuing a career minor should plan well in advance in order to integrate the coursework into their plan of study.

Career Minor in Arts Management

The career minor in arts management provides students of the visual arts with education, training, and experience in the practical, administrative side of their field. Art history and art studio majors completing this career minor will be in much stronger positions to find work and support themselves in fields within or closely related to their majors. The career minor in arts management may also be combined with any other major, provided that the student also completes at least a minor in art history or art studio.

Internships are available at local and regional art galleries, museums, nonprofit organizations, and other groups that provide services in the arts.

Program Advisor

Michael Schwager, Art Gallery
Art Building 106
(707) 664-2720

Requirements for the Career Minor In Arts Management

To earn the career minor in arts management, students must complete the following 21 units:

ARTH 312 Principles of Arts Management	3
ARTH 494 Gallery and Museum Methods	3
ARTH 499 Internship	4
Business, computer, or other related courses to be determined by the program advisor	11
Total units in the minor core	21

Students in the arts management career minor must also complete at least a minor in either art history or art studio.

Career Minor in Health Systems Organizations

The health systems organizations career minor is an interdisciplinary program that provides students with an opportunity to focus on

either of two significant dimensions of health care: technical and managerial problems, or preparation for direct service. The minor outlines a course of study within a liberal arts framework that provides each student with a basic understanding of: 1) health systems as significant social, cultural, and economic institutions within society; 2) cultural relativity in views of health and illness, and 3) the social and psychological implications for those who are served by health systems.

The supporting courses will be chosen with the assistance of the faculty advisor to prepare the student for specific career objectives. The health systems organizations minor complements a number of traditional majors, such as business administration, nursing, psychology, sociology, AMCS, and political science, in addition to programs in gerontology, women's studies, and medical anthropology. This career minor will increase the employment opportunities in the health field of students from the above majors and programs. The minor also provides an excellent background for those who plan to obtain graduate professional training in fields such as medicine, social work, and public health.

Program Advisor

Susan Hillier Ferreira, Gerontology/Psychology
Stevenson Hall 3075
(707) 664-2411

Minor Core Requirements

Course selection is pending; please see advisor for details.

AMCS 432 Health and Culture	4
GERN/SOCI 452 Health Care and Illness	4
GERN 499 Internship	4
Total units in the minor core	12

Minor Electives

Students must consult with faculty advisors to select 8 units of related elective course work.

Total units in minor electives 8

Total units in the minor 20

Career Minor in Women's Health

Women's health is a large and growing area of research and policy interest in the United States. The curriculum is organized toward care and other settings. The program is highly suitable for those interested, for example, in careers as nurses, physicians, counselors, therapists, public health workers, research analysts, and policy makers.

The career minor in women's health is designed to provide students with interdisciplinary course work, training, and work experience in the politics, practice, and experience of women's health. Career needs of both health care providers and liberal arts and sciences majors are addressed by the program.

Program Advisor

Women's and Gender Studies

Rachel Carson Hall 18, (707) 664-2840

Minor Core Requirements

WGS 280 Women's Bodies: Health and Image	3
NURS 480 Sexuality, Health, and Society (3) or WGS 350 Gender, Sexuality and Family	3
Practical Application	3-4
WGS 499 Internship in Women's Health Setting (4) Prerequisite: senior standing or NURS 425 Senior Clinical Study (Prerequisite: nursing major. Must choose a setting related to women's health)	3

Total units in the minor core 9-10

Electives

All electives must be health (including mental health) related. When the health course does not explicitly deal with women's health, students are expected to do their term papers and projects on women's health issues and to be prepared to share these course materials with the program coordinator.

Suggested Electives

AMCS 432 Health and Culture	3
GEOG 396 Medical Geography	3
GERN 300 Basic Gerontology	3
GERN 408 Transitions in Adult Development	4
NURS 340 Health and Illness in the Expanding Family	4
NURS 360 Community Health Nursing	3
PSY 404/WGS 330 Psychology of Women	4
PSY 454 Biofeedback and Somatic Psychology	4
SOCI 452 Health Care and Illness (cross-listed as GERN 452)	4
WGS 301 Women's Health Lecture Series	1-2
WGS 440/SOCI 440 Sociology of Reproduction	4
WGS/NURS 495 Special Study Research on Women's Health	1-4

Total units in electives 10-11

Total units required in the minor 20

CHEMISTRY

DEPARTMENT OFFICE

Darwin Hall 300
(707) 664-2119
www.sonoma.edu/chemistry

DEPARTMENT CHAIR

Jennifer Whiles Lillig

ADMINISTRATIVE COORDINATOR

Cathi Cari-Shudde

Faculty

Steven Farmer
Jon M. Fukuto
Jennifer Whiles Lillig
Mark J. Perri
Meng-Chih Su
Carmen F. Works

Programs Offered

Bachelor of Science in Chemistry
(certified by the American Chemical Society)

Bachelor of Arts in Chemistry

Bachelor of Science in Biochemistry

Minor in Chemistry

Teaching Credential Preparation

Chemistry is the study of matter, its properties, and how it changes. An understanding of chemical principles is required to fully understand most scientific disciplines such as biology, medicine, physics, environmental science, geology, materials science, pharmaceuticals, agriculture, forensic science, most branches of engineering, and even studio art. Chemists not only study molecules that nature provides but also synthesize new molecules to be used in many of these fields.

The department offers both bachelor of arts and bachelor of science degrees. Both degrees provide students with a solid chemical foundation to prepare them for graduate school, professional school, or the workforce. The B.S. degree requires more science coursework, while the B.A. allows more flexibility for other academic interests. The B.S. in biochemistry is designed for students with an interest in the biological aspects of chemistry and the pre-health professions.

Careers in Chemistry

Sonoma State University is fortunate to be situated within the greater Bay Area, which is rapidly becoming a leading area for research in disciplines such as biotechnology, pharmaceuticals, materials science, and proteomics. Sonoma State graduates have a high success

rate for acceptance into advanced degree programs in chemistry and biochemistry; medical, dental, and veterinary schools; cell and molecular biology; and materials science. They have also entered the job market in a variety of careers, including government agencies (FBI, forensics), technical writing, chemical and biochemical research, cosmetics and perfumes, space chemistry, teaching at all levels, medical technology, pharmaceuticals, patent law, materials research, consulting, and applications of chemistry in business.

Students seeking teaching credentials may elect chemistry as their major within the teaching credential program in science.

The small size and educational philosophy of the department encourage students to develop close relationships with other students, faculty, and staff. Coursework and individual research projects place an emphasis on laboratory experiences in which students are expected to become familiar with a variety of techniques and instruments. In their junior year, students participate in the "Senior Experience" to further prepare themselves for entry into industry or graduate education. In 2006, the department returned to the newly remodeled Darwin Hall, equipped with new lower-division teaching laboratories and facilities for advanced laboratory courses and undergraduate research. Our laboratories are equipped with many modern, computerized instruments that include ultraviolet, visible, infrared, atomic absorption, and fluorescence spectrophotometers; a nuclear magnetic resonance spectrometer; high-pressure liquid, gas, and ion exchange chromatographs; and a gas chromatograph with mass spectrometer detector.

Bachelor of Science in Chemistry (Certified by the American Chemical Society)

The B.S. degree provides thorough preparation for students who wish to pursue advanced degrees in the chemical sciences, go to professional school, or work as chemists in industry. All courses in the major core, major electives, and supporting courses must be taken in the traditional grading mode (A-F). Transcripts will be noted as approved by the American Chemical Society.

Please see the current approved curriculum on the SSU official catalog web page.

Degree Requirements	Units
General education	51
Major requirements	41
Supporting courses	19
Electives	9
Total units needed for graduation	120

Major Core Requirements

CHEM 115AB or CHEM 125AB* General Chemistry (10 units, 4 in the major core, 6 in general education (GE B1 & B3))	4
CHEM 255 Quantitative Analysis*	4
CHEM 310AB Physical Chemistry	6
CHEM 316 Physical Chemistry Laboratory	2

CHEM 325 Inorganic Chemistry	3
CHEM 335AB Organic Chemistry	8
CHEM 336 Organic Chemistry Laboratory	2
CHEM 401 Chemical Synthesis and Characterization I	3
CHEM 402 Chemical Synthesis and Characterization II	3
CHEM 445, 446, or 340 Biochemistry	3
CHEM 494 Undergraduate Research	2
CHEM 497 Research Seminar	1

Total units in the major core 41

Supporting Courses

MATH 161 Calculus I (3 units, counted as GE B4)	1
MATH 211 Calculus II	4
MATH 261 Calculus (IV)	4
PHYS 114 Introduction to Physics I	4
PHYS 116 Introduction to Physics Laboratory I	1
PHYS 214 Introduction to Physics II	4
PHYS 216 Introduction to Physics Laboratory II	1

Total units in supporting courses 19

GE Courses

CHEM 115AB	6
MATH 161	3
Others	42

Total units in GE courses 51

Electives 9

Total units to graduate 120

Sample Four-Year Program for Bachelor of Science in Chemistry

FRESHMAN YEAR:: 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (17 Units)</i>
CHEM 115A or CHEM 125A (5)	CHEM 115B or CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
GE (3)	PHYS 114 (4)
GE (3)	PHYS 116 (1)
	GE (3)

SOPHOMORE YEAR:: 29 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 335A (5)	CHEM 335B (3)
MATH 261 (4)	CHEM 336 (2)
PHYS 214 (4)	CHEM 255 (4) *
PHYS 216 (1)	GE (3)
	GE (3)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 445 (3)	CHEM 310B (3)
CHEM 310A (3)	CHEM 316 (2)
GE (3)	CHEM 494 (1)
GE (3)	GE (3)
GE (3)	GE (3)
	Elective (3)

SENIOR YEAR:: 29 Units

<i>Fall Semester (13 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 401 (3)	CHEM 402 (3)
CHEM 494 (1)	CHEM 497 (1)
GE (3)	CHEM 325 (3)
GE (3)	GE (3)
GE (3)	Elective (3)
	Elective (3)

TOTAL SEMESTER UNITS:: 120

* Students must place into the Chemistry 125 AB series by receiving an appropriate score on the chemistry placement exam. Quantitative Analysis (CHEM 255) is not required for students who have completed CHEM 125 A & B. Students should replace these four units by completing the challenge by exam form upon completion of the series.

Bachelor of Science in Biochemistry

The B.S. degree in biochemistry is appropriate for students interested in the medical fields, graduate study in chemistry or biochemistry, or employment in the biochemical, pharmaceutical or biotechnology industries. All courses in the major core, major electives and supporting courses must be taken in the traditional grading mode (A-F). Undergraduate research is required for the B.S. degree in biochemistry.

Please see the current approved curriculum on the SSU official catalog web page.

Degree Requirements	Units
General education	51
Major requirements	40
Biology courses	9
Supporting courses	13-15
Electives	5 or 7
Total units needed for graduation	120

Major Core Requirements

CHEM 115 AB or CHEM 125 AB* General Chemistry (10 units, 4 in the major core, 6 in general education (GE B1 & B3))	4
CHEM 255 Quantitative Analysis*	4
CHEM 310 AB Physical Chemistry	6
CHEM 325 Inorganic Chemistry	3
CHEM 335 AB Organic Chemistry	8
CHEM 401 Instrumental Analysis and Chemical Synthesis	3
CHEM 441 Biochemical Methods	3
CHEM 445 Structural Biochemistry	3
CHEM 446 Metabolic Biochemistry	3
CHEM 494 Undergraduate Research	2
CHEM 497 Research Seminar	1
Total units in the major core	40

Biology Courses

BIOL 123 Molecular and Cell Biology (4 units, 1 in major core, 3 in general education B2)	1
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Choose 2 from the following:

BIOL 320 Molecular Genetics	4
BIOL 321 Molecular Microbiology	4
BIOL 324 Animal Physiology	4
BIOL 325 Cell Biology	4
BIOL 334 Plant Physiology	4
BIOL 340 General Bacteriology	4
BIOL 382 Parasitology	4
BIOL 383 Virology	4
BIOL 480 Immunology	4
BIOL 544 Advanced Cell Biology	4

or other courses approved by the Chemistry Department

Total units in Biology Courses 9

Supporting Courses

MATH 161 Calculus I (4 units, 1 in major core, 3 in GE B4)	1
MATH 211 Calculus II	4
PHYS 114 or 210A Physics I	3-4
PHYS 116 or 209A Physics Laboratory I	1
PHYS 214 or 210B Physics II	3-4
PHYS 216 or 209B Physics Laboratory II	1

Total units in Supporting Courses 13-15

Strongly recommended:

Additional units in CHEM 494 Undergraduate Research	1-6
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GE Courses

CHEM 115 AB	6
MATH 161	3
BIOL 123	3
Others	39

Total units in GE courses 51

Total units to graduate 120

Sample Four-Year Program for Bachelor of Science in Biochemistry

FRESHMAN YEAR:: 28-29 Units

Fall Semester (15 Units)	Spring Semester (13 or 14 Units)
CHEM 115A or CHEM 125A (5)	CHEM 115B or CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
GE (3)	PHYS 210A (3) or PHYS 114 (4)
GE (3)	PHYS 209A (1) or PHYS 116 (1)

SOPHOMORE YEAR:: 31-32 Units

Fall Semester (15 or 16 Units)	Spring Semester (16 Units)
CHEM 335A (5)	CHEM 335B (3)
PHYS 210B (3) or PHYS 214 (4)	CHEM 255 (4) *
PHYS 209B (1) or PHYS 216 (1)	GE (3)
GE (3)	GE (3)
Elective (2 or 4) Recommended: MATH 261 (4)	GE (3)

JUNIOR YEAR:: 31 Units

Fall Semester (16 Units)	Spring Semester (15 Units)
CHEM 310A (3)	CHEM 310B (3)
CHEM 445 (4)	CHEM 446 (3)
BIOL 123 (4)	GE (3)
GE (3)	GE (3)
GE (3)	Elective (3)

SENIOR YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (14 Units)
CHEM 401 (3)	CHEM 497 (1)
CHEM 494 (2)	CHEM 325 (3)
BIOL elective upper-division (4)	CHEM 441 (3)
GE (3)	BIOL elective upper-division (4)
GE (3)	GE (3)

TOTAL SEMESTER UNITS:: 120

* Students must place into the Chemistry 125 AB series by receiving an appropriate score on the chemistry placement exam. Quantitative Analysis (CHEM 255) is not required for students who have completed CHEM 125 A & B. Students should replace these four units by completing the challenge by exam form upon completion of the series.

Bachelor of Arts in Chemistry

The B.A. degree provides a solid foundation in chemistry so students have the same career options as those with the B.S. degree, while allowing students the flexibility to pursue other academic interests. All courses in the major core, major electives, and supporting courses must be taken in the traditional grading mode (A-F). It is highly recommended that students perform undergraduate research with a faculty member.

Please see the current approved curriculum on the SSU official catalog web page.

Degree Requirements	Units
General education	51
Major requirements	32
Supporting courses	13-15
Electives	22-24
Total units needed for graduation	120

Major Core Requirements

CHEM 115AB or CHEM 125AB* General Chemistry (10 units, 4 in the major core, 6 in general education (GE B1 & B3))	4
CHEM 255 Quantitative Analysis*	4
CHEM 310AB Physical Chemistry	6
CHEM 316 Physical Chemistry Laboratory	2
CHEM 325 Inorganic Chemistry	3
CHEM 335AB Organic Chemistry	8
CHEM 401 Chemical Synthesis and Characterization I	3
CHEM 497 Research Seminar	1
Elective (upper-division chemistry)	1
Total units in the major core	32

Supporting Courses

MATH 161 Calculus I (4 units, 1 in major core, 3 in GE B4)	1
MATH 211 Calculus II	4
PHYS 114 or 210A Physics I	3-4
PHYS 116 or 209A Physics Laboratory I	1
PHYS 214 or 210B Physics II	3-4
PHYS 216 or 209B Physics Laboratory II	1
Total units in supporting courses	13-15

GE Courses

CHEM 115 AB	6
MATH 161	3
Others	42
Total units in GE courses	51

Electives 22-24

Total units to graduate 120

Recommended course

CHEM 494 Undergraduate Research

Sample Four-Year Program for Bachelor of Arts in Chemistry

FRESHMAN YEAR:: 31 or 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 or 17 Units)</i>
CHEM 115A or CHEM 125A (5)	CHEM 115B or CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
GE (3)	PHYS 210 A (3) or PHYS 114 (4)
GE (3)	PHYS 209A (1) or PHYS 116 (1)
	GE (3)

SOPHOMORE YEAR:: 29-31 Units

<i>Fall Semester (14 or 15 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 335A (5)	CHEM 335B (3)
PHYS 210B (3) or PHYS 214 (4)	CHEM 336 (2) (Elective units)
PHYS 209B (1) or PHYS 216 (1)	CHEM 255 (4) *
GE (3)	GE (3)
Elective (1 or 3) Recommended: MATH 261 (4)	GE (3)

JUNIOR YEAR:: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
CHEM 310A (3)	CHEM 310B (3)
GE (3)	CHEM 316 (2)
GE (3)	GE (3)
GE (3)	GE (3)
Elective (3)	GE (3)

SENIOR YEAR:: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 401 (3)	CHEM 497 (1)
CHEM 494 (1) (Elective units)	CHEM 325 (3)
GE (3)	Elective (3)
GE (3)	Elective (3)
Chemistry Elective (1)	Elective (3)
Elective (3)	Elective (3)

TOTAL SEMESTER UNITS:: 120

CHEM 336 (2 unit) and CHEM 494 (1 unit) are used as chemistry elective units.

** Students must place into the Chemistry 125 AB series by receiving an appropriate score on the chemistry placement exam. Quantitative Analysis (CHEM 255) is not required for students who have completed CHEM 125 A & B. Students should replace these four units by completing the challenge by exam form upon completion of the series.*

Minor in Chemistry

Completion of the following SSU courses (or their equivalent): General Chemistry 115A and B (10 units), Quantitative Analysis 255 (4 units), Organic Chemistry: either 232 (5 units) or 335A (5 units), plus at least two additional upper-division classes for a total of 6 units. These additional upper-division classes must be taken in residence at SSU. Up to six units in chemistry 115A/B may count toward the General Education requirements in area B including the laboratory requirement.

Secondary Education Teaching Credential Preparation

Chemistry students must demonstrate competence in the natural sciences by passing the subject matter examination required by the California Commission on Teacher Credentialing. One part of the examination will test breadth of knowledge in biology, chemistry, physics, astronomy, and geology. Another part of the examination will test depth of knowledge in a particular area, such as chemistry. The B.A. or B.S. degree in chemistry is recommended to prepare for the part of the examination that tests depth of knowledge in chemistry. For more information, please contact the Chemistry Department office, Darwin Hall 300, (707) 664-2119.

CHICANO AND LATINO STUDIES

DEPARTMENT OFFICE

Nichols Hall 214
(707) 664-2369
www.sonoma.edu/cals/

DEPARTMENT CHAIR

Patricia Kim-Rajal

ADMINISTRATIVE COORDINATOR

Perce Smith

Faculty

Patricia Kim-Rajal, Cultural Studies/Gender/Globalization

Ronald López, History/Politics

Daniel Malpica, Sociology/Immigration/Labor

Lecturers

Marcia Ford, Daniel Lopez, Nora Wilkins

Programs

Bachelor of Arts in Chicano and Latino Studies:

General Interdisciplinary Studies Track

Bachelor of Arts in Chicano and Latino Studies, Teacher-Preparation Track, CALS Liberal Studies Upper-Division Subject-Matter Preparation Program and Multiple-Subject Credential

Bachelor of Arts in Chicano and Latino Studies, Teacher-Preparation Track—CALS Liberal Studies Upper-Division Subject-Matter Preparation Program

Minors in Chicano and Latino Studies, various emphases

The CALS Major

The department of Chicano and Latino Studies (CALS) offers students an interdisciplinary curriculum that centers on the experiences of Chicanos and Latinos in many areas of contemporary American society, including politics, education, literature, the arts, and religion. The focus is on gaining greater insight into the relationship between historical, social, political, and ideological circumstances and Latina/o cultures and identities. The major considers the historical and contemporary experiences of Chicanos and Latinos in the United States in relation to literature, culture, political economics, social categories, and transnational migrations. Students are then free to choose, based on their interests and future career plans, a particular area of emphasis in which to complete their major electives. The flexibility of major requirements makes the CALS major ideally suited for students interested in pursuing a double major.

The overall curriculum provides majors with a solid basis in theoretical and applied analysis covering qualitative and critical methods

of study. Students develop the necessary analytical and methodological skills to better understand the emerging multicultural character of the Southwest and the key role Chicanos will increasingly play in the future, given the rapidly changing demographics of both the Southwest and the nation.

The department also offers a teacher preparation track designed to prepare students for courses and state exams that are part of the teaching credential certification process for elementary school teachers.

Future Careers

Students in the major embark on a variety of career paths after graduation. CALS graduates are optimally prepared for work in both the public and private sectors. They are broadly trained, culturally astute professionals who are able to work with diverse populations and who can take on the challenges of many different careers. Students are encouraged to consider their future careers while still in the program and to choose electives in accordance with their plans. Students in the teacher-preparation track have been optimally prepared to pursue the coursework and testing necessary to obtain a multiple subjects teaching credential in California. Majors in the interdisciplinary studies track who focus on the study of language and culture often pursue careers in teaching, migrant and bilingual education, publishing, cultural centers or graduate study in art, literature, cultural studies, or ethnic studies. Students who choose a social studies emphasis will acquire a solid basis of knowledge for work in human resources, community development, public service or advocacy work, as well as further study in health services, social welfare, psychology, sociology and political sciences.

How to pursue interest in the major

Freshman Students

Enroll in CALS 219, The Latino Experience, which provides a foundation for interdisciplinary studies in this field and also satisfies area D-1 in the G.E. pattern.

Transfer or Junior-level Students

Students who are considering the major are encouraged to enroll in CALS 339, CALS 432 or CALS 451 during their first semester at SSU. These courses offer an excellent introduction to the major and its interdisciplinary approach while fulfilling the upper-division and ethnic studies GE requirement.

Bachelor of Arts in Chicano and Latino Studies

Degree Requirements	Units
General education	51
Major requirements	40
Second major/minor or electives	29
Total units needed for graduation	120

Courses suggested for students considering a CALS major:

- CALS 339: Latinos and the U.S. Labor Market
- CALS 432: Latinos in a Global Context
- CALS 451: Chicano/Latino Humanisms

Major Core Requirements

CALS 350 Latino Cultural Studies	4
CALS 442 Race, Class & Gender Among Latinos	4
CALS 445 Chicano/Latino History	4
CALS 458 Research and Methodologies	4
CALS 474 Major Authors in Chicano/Latino Literature	4
CALS 480 Latin American Migration to the United States	4

Total units in the major core 24

CALS Electives: Choose an additional 16 units from the following courses for the general major.*

CALS 225 Spanish for Bilinguals (C3)	4
CALS 310 Chicano/Latino Folk Arts & Crafts	1
CALS 314 Latin American Literature in English Translation (C2)	3-4
CALS 339 Latinos and the US Labor Market (D1)	3-4
CALS 352 Chicano/Latino Philosophy (C2)	3
CALS 366 Mexican Folk & Traditional Dance	1
CALS 368 Chicano/Latino Music (C1)	3
CALS 374 Latino Literature (C2)	3
CALS 393 Chicano/Latino Cinema (C1)	3
CALS 400 Special Topics	4
CALS 403 Latino Youth & Adolescents (E)	4
CALS 405 Latino Family	4
CALS 426 Sociolinguistics (C3)	4
CALS 432 Latinos in a Global Context (D5)	4
CALS 450 Chicano/Latino Children's Literature	3
CALS 451 Chicano/Latino Humanisms (C3)	4
CALS 456 Bilingual/Cross-Cultural Education	4

All majors must complete a capstone project/paper during their senior year in one of the following classes: CALS 405, CALS 426, CALS 442, CALS 445, CALS 474, or CALS 480.

**CALS double-majors have the option of using two upper-division courses from outside the department toward the 40 units.*

Advising Four-Year Plan for CALS Majors

FRESHMAN YEAR:: 32 Units	
<i>Fall Semester (15-16 units)</i>	<i>Spring Semester (16 units)</i>
ENGL 101 (A2) (3)	BIOL (B2) (3)
MATH (B4) (3)	CALS 219 (D1) (3)
ARTS GE (C1) (3)	PHIL 101 (A3) (3)
Physical Science GE (B1) (3)	HIST 201 (D2) (3)
Elective (Spanish is recommended) (4)	Elective (Spanish is recommended) (4)
SOPHOMORE YEAR:: 31-33 Units	
<i>Fall Semester (16-17 units)</i>	<i>Spring Semester (15 units)</i>
HUMS 200 (A1) (3)	PHIL 120 or CALS 352(C3) (3)
ENGL or FL 214 or equiv, (C2) (3)	Physical Science GE (B3) (3)
POLS 200 (D4) (3)	Upper-division GE (D5) (3)
HIST 251 (D3) (3)	CALS 220 (C4) (3)
CALS 225 (4+1) or CALS elective	CALS 339 (3) or CALS elective
JUNIOR YEAR:: 28-32 Units	
<i>Fall Semester (15 units)</i>	<i>Spring Semester (15 units)</i>
CALS 350 (4)	CALS 474 (4)
CALS 451 (C4) (4)	CALS elective (4)
CALS 403 (E1) (4)	CALS elective (4)
Elective or 2d major or minor (4)	Elective or 2d major or minor (4)
SENIOR YEAR:: 28-32 Units	
<i>Fall Semester (16 units)</i>	<i>Spring Semester (16 units)</i>
CALS 458 (4)	CALS 445 (4)
CALS 480 (4)	CALS 442 (4)
Elective or 2d major or minor (4)	CALS elective (4)
Elective or 2d major or minor (4)	Elective or 2d major or minor (4)
TOTAL SEMESTER UNITS FOR B.A. PROGRAM/CALS MAJOR:: 120-124	

Minor in Chicano and Latino Studies

Students are to select two courses minimum (8 units) from the CALS core, with additional classes selected from CALS electives (12 units). In some cases students may apply and transfer one course (only) from another department (likely their major) to the CALS minor.

The following two options for a specific emphasis for the CALS minor are often of interest:

Social Science emphasis

- CALS 339 or 432
- CALS 405 or 442
- CALS 445
- CALS 458
- CALS 395, CIP or Service Learning Project (optional)

Total units required 20

Spanish emphasis

CALS 225 (or Span 202) 4-5

One additional course in advanced-level Spanish required (up to two permitted), selected from the following: SPAN 301, SPAN 305, SPAN 307 4-8

Three or four classes selected from the following:

CALS 374, CALS 426, CALS 451, CALS 456, CALS 460, CALS 474 11-16

Total units required 20

Spanish Language Proficiency

The CALS program encourages students to develop their Spanish language competencies. Proficiency in Spanish is a crucial skill for students who plan to become teachers, work in community services, go to graduate school, or do Chicano/Latino studies-related research.

Subject-Matter (Teaching Credential) Preparation Programs

Students may choose from two CALS options in order to prepare for the teaching profession while completing the CALS major requirements. CALS majors may select from an integrated, four-year, fast-track program, where students receive both a CALS/Liberal studies degree and the Multiple-Subject Teaching Credential, or an upper-division CALS liberal studies subject-matter preparation track for transfer students or new majors.

Please refer to the Education section of catalog for information on teaching credential programs. For more information, review the University's special bulletin, *Programs in Teacher Education*.

Integrated (four-year) Subject-Matter Preparation Program in Chicano and Latino Studies/Liberal Studies and Teaching Credential

This involves the acquisition of both the CALS bachelor of arts and the Multiple Subjects Credential in four years. It is a fast-track, state-approved program to provide for completion of a bachelor's degree and teaching credential in eight semesters.

Advising Plan for Four-Year Integrated Program

FRESHMAN YEAR:: 32 Units

Fall Semester (16 Units)	Spring Semester (16 Units)
ENGL 101 (A2) (3)	BIOL 110 (B2) (4)
MATH 150 (B4) (3)	PHIL 101 (A3) (3)
ARTS GE (C1) (3)	HIST 201 (D2) (3)
Chemistry, Astronomy or Physics (B1) (3)	CALS 219 (C3) (3)
POLS 200 (D3) (3)	ENGL 200 (A1) (3)
CALS 310 (1)	

SOPHOMORE YEAR:: 31 Units

Fall Semester (16 Units)	Spring Semester (16 Units)
Geology or Physical Geography (B3) (3)	HIST 251/HIST 252 (3)
EDMS 417 (D1) (3)	CALS 365 or 366 (1)
HIST 251/HIST 252 (D3) (3)*	CALS 442 (4)
CALS 403 or EDMS 420 (E) (3)	CALS 368 or CALS 479 (C1) (3)
CALS 458 (4)	
GEOG 302 (D5) (3)	
EDMS 470 (3)	

JUNIOR YEAR:: 32 Units

Fall Semester (16 Units)	Spring Semester (16 Units)
CALS 350 (4)	CALS 426 (4)
CALS 460 (3)	MATH 300B (3)
CALS 374 (C2) or CALS 450 (3)	EDMS 471 (2)
EDMS 463 (3)	EDMS 474 (3)
MATH 300A (3)	EDMS 476F & EDMS 476S (4)

SENIOR YEAR:: 35 Units

Fall Semester (17 Units)	Spring Semester (18 Units)
CALS 480 (4)	EDMS 464 (2)
CALS 456 (4)	EDMS 482S (2)
KIN 400 (3)	CALS 445 (4)
EDMS 411 (3)	EDMS 482F (10)
EDMS 475 (3)	

TOTAL SEMESTER UNITS FOR B.A. PROGRAM AND CREDENTIAL:: 131

*Students need to take both sections of U.S. History in order to complete program requirements.

Notes:

1. Students need to take both sections of U.S. History in order to complete program requirements.
2. Students in the Integrated Program need to apply for admission to the credential program during November of the sophomore year.
3. Students must take the CBEST prior to the beginning of the junior year.
4. Students can use EDUC 250 or EDUC 339 or the new EMT Freshman Seminar as an elective and/or in lieu of CALS 395 to meet program field experience requirements.

Upper-Division Subject Matter Preparation Program in Chicano and Latino Studies/Liberal Studies

This state-approved program is designed for new upper-division and transfer students and meets the subject matter preparation requirements for entry into the Multiple-Subject (Elementary) Teaching Credential.

Sample Four-Year Program

FRESHMAN YEAR:: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (A2) (3)	BIOL 110 (includes lab) (B2) (4)
MATH 150 (B4) (3)	PHIL 101 (D1) (3)
ARTS GE (C1) (3)	CALS 219 (3)
Chemistry, Astronomy or Physics (B1) (3)	HIST 201 (D2) (3)
POLS 200 (D3) (3)	ENGL 200 or AMCS 200 (3)

SOPHOMORE YEAR:: 28-31 Units

<i>Fall Semester (14-15 Units)</i>	<i>Spring Semester (14-16 Units)</i>
Geology or Physical Geography (B3) (3)	HIST 252 (3)
CALS 350 (4)	
CALS 225 (3) + lab (1)	EDMS 417 (D1) (3)
CALS 310 (1)	CALS 365 or 366 (1-2)
HIST 251 (D3) (3)	CALS 374 (C2) or CALS 450 (3-4)
Electives (3-4)	CALS 442 (4)

JUNIOR YEAR:: 31 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (14 Units)</i>
MATH 300A (3)	MATH 300B (3)
CALS 451 (C3) (4)	CALS 368 or CALS 479 (C1) (3)
CALS 458 (4)	GEOG 302 (D5) (4)
CALS 460 (3)	Electives (4)
KIN 400 (3)	

SENIOR YEAR:: 30-31 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15 Units)</i>
CALS 403 or EDMS 420 (E) (4)	CALS 426 (4)
CALS 480 (4)	CALS 445 (4)
CALS 456 or 460 (3-4)	EDMS 470 (3)
Elective or Concentration (4)	Elective or Concentration (4)

TOTAL SEMESTER UNITS FOR B.A. PROGRAM AND CREDENTIAL:: 120-124

COMMUNICATION STUDIES

DEPARTMENT OFFICE

Nichols Hall 330
(707) 664-2149
www.sonoma.edu/communications/

DEPARTMENT CHAIR

Elizabeth Burch

ADMINISTRATIVE COORDINATOR

Brooke Tester

Faculty

Melinda Barnard / Theory, Advertising, Public Relations,
Quantitative Analysis, Children and Media
Ed Beebout / Broadcast Journalism, Broadcast Management
Elizabeth Burch / Ethics, Scriptwriting, Environmental Communication,
International Communication
Marco Calavita / History, Theory, Criticism, Screenwriting, Film Analysis
Nate Campbell / Radio Broadcasting, Recording
Michael Litle / Film, Video, Criticism
Charles McAuley / Newspaper Production, Reporting
Jonah Raskin / Journalism, History, Law, Marketing
Janet Craddock / Public Relations

Programs Offered

Bachelor of Arts in Communication Studies

The communication studies major is an innovative, interdisciplinary program that prepares students for careers in the media or for advanced graduate study.

Communication studies coordinates three distinct approaches to the media: practical application, historical study, and critical analysis. Practical application combines basic training in equipment operation, communication skills, production design, organizational skills, and professional internship. Historical study focuses on the evolution of the mass media and the relationship of the mass media to society. Critical analysis explores media ethics and the analysis and evaluation of specific mediated texts using qualitative and quantitative methods.

Students are encouraged to develop a specific advisory plan with the assistance of a faculty advisor. Advisory plans, based on the student's specific interests, may focus on:

- General areas such as journalism, media criticism, or public relations;
- Media such as radio, television, and newspapers;
- Career roles such as television producer, sports announcer, or reporter; and
- Preparation for graduate school.

Students are required to take a senior-year internship. The department emphasizes internships that provide students with real-world insights into the media. The department has developed professional media internships with community organizations, radio and television stations, newspapers, magazines, public relations firms, and other media groups.

All on-campus media operate in conjunction with communication studies classes. On-campus media offer a variety of opportunities for students. They include the *Star*, the student newspaper; KSUN, an Internet radio station that can be heard at www.sonoma.edu/ksun; and SSU-TV, the campus television station that provides news, information, and entertainment.

Students are also required to take Senior Seminar in which they complete a senior project. This project combines their academic training in the major with a real world application.

Careers in Communication Studies

Graduates from the department find employment in the mass media and in the ever-growing field of communication. Some graduates find work by using their technical skills in radio, video, and computers. Others rely on their training and experience to find jobs in the broad field of public relations. They write for and edit newspapers and newsletters, and design brochures and flyers. They are photographers and are even employed by candidates running for public office. In addition, graduates design websites, edit films, produce documentaries, videotape weddings, record music, and serve as disc jockeys.

Past graduates have become lawyers and teachers, run employment agencies, are hired as fundraisers, private investigators, and work in law enforcement. Communication Studies graduates work in corporate or non-profit organizations doing sales, publicity, or marketing. Wherever communication takes place and whenever media are used, Communication Studies graduates can be found.

Bachelor of Arts in Communication Studies

Degree Requirements	Units
General Education	51
Major Requirements	48
University Electives	21
Total units needed for graduation	120

Communication Studies is a high-demand major. Junior transfers are taken in the fall only. On-campus change of majors are limited by the number of students who can be served by the faculty and facilities of the program.

- **Major Core:** All students complete 28 units of required coursework.

- **Skill Sequence:** Students complete one Skill Sequence comprised of a 4-unit beginning and 4-unit advanced skill course.
- **Major Electives:** Students complete 12 units of COMS electives. Student may choose to work for one of the campus media outlets for their 12 units of electives.

Core Courses (All Courses Are Required)	28 Units
COMS 200 Principles of Mass Communication	4
COMS 202 Methods of Media Criticism	4
COMS 301 Communication Theory and Research (Junior status to register)	4
COMS 302 Media Ethics (<i>Junior status to register</i>)	4
COMS 315 Media Law (<i>Senior status to register</i>)	4
COMS 402 Senior Seminar (<i>Senior status to register</i>)	4
COMS 499 Senior Internship (<i>Senior status to register</i>)	4
Skill Sequences (1 sequence is required)	8 Units
COMS 201 Storytelling Via Video	4
COMS 316 Advanced Video Production	4
COMS 210 Writing for the Media	4
COMS 318 Advanced Media Writing	4
COMS 265 Introduction to Radio Broadcasting	4
COMS 317 Advanced Broadcasting Techniques	4
COMS Electives (12 Units Required)	12
Major electives	12
Total units in major	48

Four-Year Plan for Bachelor of Arts in Communications Studies

Students start the major in fall of their Sophomore year. This plan does not identify the communication studies elective courses an individual student might take. A complete list of department approved electives is available in the department. Because the major has 4-unit classes, the distribution of units is uneven. Students may distribute their GE and University electives as they wish.

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
GE Area A2 (3)	GE Area A1 (3)
Mathematics (GE) (3)	GE Science: B1, B2, or B3 (3)
GE Area A3 (3)	University Elective (3)
GE (3)	GE Area D3 or D4 (3)
University Elective (3)	GE (3)

SOPHOMORE YEAR:: 28-31 Units

Fall Semester (14 Units)	Spring Semester (***14-17 Units)
GE Science: B1, B2, or B3 (3)	GE (3)
GE Area D3 or D4 (3)	GE Science: B1, B2, or B3 (3)
COMS 200 (4)	COMS 202 (4)
COMS Beg. Skill Class (4)	COMS Adv. Skill Class (4)
	GE ***Optional (3)

JUNIOR YEAR:: 33 Units

Fall Semester (16 Units)	Spring Semester (17 Units)
Upper-Division GE (3)	Upper-Division GE (3)
Upper-Division GE Area E (3)	GE (3)
University Elective/GE (3)	COMS Elective (4)
University Elective (3)	University Elective (3)
COMS 301/302 (4)	COMS 301/302 (4)

SENIOR YEAR:: 26-29 Units

Fall Semester (13 Units)	Spring Semester (16 Units)
University Elective (3)	COMS 315** (4)
University Elective (3)	COMS 402** (4)
GE* (3)	COMS Electives (4)
COMS Elective (4)	COMS 499 (4)

TOTAL UNITS:: 120

* If not taken Sophomore year

** Must be taken last semester.

COMPUTER SCIENCE

DEPARTMENT OFFICE

Darwin Hall 116

(707) 664-2667

www.cs.sonoma.edu

DEPARTMENT CHAIR

Ali A. Kooshesh

ADMINISTRATIVE COORDINATOR

Jennifer Aaseth

TECHNICAL STAFF

Roger Mamer

Faculty

Ali Kooshesh

George Ledin Jr.

B. Ravikumar

Suzanne Rivoire

Lynn Stauffer

Tia Watts

Programs Offered

Bachelor of Science in Computer Science

Minor in Computer Science

Computer science is the scientific study of computing devices, the software that drives them, and the computational tasks they are capable of performing. Computer scientists study both hardware and software; as with all sciences, each of these possesses both theoretical and applied components. Computing theory shares knowledge and techniques with the fields of mathematics, physics, engineering, philosophy, psychology, and linguistics. Its applications span the range of human endeavors: the physical life and social sciences; the literary, visual, and performing arts; law; government; recreation; and virtually every sector of the commercial world. Thus, computer science is by its very nature an interdisciplinary subject that offers both a solid unifying foundation for a liberal arts and sciences education, and valuable career skills.

The curriculum consists of a rigorous course of study in computer science and mathematics and provides the student with a thorough grounding in programming, fundamentals of computer organization, data structures, and algorithm design. It is designed to prepare students for careers in the computer industry and graduate work in computer science.

All courses submitted toward either major or minor requirements in the Computer Science Department must be taken for a letter grade (A-F). This includes electives in CS and all other courses taken to satisfy the major. This does not apply to courses that are challenged. Only those classes for which the student has received a C- or better may be used to satisfy prerequisite requirements. An

instructor may require the student to provide evidence of having met prerequisite requirements.

Degree Requirements for a Bachelor of Science in Computer Science

General Education (51 units, 6-9 covered by major requirements)	42 - 45 units
Computer Science Core	49 units
Computer Science Electives	9 units
Computer Science Capstone Requirement	3 units
Required Supporting Courses	10 - 12 units
General Electives:	6-8 units
Total units needed for graduation:	124

Major Core Requirements

CS 115 Programming I (GE Area B3)	4
CS 210 Introduction to Unix	1
CS 215 Programming II	4
CS 242 Discrete Structures for Computer Science	4
CS 252 Introduction to Computer Organization	4
CS 315 Data Structures	4
CS 351 Computer Architecture	4
CS 355 Database Management Systems Design	4
CS 370 Software Design and Development	4
CS 415 Algorithm Analysis	4
CS 450 Operating Systems	4
CS 454 Theory of Computation	4
CS 460 Programming Languages	4

Total units in major core 49

Computer Science Electives

Choose 9 units of upper-division CS electives (see list below). No more than 3 units can be satisfied by a combination of CS 349, 390, 495, and 497.

CS 340 Computer Security and Malware	3
CS 349 Problem Solving in a Team Environment	1
CS 360 Object-Oriented Programming	3
CS 365 Computer Networking and the Internet	3
CS 375 Computer Graphics	3
CS 385 Selected Topics	1-4*
CS 390 Computer Science Colloquium	1
CS 452 Compiler Design and Construction	3
CS 465 Data Communications	3
CS 480 Artificial Intelligence	3
CS 495 Special Studies	1-4
CS 496 Senior Seminar	1-4
CS 497 Internship	2

*Selected topics courses include Bioinformatics, Data Compression, Computer Game Development, Parallel and Distributed Computing, Wireless Networks, Mobile Application Development, and other current topics in computer science.

Total units in major electives 9

CS Capstone Requirement

One of the following courses:

CS 470 Advanced Software Design Project	3
CS 495 Special Studies (requires instructor approval)	3

Total units in capstone requirement 3

Required Supporting Courses

MATH 161 Differential and Integral Calculus I (GE Area B4)	4
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Two additional courses from the following: 6-8

MATH 165 Elementary Statistics	4
MATH 211 Differential and Integral Calculus II	4
MATH 222 Elementary Applied Linear Algebra	3
MATH 241 Differential Equations with Linear Algebra	4
MATH 306 Number Theory	3
MATH 316 Graph Theory and Combinatorics	3
MATH 352 Numerical Analysis	3
MATH 416 Graph Theory and Combinatorics	3
MATH 430 Linear Systems Theory	3
MATH 470 Mathematical Models	3
PHYS 214 Introduction to Physics II	4
(Prerequisite PHYS 114, GE Area B1)	
Or other by arrangement with the CS Department	

Total units in other required courses 10-12

Total units in the major 71-73

Minor in Computer Science

Students electing this minor will be prepared for careers in business application programming, scientific application programming, computer equipment sales, as field engineers, and as data processing managers among the myriad job opportunities associated with the computer field. Approval of the minor curriculum should be obtained by the junior year at the latest in order that the minor may be properly planned.

Minor Core Requirements

CS 115 Programming I	4
CS 210 Introduction to UNIX	1
CS 215 Programming II	4

Total units in minor core 9

Minor Electives

Choose 11 units of CS major courses (listed under *Major Core Requirements* and *Computer Science Electives*) of which 6 units must be upper-division. No more than 2 units in any combination of CS 349, 390, 495, and 497 can be applied toward the minor.

Total units in minor electives 11

Total units in the minor 20

Sample Four-Year Plan for Bachelor of Science in Computer Science

FRESHMAN YEAR:: 28 Units

Fall Semester (13 Units)	Spring Semester (15 Units)
CS 115 (GE-B3) (4)	CS 210 (1)
GE (3), GE (3), GE (3)	CS 215 (4)
	MATH 161 (GE-B4) (4)
	GE (3), GE (3)

SOPHOMORE YEAR:: 30-31 Units

Fall Semester (16/17 Units)	Spring Semester (14 Units)
CS 242 (4)	CS 252 (4)
Supporting Course in MATH/PHYS (3/4)	CS 315 (4)
GE (3), GE (3), GE (3)	GE (3), GE (3)

JUNIOR YEAR:: 33-34 Units

Fall Semester (16/17 Units)	Spring Semester (17 Units)
CS 351 (4)	CS 355 (4)
Supporting Course in MATH/PHYS (3/4)	CS 370 (4)
CS Elective (3)	CS Elective (3)
GE (3), GE (3)	Upper-division GE (3)
	General Elective (3)

SENIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
CS 450 (4)	CS 415 (4)
CS 454 (4)	CS 470 (3)
CS 460 (4)	CS Elective (3)
Upper-division GE (3)	Upper-division GE (3)
	General Electives (3-5*)
	*to total 124 units

TOTAL UNITS:: 124

COUNSELING

DEPARTMENT OFFICE

Nichols Hall 220

(707) 664-2544

www.sonoma.edu/counseling

DEPARTMENT CHAIR

Adam Hill

ADMINISTRATIVE COORDINATOR

Stephanie Wilkinson

Faculty

Maureen Buckley

Adam Hill

Jayamala Madathil

Julie Shulman

Adam Zagelbaum

Programs Offered

Master of Arts in Counseling

Option I Community Counseling: Marriage and Family Therapy (MFT)

Option II School Counseling: Pupil Personnel Services

Additional Programs

Practicum and Internship Facility (offering counseling services to the community)

MEAP (Migrant Education Advisor Program)

The 60-unit graduate program in counseling offers two professional training options: Option I prepares students for Community Counseling/Marriage and Family Therapy licensure (CC/MFT), and Option II prepares students for the School Counseling and the Pupil Personnel Services Credential (SC/PPSC). The program relies heavily on interpersonal skill training and field experience, beginning during the first semester and culminating with an intensive supervised internship/field experience in some aspect of counseling, permitting the integration of theory, research, and practical application. The Department is prepared to assist CC/MFT students in obtaining field placements relevant to their projected professional goals. These placements include, but are not limited to: marriage and family counseling agencies, mental health clinics, counseling centers, public schools, college-level counseling services, and the on-campus Practicum and Internship Facility. For the school counseling program, field placements are at a minimum of two of the three K-12 levels: elementary school, middle school, and high school.

Special characteristics of the program include the following:

1. Early observation of and involvement in actual counseling settings;
2. Development of a core of knowledge and experience in both individual and group counseling theory and practice;

3. Encouragement in the development and maintenance of individual counseling styles;
4. Commitment to self-exploration and personal growth through participation in peer counseling, individual counseling, and group experiences. This aspect of the program is seen as crucial to the development of adequate counseling skills and is given special consideration by the faculty as part of its evaluation of student readiness to undertake internship responsibilities; and
5. Strong emphasis on acknowledging and appreciating diversity.

In sum, the training emphasis in the program is to integrate theory, practical experience, and personal learning rather than exposing students to a piecemeal professional preparation. To varying degrees, students will find that in most of their course work the faculty expects students to be able to articulate their unique and personal histories, including their relationships with family, peers, and significant others, for it is our belief that self-understanding is crucial in effective counseling.

The effort is to establish a sound foundation in the student for a lifetime of continued professional growth — a foundation which permits confident movement into an entry-level counseling position but which does not pretend to be more. Within the compass of a 60-unit program, the faculty sees such a goal as attainable and eminently worthwhile.

The faculty is committed to the idea that counselors of the future should take an active role in helping to shape the social/environmental milieu in which they will work. While the faculty recognizes how difficult this task may be in specific instances and areas, it sees the counselor as one who actively participates in the life of an organization, not as a submissive keeper of the status quo or an unseeing iconoclast, but as a sensitive and perceptive voice representing individual freedom and human values. Leadership skills, and the skills necessary to facilitate change, are stressed in this program.

The master's program may be completed within two academic years; however, some students with jobs and/or family responsibilities may wish to move more slowly. Resources permitting, efforts will be made to accommodate individual patterns. For most students, 8 units per semester will be considered a minimal number. It should be stressed that individual program paths should be planned very carefully since many courses will not be offered every semester.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Recognition of Postsecondary Accreditation (COPA), has conferred accreditation to the Counseling Department at Sonoma State University in both Community Counseling and School Counseling. The School Counseling program is accredited by the California Commission on Teacher Credentialing (CCTC); in addition, the School Counseling program is accredited by the National Council for Accreditation of

Teacher Education (NCATE). The Community Counseling program is not designed to meet criteria for CACREP's Marital, Couple, and Family Counseling/Therapy specialization; however, it is accredited by the Board of Behavioral Science for training required for licensure as a Marriage and Family Therapist in California.

A student who has not been formally admitted to the Counseling Department may take no more than 12 units and only in the following course offerings: COUN 501, 502A/B, 503, 511, 520, 524, 525, 527A/B, 528A/B, 535, 545, and 582A/B. Admission to individual courses in no way implies admission to the master's degree program or to the PPSC program. You may take these courses through Open University. Call Extended Education for more information (664-2394).

Master of Arts in Counseling

Admission Requirements

1. A bachelor's degree, preferably in the behavioral sciences and with sound preparation in psychology, or in education for the School Counseling option, is required.
2. For both options, a course in personality theory and an undergraduate or graduate level statistics course that includes analysis of variance is required; in addition, a course in abnormal psychology is required for the MFT/Community Counseling option. A course in child development and documentation that you have taken the CBEST by the start of your first semester (www.cbest.nesinc.com), is required for the PPS School Counseling option.
3. Applicants are strongly encouraged to have acquired an undergraduate-level of understanding of human development, family/educational systems, cognitive-behavioral applications, and client-centered therapy. This introductory knowledge base may be acquired by enrolling in relevant coursework or by undertaking thoughtful reading on these topics.
4. A 3.00 (B) grade point average in the last two years of undergraduate work is required. Applicants who satisfy all other requirements may petition the University for waiver of this requirement. It should be emphasized that such a waiver is not automatically granted.
5. Completion of counseling department application forms, in addition to those required by the University.
6. A personal interview and group interview is required for applicants considered for final review. In these interviews, questions may involve personal disclosure deemed relevant by the faculty for determining the applicant's readiness for beginning training for a career in counseling. All disclosures are held in strict confidence.

Departmental admissions committees have found the following criteria meaningful, or even indispensable for applicants:

- a. The ability to handle academic work of graduate-level rigor,

- generally as evidenced by previous academic performance;
- b. Counseling-relevant work experience (paid or volunteer); and
- c. Global personality assessment—suitability for a career in a helping profession, as evidenced by quality of interview, personal data, autobiography, and letters of recommendation.

For more information, please see Graduate Degrees in the Degree Requirements section of this catalog.

CREDENTIAL ONLY: Students with master's degree in a practitioner counseling area such as MFT, Social Work, Counseling, School Psychology (an M.A. program that required a practicum and internship/field experience or a two-year internship/field experience) may be considered for "Credential Only" admission. They must apply through the traditional process and go through an interview. Typically the credential-only admittees will have approximately 30 units to complete in our school counseling program. The number of units may vary depending on the individual transcripts assessment. Students would have to take all of the School Counseling specific courses and complete the 600-hour (total) field experience/internships.

Application Procedures

Interested persons can obtain the standard statewide graduate application form from the Admissions Office of Sonoma State University or download an application from the Sonoma State webpage. Students are accepted to the counseling program only once a year; therefore, we begin taking departmental applications on October 1 and continue to January 31 for admission the following fall. A \$25.00 application fee is required for the department. All applicants to the program must also apply for admission to the University and follow the University timelines for admission procedures. For specific instructions and procedures, contact the Counseling Department and/or the Office of Admissions and Records (www.sonoma.edu/counseling).

General Information Meetings

Students planning to apply for admission or students wishing to enroll in any of the counseling department's courses are urged to attend one of the informational meetings specifically planned for prospective students. Selection criteria, admission procedures, and registration and advisement procedures will be explained. For informational meeting dates, call the Counseling Department office or visit the department webpage at www.sonoma.edu/counseling/.

Major Core Requirements

COUN 501 Theory and Practice of the Professional Counselor	4
COUN 510A Counseling Pre-Practicum	4
COUN 513 Research and Evaluation in Counseling	4
COUN 514A Supervised Internship / Field Experience	4
COUN 514B Supervised Internship / Field Experience	4
COUN 525 Psychological and Educational Assessment	2
COUN 570 Cross-Cultural Awareness in Counseling	3

Total units in M.A. core 25

Option I - Community Counseling/Marriage and Family Therapy

Completion of the Community Counseling/Marriage and Family Therapy (CC/MFT) option, in addition to the major core requirements above, satisfies all academic requirements in order to be eligible for the MFT examination. If the Board of Behavioral Sciences (BBS) mandates changes in curriculum for MFT trainees, the Department of Counseling will revise courses accordingly so the curriculum remains in compliance with BBS standards. The course descriptions in this catalog edition may not be the most current versions if such curricular revisions are undertaken after the catalog is printed.

COUN 502A/B Adult Development: Individual, Family, and Career Development	4
COUN 503 Dynamics of Individual Behavior	3
COUN 510B Counseling Practicum	4
COUN 512 Theory and Practice of Group Counseling	4
COUN 535 Development and Clinical Issues with Children and Adolescents	4
COUN 540 Marriage and Family Counseling	4
COUN 545 Law and Ethics for the Counselor	3
COUN 580A/B Relationship and Sexuality Counseling	4
COUN 582A Psychopharmacology	2
COUN 582B Introduction to Chemical Dependency	1
Additional elective units (with department approval)	2
Total units in the Community Counseling/MFT option	35
Total units in the degree	60

Option II - School Counseling/Pupil Personnel Services Credential

Completion of the School Counseling/Pupil Personnel Services (PPS) option, in addition to the major core requirements above, satisfies the academic requirements in order to be eligible for the Pupil Personnel Services credential in school counseling. Candidates for the PPS credential are urged to be mindful of the following: while it is possible to complete all the courses required for the credential in a two-year period, such a program requires extremely careful planning. The department intends to offer each PPS course at least once a year, but students need to plan the sequence with their advisor to ensure it matches the availability of courses.

COUN 510B Counseling Practicum	4
COUN 511 Academic Career Counseling K-12	4
COUN 520 Introduction to School Counseling	4
COUN 521 Pupil Personnel Services: Concepts and Organization	4
COUN 523 Working with Families in a School Setting	4
COUN 524 Counseling Children and Adolescents	4
COUN 526 Group Counseling in Schools	4
COUN 527 Law and Ethics for School Counselors	3
COUN 528A Consultation	3
COUN 528B Crisis Intervention	1
Total units in the School Counseling option	35
Total units in the degree	60

All master's candidates are required to complete a project demonstrating a comprehensive and integrated understanding of the field of counseling. Projects include a case analysis and a grant proposal for developing a comprehensive mental health or school guidance specialized program. Six hundred (600) hours of supervised field experience are required for both the Community Counseling and School Counseling options.

Community College Counseling Credential

Completion of the M.A. degree in either option satisfies all current requirements to apply for the Community College Counseling Credential. However, it should be noted that all of the required 600-hour school counseling field experience will be at the K-12 level and not at the Community College level.

Practicum and Internship Facility

Stevenson Hall 1001 and 1004

For appointments: (707) 664-2544

Information also through Dept. of Counseling: (707) 664-2648

Clinical Supervisor Dr. Mark Doolittle (707) 664-2648

Directors:

Counseling Department Faculty

Contact Counseling Department at (707) 664-2544

Clinical Supervisor:

Mark Doolittle, Ph.D.

Professor Emeritus

(707) 664-2648

email: mark.doolittle@sonoma.edu

Under sponsorship and administrative oversight by the Counseling Department, the Practicum and Internship Facility functions as the clinical training site for M.A. students in the Department of Counseling. Its goals are:

- To provide a real-world training environment for Counseling Department graduate students as they complete their Practicum, Supervised Internship, and other components of the M.A. Counseling degree, in accord with national accreditation standards and state licensing criteria;
- To create links between the University and the community that provide direct practical services for the less fortunate and less advantaged members of our community by providing high quality, free services to the children, families, and communities in the service area of SSU;
- To support and develop collaborative programs with businesses, agencies, schools, and foundations that create innovative solutions for the social, family, and personal problems facing individuals and families in our community; and
- To sponsor and support the development of on-campus collaborations between SSU departments and centers which serve the goals of community service, increased training options, and expanded research opportunities that enhance the educational and career opportunities of Sonoma State University students.

Sample Two-Year Program for Master of Arts in Counseling

FIRST YEAR:: 29-31 Units

<i>Community Counseling/MFT</i>	<i>School Counseling/PPSC</i>
<i>Fall Semester (15 Units)</i>	<i>Fall Semester (15 Units)</i>
COUN 501 (4)	COUN 510A (4)
COUN 510A (4)	COUN 520 (4)
COUN 535 (4)	COUN 524 (4)
COUN 545 (3)	COUN 527 (3)
<i>Spring Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
COUN 510B (4)	COUN 501 (4)
COUN 503 (3)	COUN 510B (4)
COUN 525 (2)	COUN 511 (4)
COUN 582 A/B (3)	COUN 526 (4)
Electives (2)	

SECOND YEAR:: 29-31 Units

<i>Fall Semester (15 Units)</i>	<i>Fall Semester (14 Units)</i>
COUN 502A/B (4)	COUN 514A (4)
COUN 514A (4)	COUN 525 (2)
COUN 540 (4)	COUN 528A/B (4)
COUN 570 (3)	COUN 513 (4)
<i>Spring Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
COUN 513 (4)	COUN 570 (3)
COUN 514B (4)	COUN 514B (4)
COUN 512 (4)	COUN 521 (4)
COUN 580A/B(4)	COUN 523 (4)

TOTAL UNITS:: 60

CREATIVE WRITING

ENGLISH DEPARTMENT OFFICE

Nichols Hall 362

(707) 664-2140

Programs Offered

Bachelor of Arts in English Creative Writing concentration

Master of Arts in English Creative Thesis option

Creative writing is offered in the English Department through both undergraduate and graduate degrees. A master of arts in English with a creative thesis option is available as a 34-unit program, and the bachelor of arts in English with a creative writing emphasis is a 40-unit program. Sequences of courses are available in fiction writing, poetry writing, screen and script writing, and nonfiction writing.

Creative writing faculty includes poet **Gillian Conoley**, winner of several Pushcart Prizes for poetry, a National Endowment for the Arts award, a Fund for Poetry Award, the Jerome Shestack Award from *The American Poetry Review*, and a nominee for the National Book Critics' Circle Award. She is the author of *The Plot Genie*, *Profane Halo*, *Lovers in the Used World*, *Beckon*, *Tall Stranger*, and *Some Gangster Pain*. Her work has been anthologized in over 20 national and international anthologies, including the Norton Anthology *American Hybrid*, several *Best American Poetry* collections, *The Pushcart Prize Anthology*, and *Lyric Postmodernisms*. **Gillian Conoley** has taught at the Iowa Writers' Workshop, Tulane University, Vermont College MFA Program, and the University of Denver.

Fiction writer **Sherril Jaffe** is the winner of a PEN award and author of six works of fiction, including *Scars Make Your Body More Interesting & Other Stories*, *This Flower Only Blooms Every Hundred Years*, *The Unexamined Wife*, *The Faces Reappear*, *House Tours*, and *Interior Designs*, all with Black Sparrow. She is also the author of two works of non-fiction from Kodansha: a memoir, *Ground Rules: What I Learned My Daughter's Fifteenth Year* as well as, in collaboration with Alan Lew, *One God Clapping: The Spiritual Path of a Zen Rabbi*, a *San Francisco Chronicle* best seller and winner of the Josephine Miles Award for Literary Excellence in 2000. In 2010, she was awarded a fellowship to the MacDowell Colony. Her short stories appear regularly in such literary journals as *Epoch*, *Zyzyva*, *Alaska Quarterly Review*, and *Superstition Review*. A new novel, *Expiration Date*, will be published in 2011. Sherril Jaffe has also taught at U.C. Berkeley, U.C. Davis, San Francisco State University, and The New School for Social Research in New York City.

Noelle Oxenhandler is the author of three non-fiction books: *A Grief Out of Season*, *The Eros of Parenthood*, and *The Wishing Year*, *An Experiment in Desire* (Random House 2008). Her essays, which have been frequently anthologized, have appeared in many national and literary magazines, including *The New Yorker*, *The New York Times Magazine*, *Vogue*, "O" Magazine, *Tricycle*, and *Parabola*. Her

work has been listed in *The Best Essays of the Year* collection and included in both *The Best Spiritual Essays of the Year* and *The Best Buddhist Essays of the Year* collections. She has been a regular guest teacher in the Graduate Writing Program at Sarah Lawrence College.

Greg Sarris, author, screenwriter, and scholar, holds the Endowed Chair in Native American Studies within the School of Arts and Humanities. Sarris has published several books of fiction and non-fiction, including the widely anthologized collection of essays, *Keeping Slug Woman Alive: A Holistic Approach to American Indian Texts*, *Watermelon Nights*, *Mabel McKay: Weaving the Dream*, *The Woman Who Loved a Snake*, and *Grand Avenue*, which was made into an HBO miniseries Sarris wrote and co-produced with Robert Redford. Sarris holds a Ph.D. from Stanford University and has previously taught at Loyola Marymount University in Los Angeles and UCLA. He currently serves as chairman of his tribe, the Federated Indians of Graton Rancheria.

Through the **Writers at Sonoma Series**, internationally and nationally prominent writers, publishers, and agents are invited each year to read and conduct seminars and workshops for students in the program. Visitors to the campus and the program have included Rae Armantrout, Yusef Komunyakaa, Lawrence Weschler, David Halberstam, Ishmael Reed, Clark Coolidge, D.A. Powell, C.S. Giscombe, Jessica Mitford, Allen Ginsberg, Lawrence Ferlinghetti, Charles Bernstein, Lyn Hejinian, Tom Wolfe, Czeslaw Milosz, Edward Albee, Kurt Vonnegut Jr., Michael Palmer, Donald Revell, Jane Miller, James Ellroy, Wanda Coleman, Lynn Freed, and Yiyun Li. Writers at Sonoma Series is funded by Instructionally Related Activities and the Nadenia Newkirk Fund for writers.

The well-regarded student literary magazine **ZAUM** is published through the Small Press Editing course offered by the English Department every semester. Students can learn every aspect of literary editing and publishing, including layout, design, and copyediting through this course. A paid position for a student as senior editor is available each year.

VOLT is the highly acclaimed national award-winning magazine which publishes nationally and internationally known authors. Winner of three Pushcart prizes and numerous grants, VOLT is committed to innovative writing. Students can work on the magazine by arrangement with instructor and through the Small Press Editing course. VOLT is edited by poet Gillian Conoley.

The SSU creative writing program is a member of the Associated Writing Programs. For program details, please refer to the English Department section in this catalog.

CRIMINOLOGY AND CRIMINAL JUSTICE STUDIES

DEPARTMENT OFFICE
Stevenson Hall 2084
(707) 664-2934
www.sonoma.edu/ccjs

DEPARTMENT CHAIR
Barbara Bloom

ADMINISTRATIVE ANALYST
Lisa Kelley

ADMINISTRATIVE COORDINATOR
Katie Musick

Faculty

Barbara Bloom
Diana Grant
Patrick Jackson
Eric Williams

Programs Offered

Bachelor of Arts in Criminology and Criminal Justice Studies
Minor in Criminology and Criminal Justice Studies

The criminology and criminal justice studies major offers a liberal arts curriculum concerned with the changing nature and content of law, the shifting public expectations of criminal justice agencies, and the reactions of those agencies to social perceptions and political pressures.

The student is offered an interdisciplinary academic approach to the understanding of the mechanisms of social control, resolutions of criminal justice problems, and a knowledge of accepted procedures and alternatives. This general but all-important background serves as a base for the areas of emphasis that are of interest to the individual student. Fields of interest — such as adult and juvenile probation, law enforcement, judicial administration, public advocacy, prevention and diversion, and correctional services — are studied in detail from several perspectives. Criminology and criminal justice studies majors are prepared to pursue graduate education in justice studies and the law as well as other graduate fields.

Bachelor of Arts in Criminology and Criminal Justice Studies

Degree Requirements	Units
General education	51
Major core requirements	36
Electives (chosen under advisement)	24
Free electives	9
Total units needed for graduation	120

Please note that transferable units from other institutions may be

applied to the category “electives chosen under advisement.” The course work taken at this University to complete the major requirements must be selected in consultation with a department advisor.

Courses in Spanish (for non-native speakers) and computer and information sciences are highly recommended as supporting subjects.

Students must consult with a faculty advisor before beginning core courses.

Major Core Requirements

CCJ 201 Criminal Justice and Public Policy	4
CCJ 420 Seminar in Criminology	4
CCJ 330 Government and the Rule of Law or	
CCJ 404 Introduction to Constitutional Law	4
CCJ 370 Seminar in Research Methods	4
CCJ 450 Punishments and Corrections	4
CCJ 489 Civil Liberties and the Constitution or	
CCJ 405 Rights of the Accused	4
CCJ 490 Senior Seminar: Criminology and Criminal Justice Studies	4
CCJ 497 Juvenile Justice	4
CCJ 499 Internship*	4

Total units in major core 36

* The internship requirement may be waived for students currently or previously employed in criminal justice or a related area. It must be substituted with another 4-unit course.

Minor in Criminology and Criminal Justice Studies

The minor consists of any 20-unit pattern of Criminology and Criminal Justice Studies courses chosen in consultation with a department advisor. A maximum of 4 units of special studies or internship credit may be applied to the minor.

Minor courses must be taken in residence for a letter grade, except for the internship which is offered Cr/NC only.

Sample Four-Year Program for Bachelor of Arts in Criminology and Criminal Justice Studies

The sequence and selection of specific courses are suggestive.

FRESHMAN YEAR:: 32 Units

Fall Semester (15 Units)

ENGL 101 (3)
Mathematics GE (3)
GE (3)
Electives (6)

Spring Semester (17 Units)

PHIL 101 (3)
GE (3)
GE (3)
Computer Science (3)
SPAN 101 (4)
SPAN 101L (1)

SOPHOMORE YEAR:: 31 Units

Fall Semester (15 Units)

HUM 200 (3)
GE (3)
CCJS 201 (4)
SPAN 102 (4)
SPAN 102L (1)

Spring Semester (16 Units)

GE (3)
GE (3)
CCJS 370 (4)
Elective (3)
GE (3)

JUNIOR YEAR:: 29 Units

Fall Semester (15 Units)

CCJS 399 (1)
CCJS 420 (4)
CCJS 489 (4)
Electives (3)
Upper-Division GE (3)

Spring Semester (14 Units)

CCJS 330 (4)
CCJS 450 (4)
Upper-Division GE (3)
Electives (3)

SENIOR YEAR:: 28 Units

Fall Semester (13 Units)

CCJS Upper-Division Electives (4)
Upper-Division GE (3)
Electives (6)

Spring Semester (15 Units)

CCJS 490 (4)
CCJS 499 (4)
CCJS 497 (4)
Electives (3)

TOTAL UNITS:: 120

ECONOMICS

DEPARTMENT OFFICE

Stevenson Hall 2042
(707) 664-2366
www.sonoma.edu/sbe

DEPARTMENT CHAIR

Robert Eyler

ADMINISTRATIVE COORDINATOR

Barbara Dietrich

LOWER-DIVISION ADVISOR

Sheila Mackintosh-Sims

Faculty

Florence Bouvet

Steven Cuellar

Robert Eyler

Sue Hayes

Chong-Uk Kim

Michael Visser

*Richard West

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Arts in Economics

Minor in Economics

Economics is a social science that focuses on the organization of economic systems for the production of goods and services and the distribution of wealth and income. The SSU Economics Department is committed to excellence in providing students an education to meet the challenges of the future in a wide variety of careers.

The B.A. degree program has three basic objectives: to provide a sound grasp of the tools of economic analysis and measurement; to provide an understanding of institutional development and the interrelation of economic and social factors; and to develop the student's ability to apply systematic analysis and understanding to decision-making in both the private and the public sectors.

Many courses deal with the structure and performance of a particular institution or policy area within the economy. Students can follow their career and intellectual interests by taking a field concentration or advisory study plan as described below.

Many faculty have served as practicing economists with public agencies or private firms, bringing a rich background of practical experience analyzing policy issues and problems to their teaching.

Careers in Economics

The curriculum and teaching program of the department are designed for students who seek employment in the public or private

sector upon graduation and those who wish to pursue graduate studies in economics, business, public administration, law, and other fields.

Many of the department's graduates have started their careers with major financial institutions, corporate businesses, government, and nonprofit organizations. They find employer preferences for well-trained economics majors as budget analysts, management trainees, marketing specialists, program planners, teachers, and a wide variety of entry-level jobs in which employers expect a person to be able to apply systematic thinking and analysis.

Learning Objectives

Objectives Specific to Economics

Students are required to:

- Articulate an understanding of economic terms, concepts, and theories;
- Identify subjective and objective aspects of economic policy;
- Use both qualitative and quantitative reasoning to analyze social and economic issues; and
- Demonstrate an awareness of current and historic economic issues and perspectives.

General Skills

In the course of meeting the objectives specific to economics, students are expected to acquire and demonstrate:

- Critical-thinking abilities;
- Communication skills; and
- Quantitative and information-based skills.

Relating Knowledge to Values

Students are expected to acquire and demonstrate:

- An awareness of global, historical, and institutional economic issues; and
- Understanding of choices and values behind economic policy formation.

Bachelor of Arts in Economics

Degree Requirements	Units
General education	51
Major requirements	41-44
General electives	25-27
Total units needed for graduation	120

Prerequisites

Majors must complete a math/statistics requirement (MATH 165, BUS 211 or equivalent) as a prerequisite for the upper-division core courses in the major.

Major Core Requirements

ECON 204 Introduction to Macroeconomics	4
ECON 205 Introduction to Microeconomics	4
ECON 304 Intermediate Macroeconomic Theory	4
ECON 305 Intermediate Microeconomic Theory	4
ECON 317 Introduction to Econometrics	4
Two 400-level economics seminars not used in a field concentration or advisory study plan	8

Total units in the major core 26-28

Field concentration or advisory study plan 15-16

Total units in the major 41-44

B.A. Field Concentrations

An economics major may select one of the following concentrations, which are designated on a student's transcript and diploma. Please see an advisor for details of each of the following concentrations:

- Managerial Economics
- Labor and Public Economics
- International Economics

B.A. Advisory Study Plans

Instead of a field concentration, economics majors may focus their course work beyond the required core courses in an advisory study plan. These plans are not designated on diplomas, but completion can be certified by a letter from the department chair. Please see an advisor for details or to develop a specialized plan.

Minor in Economics

Students may qualify for a minor in economics by completing the 20-unit program listed below. The minor will be recorded upon request in the student's official records.

ECON 204 Introduction to Macroeconomics	4
ECON 205 Introduction to Microeconomics	4
ECON 304 Intermediate Macroeconomic Theory	4
ECON 305 Intermediate Microeconomic Theory	4
Upper-division economics course (excluding internships and tutoring)	4
Total units in the minor	20

Sample Four-Year Program for Bachelor of Arts in Economics

FRESHMAN YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
ENGL 101 (A2) (3)	PHIL 101/102 (A3) (3)
MATH 165 (B4) (4) or BUS 211 (4)	BIOL 110 (B2/lab) (4)
ECON 204 (D5) (4)	ECON 205 (4)
UNIV 102 (3)	U.S. History course (D3) (3)

SOPHOMORE YEAR: 34 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (16 Units)</i>
Written/Oral Analysis (A1) (3)	Physical Science course(B1) (3)
Literature (C2)* (3)	POLS 200 (D4) (3)
ECON 305 (4)	Fine Arts course (C1)* (3)
ECON 317 (4)	Natural Science (B3) (3)
Social Sciences (D1*/D2) (4)	ECON 304 (4)

JUNIOR YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
Humanities (C3/C4)* (3)	Humanities UD(C4/C3)* (3)
Concentration/Advisory study plan (8)	Concentration/Advisory study plan (8)
Social Sciences UD GE (D2/D1) (3)	Elective (3)

SENIOR YEAR: 31 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (12 Units)</i>
Electives (12)	Electives (8)
Integrated Person UD GE (E)* (3)	Economics Seminar (4)
Economics Seminar (4)	

In order to total the 120 units necessary for graduation within four years, a student must average 15 units per semester.

(*One of these courses must be ethnic studies.)

TOTAL UNITS: 120

Double Majors

Students with majors in disciplines such as business, environmental studies and political science will find that adding an economics major provides them with a breadth of background that is viewed favorably by graduate professional programs and employers.

Students interested in any double major with economics should consult with their Economics Department advisor.

Graduate Work in Economics and Related Fields

Economics majors planning graduate work in economics, business, or public administration should take one or more courses of calculus and linear algebra, probability theory, ECON 404, 405 and 417. Consult with an advisor to plan accordingly.

EDUCATION

SCHOOL OFFICE

Stevenson Hall 1078
(707) 664-3115/2132
www.sonoma.edu/education

STUDENT SERVICES/CREDENTIALS OFFICE

Stevenson Hall 1078, (707) 664-2832
credentials.office@sonoma.edu

The Student Services Office serves as the admissions and records center for all programs offered in the School of Education and is responsible for the recommendation of teaching and service credentials. Credentials analysts and staff are available to provide application information and credential information to prospective students, continuing students, out of state teachers/administrators, University constituents, and the University service area in general.

CAREER OUTLOOK

California faces the daunting task of replacing 300,000 teachers over the next ten years. Currently shortages of credentialed teachers exist in mathematics, science, special education, Spanish, and bilingual education. In addition to public schools, graduates of the School of Education find positions in community agencies and in the private sector.

Scholarship Opportunities for Teacher Preparation

APLE

The Assumption Program of Loans for Education (APLE) is a teacher incentive program designed to encourage students to become California teachers in a range of critical teacher shortage areas and in several types of high-need schools. Administered by the California Student Aid Commission, the program forgives up to \$19,000 in outstanding educational loan balances in return for four consecutive years of qualifying teaching service. Candidates must apply while enrolled in a credential program.

TEACH Grant

The Teacher Education Assistance for College and Higher Education (TEACH) Grant is a program created through the federal government's College Cost Reduction and Access Act of 2007. The federal TEACH Grant program provides grants of up to \$4,000 per year to students who are interested in earning a California teaching credential, meet certain criteria, and who are enrolled in programs at Sonoma State University that have been designated as eligible. You can review eligibility and application procedures at <http://www.sonoma.edu/finaid/>.

F. George Elliott Exemplary Student Teaching Scholarship

This scholarship recognizes a credential candidate who is currently completing full time student teaching or internship and whose practice and professional dispositions exceed excellence on all program

performance and disposition standards. Each of the three School of Education departments may nominate one candidate for this award each semester. Nominees should excel in:

- Educating the whole student;
- Implementing curriculum and pedagogy that are innovative, creative, and reflective of program preparation;
- Reflecting on their practice; and
- Engaging with the school, community and families.

Elliott Fellowship for Professional Renewal

This award is open to all Santa Rosa City School District middle school, junior high and senior high teachers who have completed from three to nine years teaching in the Santa Rosa City School District. It provides the recipient a two-semester scholarship in the amount of part- or full-time enrollment fees plus an additional 20% toward fees for books and supplies. Candidates apply for this award, and the recipient will be selected by a faculty committee appointed by the Dean. Each recipient of this award must complete the two-semester scholarship period within five years of receiving the award. All applicants must meet admissions requirements for graduate study at SSU.

Noyes Scholarship

The Noyes Scholarship program will provide

- (a) scholarships to undergraduates who are part of a mathematics undergraduate teacher program and/or science students intent on becoming teachers;
- (b) scholarships to math or science teacher candidates in their credential programs; and
- (c) Noyce Scholar internships opportunities to work with master teachers in high-need K-12 schools.

The project is based in the Science and Mathematics Teacher Recruitment and Retention Initiative (SMTRI) program at Sonoma State University (www.sonoma.edu/education/grants/smtri).

Patricia Nourot Memorial Scholarship

This scholarship provides funds to cover educational expenses for students in the Early Childhood Education minor or the master's degree program with an emphasis in Early Childhood Education. In each academic year, applications will be considered and one scholarship of up to \$300 will be awarded. Applicants should show potential for leadership in the field of Early Childhood Education. The student who is awarded the scholarship will be notified by December 15, and the funds will be available for spring semester.

Credential Programs

Child Development Permit

The California Child Development Permit is issued by the Commission on Teacher Credentialing (CTC). The permit is organized into different levels, each authorizing the holder to perform different levels of service in child development programs. Sonoma State University is authorized to process Child Development Permit applications at the Assistant Teacher, Associate Teacher, and Teacher levels for preschool programs. Additional information and application packets are available online at <http://www.sonoma.edu/users/f/filp/ece/permit.htm>.

Multiple Subject and Single Subject Credentials

The multiple subject and single subject credentials authorize the teaching of students at various stages of English language development and from a variety of cultural backgrounds.

Individuals interested in teaching at the elementary school level should apply to the Multiple Subject Credential Program, which prepares candidates to teach in a self-contained classroom, kindergarten through grade 12.

The single subject credential authorizes the holder to teach a particular subject in a school organized by academic disciplines, kindergarten through grade 12. Since most elementary schools are not departmentalized, this credential generally is appropriate for the middle school and high school teacher candidate (art, music, and physical education candidates may actually teach K-12).

Education Specialist Credential

The Education Specialist (special education) Credentials, Level I and Level II, are offered for mild/moderate and moderate/severe disabilities and authorize the holder to provide services in K-12 special day classes (SDC) or resource specialist program classes (RSP).

Advanced Credentials

Individuals possessing a basic teaching credential may enter programs leading to specialist or service credentials. These advanced credentials authorize the holder to perform specialized roles in public schools.

The advanced credentials we offer are:

- Education Specialist II
- Preliminary Administrative Services Credential I (PASC I)
- Professional Administrative Services Credential II (PASC II)
- Reading Certificate
- Reading and Language Arts Specialist Credential
- Teaching English to Speakers of Other Languages (TESOL)

Note: Program requirements change periodically, and current information may not be available in this catalog. For more detailed information on credentials and other education programs, please see the University's special bulletins and the School of Education's

current program brochures and policy statements, or visit the Education website, www.sonoma.edu/education.

Admissions

Basic Teaching Credential Programs

Basic teaching credentials include Multiple Subject, Single Subject, and Preliminary Education Specialist Credentials. The basic authorization to teach in the California public schools requires all the following:

- Possession of a bachelor's degree;
- Verification of appropriate subject matter competency, either completion of an approved subject matter preparation program or passage of appropriate state-approved examination(s);
- Basic Skills Requirement met via appropriate option;
- Completion of a college-level course or college-level examination that covers the U.S. Constitution. POLS 200 or 202 at SSU will meet the requirement;
- Completion of a state-approved program of professional teacher education;
- Valid Adult, Child, Infant CPR card (Single Subject and Multiple Subject only); and
- RICA (Multiple Subject and Education Specialist only).

Note: Students should consult with the Student Services Office during their first semester on campus if they plan to pursue a teaching credential. Students admitted to a credential program should contact the Student Services Office for any changes in requirements.

California State University Requirements for Admission to Basic Teaching Credential Preparation Programs

All credential candidates must complete the following before admission to the professional preparation programs:

1. Application/admission to the University;
2. Submission of application to a basic credential program through the School of Education;
3. Professional Goals Statement;
4. Grade point average of 2.75 in last 60 units of attempted course work or a 2.67 overall grade point average;
5. Basic Skills Requirement met or in progress via appropriate option;
6. Two letters of recommendation, dated within six months of application to the program;
7. Verification of appropriate subject matter competency completed or in progress (requirement depends on type of credential sought);
8. Submission of negative TB test dated within 12 months of application to the program;
9. Filing of the application for a Certificate of Clearance, which includes fingerprinting;

10. Demonstration of aptitude, personality, and character traits that satisfy the standards of the teaching profession. Assessment of these qualities will be made by the School of Education through evaluation of interviews, letters of recommendation, candidate's professional goals statement, and spontaneous writing sample;
11. Evidence of 45 hours of experience working with school-age children (completed within the last two years); and
12. Verification of understanding of professional responsibilities related to harassment, child neglect or abuse, and discrimination. Successful completion of the Legal Seminar and assessment offered in the School of Education meets this requirement; and
13. For admission to multiple subject and education specialist programs, a passing score on the appropriate CSET subtests is required. See the CSET Exam information and registration guide: <http://www.cset.nesinc.com/>.

Contact the Student Services Office for information about the latest test date that will be acceptable for the semester in which you are applying. Even if you request scores to be sent to the University directly from the testing company, also submit a photocopy of scores directly to the Credentials Office.

PLEASE NOTE: Students may be eligible to request a waiver of the CSET passing requirement, under certain circumstances. For more information on these options, please e-mail the Student Service Office at credentials.office@sonoma.edu.

The Student Services Office provides information regarding standards and dates for application to programs in the School of Education.

Additional program-specific admission requirements are listed with each program description.

NOTE: A Pre-Credential Track is available for all applicants who are currently working on CSET completion.

Undergraduate Integrated/Blended Degree and Credential Programs

The Integrated/Blended Degree and Credential Programs offer undergraduate students the opportunity to earn a four-year baccalaureate degree and a teaching credential simultaneously. The undergraduate blended degree program is currently available for Track 3 majors in Hutchins Liberal Studies, leading to a multiple subject credential. Students in this program must receive advising about course sequence prior to, or very early in, their freshman year; enroll in an average of 15-18 units per semester; and be willing to take courses in at least one summer session.

For Secondary Education, integrated programs are available for majors in music and kinesiology leading to the Single Subject credential. This option may be available to transfer students, depending on the program of interest. For more information contact the Student Services Office in the School of Education.

Foundational Authorizations

The Foundational Level General Science Teaching Credential authorizes teaching integrated science through 8th grade and general science at the high school level (as opposed to college-prep high school biology, chemistry, or physics).

The Foundational Level Mathematics Teaching Credential authorizes the holder to teach the following content areas: general mathematics, all levels of algebra, geometry, probability and statistics, and consumer mathematics. Calculus and math analysis classes are outside the scope of the authorization.

Contact the School of Education Student Services/Credentials Office (credentials.office@sonoma.edu) for further information.

Procedures for Admission to Basic Teaching Credential Preparation Programs

The Credentials Office provides information regarding admissions requirements and dates for application to programs in the School of Education.

Obtain application packets and additional information from the Credentials Office, Stevenson 1078, or on the website, www.sonoma.edu/education. Submit to the Credentials Office, Stevenson 1078.

Continuation in Basic Teaching Credential Preparation Programs

1. All education students are required to attend at least one advising session each semester, or meet with an advisor.
2. Students must successfully complete all requirements for each program phase—including coursework, practica, and student teaching—before entering the subsequent phase.
3. Students are expected to make continuous progress toward the credential while maintaining a grade point average of 3.00 in professional education courses after entry into the credential program. Incomplete grades (I) and grades of C- or below in professional education courses must be removed and statutory requirements met prior to continuing enrollment in courses.
4. Candidates who must delay progress in the professional education program may file a written request with the program coordinator for an extended program or for a leave of absence. A student returning from a program delay will be subject to the screening requirements in effect at the time of reentry and will be accommodated as space allows. Any student on academic probation is subject to automatic disqualification as a credential candidate.

In all School of Education programs students are expected to meet and maintain high academic and performance standards, including all of the following (additional standards may be required by specific programs):

- Maintenance of a 3.00 GPA in all professional education courses (nothing lower than a C, including prerequisites);

- Successful completion of required field experiences;
- Successful completion of a program portfolio prior to advancement to the final phase of the program and/or completion of the final field experience; and
- Effective July 2008 all credential candidates in Multiple Subject and Single Subject programs will be required to successfully complete the Performance Assessment for California Teachers.

Clearing a Preliminary Credential

If you hold a California preliminary multiple subject, single subject, or education specialist credential and you have questions about completing requirements to clear the credential, please contact the Credentials Office at credentials.office@sonoma.edu.

Master of Arts in Education

Description of M.A. in Education Programs

Sonoma State University's School of Education offers five advanced credential programs and six areas of concentration within the Master of Arts in Education degree. Each of these programs reflects the philosophy, purpose, and goals of the School of Education Conceptual Framework, developed by the School of Education faculty. In our M.A. programs, students critically examine educational theories and research through a variety of empirical, theoretical, and cultural lenses to develop an informed educational vision and innovative pedagogy in a variety of educational settings. Students have the opportunity to collaborate with faculty and colleagues to examine and influence current educational practice through research, project development, and advocacy. We expect graduates to emerge from their work at Sonoma State University as leaders in their field and agents of change.

The six M.A. in education areas of concentration offered at Sonoma State University are:

- Curriculum, Teaching, and Learning (see Department of Curriculum Studies and Secondary Education);
- Early Childhood Education (see Department of Literacy Studies and Elementary Education);
- Educational Leadership (see Department of Educational Leadership and Special Education);
- Reading and Language (see Department of Literacy Studies and Elementary Education);
- Special Education (see Department of Educational Leadership and Special Education); and
- Teaching English to Speakers of Other Languages (see Department of Curriculum Studies and Secondary Education).

Throughout their years in an M.A. program, students are required each semester to meet with the graduate advisor in their area of concentration to plan collaboratively their progress in the M.A. program. Students may also confer with other graduate program faculty and the Director of Graduate Studies for advice and guidance

in their coursework and professional development. Students must maintain a 3.00 grade point average in all coursework in the approved M.A. program as well as in all coursework taken subsequent to admission in conditionally classified standing.

For more information about the M.A. in education, read our M.A. handbook online at www.sonoma.edu/education/Masters.htm

Prerequisites for the M.A. in Education Program

- A bachelor's degree from an accredited institution;
- A cumulative upper-division and graduate grade point average of at least 3.00 and a grade point average of at least 3.00 for previous work in education; and
- A valid basic teaching credential (except in Curriculum, Teaching, and Learning, Early Childhood Education, and TESOL).

Procedures for Applying to the M.A. in Education Program

1. Apply to the University as a graduate student;
2. Apply to the School of Education; and
3. Submit the following:
 - a. A professional goals statement;
 - b. One set of official or unofficial transcripts;
 - c. One photocopy of a valid basic teaching credential, when required; and
 - d. Two current letters of reference attesting to academic potential and professional promise (except where otherwise noted).

M.A. Core Courses

Two core courses are required for all M.A. in education program areas of concentration:

EDUC 570 The Reflective Educator 3

EDUC 571 Research Paradigms in Education 3

Pathways to Program Completion

The M.A. program of study requires 30-36 semester units of course work, depending on the M.A. pathway a student selects. There are three pathways to program completion, including the thesis/project, cognate, and individualized examination. We encourage students to become knowledgeable about each of the pathways in order to pursue a program of study that meets their professional goals within their preferred style of learning.

In all three pathways, graduate students take 18 units in the program area of concentration and at least 6 units (EDUC 570 and 571) of M.A. core courses. All M.A. students work with a three-member committee, most closely with the committee chair, to complete a culminating activity, which is presented to the committee in a public forum. In addition to these points in common, there are distinct differences among the three pathways to program completion, as described below.

1. Thesis/Project

The thesis/project pathway is a 30-unit course of study, including 18 units in the student's program area of concentration and 12 units of core courses (EDUC 570, 571, 598, and 599). In order to prepare for the thesis/project, students must take Education 598 (Developing a Thesis/Project) and 599 (Supervised Study for the Thesis/Project) as their final two courses in the M.A. program.

The thesis is a written product of a systematic study of a significant question, problem, or issue in education. The project is a written document describing a significant undertaking appropriate to education. The thesis/project option requires an extensive write-up, including an in-depth literature review. Students must also present their thesis/project to their three-member committee in a public forum. Examples of a thesis investigation include process/product research, co-relational study, action research, ethnographic study, historical study, or theoretical study. Examples of a project include curriculum design, professional development for educators, program design, a performance piece, or a creative project.

For students pursuing the thesis/project pathway, two additional core courses are required:

EDUC 598 Developing a Thesis/Project 3

EDUC 599 Supervised Study for Thesis/Project 3

2. Cognate

The cognate pathway is a 36-unit course of study, including 18 units in student's program area of concentration, 9 units of core courses (EDUC 570, 571, and 572), and a 9-unit cognate course of study. The cognate course of study is a group of courses which students choose in consultation with a faculty advisor and/or committee chair, which allows students to examine areas of interest related to their M.A. concentration. In order to work with their three-member committee on the cognate project, students must take Education 572 (Supervised Study for the Cognate Project) as their final course in the M.A. program.

The cognate project (e.g., professional article, video, website, or field-based product) is a significant undertaking through which students connect their cognate course of study with the M.A. core courses, program concentration, and/or work in the field. The project displays understandings, practices, and theoretical perspectives on the candidate's program area of concentration and cognate course of study. Projects should arise out of candidate's goals and professional interests and may take virtually any form. The project may address, for example, implications of the cognate course of study for the classroom, reflections on new teaching practices, response to scholarly research, or educational theory. A written reflection that includes the theoretical context for the project must be included. Students must present the completed project to their three-member committee in a public forum.

For students pursuing the cognate pathway, one additional core course is required:

EDUC 572 Supervised Study for the Cognate Project 3

3. Individualized Examination

The individualized examination pathway is a 33-unit course of study, including 18 units in the student's program area of concentration, 9 units of core courses (EDUC 570, 571, and 573), and 6 units of elective courses. For the electives, students, in consultation with their faculty advisor and/or committee chair, choose courses which allow them to examine areas of interest related to the M.A. concentration and to focus on the examination area(s) of study that they have chosen. In order to work with their three-member committee as they prepare for the examination, students must take Education 573 (Supervised Study for the Individualized Examination) as their final course in the M.A. program.

The individualized examination addresses areas of study identified by the student in consultation with the student's examination committee. The exam is written by the student's committee (a chair plus two other members) and consists of three questions related to the student's area(s) of study, including one question submitted in advance to the committee by the student. When the student is ready to take the examination, he/she receives the questions from the chair and has 72 hours to complete the written examination and return it to the chair. Within two weeks of completing the examination, the student must meet with the committee for an oral examination in which the committee asks follow-up questions for clarification and elaboration.

For students pursuing the individualized exam pathway, one additional core course is required:

EDUC 573 Supervised Study for the Individualized Examination 3

PLEASE NOTE: None of the M.A. core courses may be taken through Extended Education.

The Program Portfolio

In order to advance to candidacy, all students must complete a satisfactory program portfolio and present it to their committee. In most cases, this presentation occurs at the same meeting where the student presents a proposal for the culminating activity. The program portfolio contains artifacts (papers, projects, etc.) produced by the student throughout the M.A. program which demonstrate the student's proficiency and growth in the areas listed below. The portfolio should be reflective in nature and should show personal, professional, and intellectual growth. It should also demonstrate how the student's M.A. program has prepared the student to undertake the culminating activity (thesis/project, cognate project, or individual examination).

In the program portfolio, students are expected to demonstrate:

- Personal, intellectual, and professional growth over the course of the M.A. program;
- Written language proficiency;
- Breadth and depth of knowledge in educational research;
- Breadth and depth of knowledge in the program area of concentration;

- Critical analysis of multiple historical, philosophical, and theoretical perspectives in education; and
- Evidence of planning toward the completion of the culminating activity (thesis/project, cognate project, or individualized examination).

Requirements for Advancement to Candidacy

- Completion of M.A. core courses EDUC 570 and 571, and of M.A. area of concentration courses;
- Presentation and approval of program portfolio;
- Presentation of culminating activity proposal; and
- Filing of Advancement to Candidacy form (GSO 1) with School of Education Director of Graduate Studies.

Requirements for the M.A. Degree in Education

M.A. students must complete all requirements as established by the School of Education, the SSU Graduate Studies Council, and the University, to include:

1. Completion of an approved program consisting of a minimum of 30 units of upper-division and 500-level courses, as follows:
 - a. a maximum of 12 units of upper-division courses
 - b. not more than 9 semester units of transfer and/or extension credit
2. Filing of an Advancement to Candidacy form that verifies approval of the program portfolio, verifies writing proficiency, and describes the culminating project; and
3. Completion and final approval of culminating activity (thesis/project, cognate project, or individualized examination).

All requirements listed above must be completed within seven years (14 semesters) of the initiation of graduate study. Students have four semesters after taking their final course (EDUC 599 or EDUC 572 or EDUC 573) to complete the culminating activity.

EDUCATION: CURRICULUM STUDIES & SECONDARY EDUCATION (CSSE)

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**Faculty Early Retirement Program*

Programs Offered

Basic Credential:

Single Subject (Secondary Schools) Teaching Credential

Master of Arts in Education with a concentration in Curriculum, Teaching, and Learning (CTL)

Master of Arts in Education with a concentration in Teaching English to Speakers of Other Languages (TESOL)

The Department of Curriculum Studies and Secondary Education is dedicated to the advancement of excellence in education. CSSE offers an exemplary single subject teacher education preparation program based on sound educational practice, extensive research knowledge, and sensitivity to the needs of diverse populations. Our faculty is comprised of internationally recognized scholars from a wide variety of subject area disciplines who study and produce current research in teacher education and curriculum studies, and who are familiar with the best practices of teachers. CSSE provides many opportunities for students to be part of a high-quality teaching and learning community.

While most of the programs in CSSE are designed for positions in public schools, students can also receive preparation in our master of arts in Curriculum Teaching and Learning, applicable to a wide variety of non-teaching positions in education, government, and the corporate sector. The Master of Arts in Curriculum, Teaching, and Learning allows students to design their own program of study (area of emphasis), or select an area of emphasis in educational technology, specifically designed for students interested in technology applications in the public or private sector.

Note: Program requirements change periodically, and current information may not be available in this catalog. For more detailed information on credentials and other education programs, please see the University's special bulletins and the School of Education's current program brochures and policy statements, or visit the education website, www.sonoma.edu/education.

Single Subject (Secondary Schools) Teaching Credential

The single subject credential authorizes the holder to teach a particular subject in a school organized by academic disciplines, kindergarten through grade 12. Since most elementary schools are not departmentalized, this credential, in general, is appropriate for the middle school and high school teacher candidate (art, music, and physical education candidates may actually teach K-12). The program aims toward two primary goals: (1) to develop the skills and knowledge needed to be an effective beginning teacher, and (2) to begin to establish the professional understandings and attitudes useful for supporting growth and development throughout a teaching career.

Coursework combined with the field experience in the program will make candidates:

- Competent in basic classroom skills;
- Knowledgeable and enthusiastic about students, learning, and teaching;
- Sensitive to cultural, linguistic, and learning diversity, and informed about multiple cultures; and
- Prepared to continue their development as professional educators. After completion of the Single Subject Credential Program, candidates will be recommended for the California Single Subject Teaching Credential in a subject area. This credential certifies the holder to teach classes in a subject in California public schools. Depending upon undergraduate or graduate standing and on the elective courses taken, the credential will be either the Preliminary or the Professional Clear Credential. In either case, the credential will need to be renewed at the end of five years. Successful completion of the program prepares candidates to teach in California's culturally and linguistically diverse classrooms.

Students pursuing the single subject credential may select from among the following programs.

Art

Art Building 128

(707) 664-2151

English

Drama / English / Journalism / Speech
Nichols Hall 362
(707) 664-2140

Modern Languages

French / German (Test only)
Spanish
Stevenson Hall 3016
(707) 664-2351

Science

Chemistry, Physics, Biology
Darwin Hall 121
(707) 664-2189

Mathematics

Stevenson Hall 3019
(707) 664-2917

Music

Ives Hall 206
(707) 664-2324

Physical Education

PE Building 14
(707) 664-2357

Adapted Physical Education

PE Building 14
(707) 664-2357

Social Science

Stevenson Hall 2070
(707) 664-2112

Students may satisfy subject matter requirements by passing the appropriate state approved examinations (CSET).

The Single Subject Credential Program is a two-semester program that begins either in the fall or spring semester. Students are admitted to the program according to the subject they plan to teach:

Fall Admission

English
Social Studies
Foreign Language
Music
Physical Education
Art
Mathematics
Science

*** Spring Admission**

English
Social Studies

* All other subject areas may apply in spring, but students must agree to a three-semester program pathway.

The Single Subject Credential Program

The Single Subject Credential Program is a two-semester program. Students admitted for the fall semester, who successfully complete all coursework and their final student teaching, will be eligible for the credential in June. Students admitted for the spring semester, who successfully complete all coursework and their final student teaching, will be eligible for the credential in January. Students who wish to take longer than two semesters to complete the credential program may extend their program to three or four semesters. More information regarding the extended program may be obtained from the single subject program advisor at (707) 664-4203.

Single subject program courses required for each phase are listed below. The co- and prerequisite courses and all Phase I courses must be satisfactorily completed prior to beginning Phase II.

Program Corequisite Course

EDSP 433 Teaching Adolescents with Special Needs 3

Program Prerequisite Courses

EDUC 417 School and Society 3

EDSS 418 Learning and Development in Adolescents 3

Total corequisite and prerequisite courses 9

Program Requirements

Phase I

EDSS 442 Middle/Secondary Teaching in Multicultural Settings 4

EDSS 443A Observation and Participation in Multicultural Settings 2

EDSS 443B Seminar: Classroom Management and Field Experience 3

EDSS 444 Teaching in the Content Areas 4

EDSS 446 Language and Literacy Across the Curriculum: Middle and Secondary Schools 4

Total units Phase I 17

Phase II

EDSS 458 Student Teaching in Multicultural Settings 12

EDSS 459 Seminar for Secondary Student Teachers 4

Successful completion of Performance Assessment of California Teachers (PACT)

Total units Phase II 16

Total units for program (including corequisites and prerequisites) 42

Teaching Performance Assessment

A teaching performance assessment (TPA) is required for all those seeking a single subject teaching credential. The Performance Assessment for California Teachers (PACT) is the teaching performance assessment used by the Single Subject Program. This assessment is comprised of a teaching event that is an extended documentation of a segment of student teaching. It is the capstone performance assessment that integrates learning throughout the teacher education program. It includes 2-3 lessons of teaching that are videotaped and analyzed by the student. It is structured in sections corresponding

to developing a context for learners, planning, teaching, assessing, academic language, and reflecting on teaching. A subject matter expert scores the teaching event. The teaching event takes place in Phase II (student teaching) of the program. All students must pass the PACT to receive a teaching credential.

Integrated Degree and Credential Pathway Program

The Integrated Degree and Credential Pathway Program is an opportunity to earn a four-year baccalaureate degree and a teaching credential simultaneously. Students in this program must receive advising about course sequence prior to, or very early in, their freshman year; enroll in an average of 15-18 units per semester, and be willing to take courses in at least one summer session. Most majors will earn a four-year degree and a teaching credential in four years plus one additional semester. This program is currently available for first-semester freshman students who are majors in English, mathematics, kinesiology, and music, who are seeking a single subject teaching credential.

Single Subject Intern Program

The intern program is a collaboration between the Curriculum Studies and Secondary Education Department at Sonoma State University, the Beginning Teacher Support and Assessment Program at the Sonoma County Office of Education, and participating school districts.

The intern program allows public and nonpublic school teachers who do not hold preliminary single subject credentials to complete a credential program with supervision and mentoring while employed as teachers. Further information can be obtained from the School of Education Credentials Office or from the Intern Coordinator, Dr. Karen Grady (664-3328).

To be eligible to participate in the single subject intern program, each candidate must have:

- Completed corequisite courses and all Phase I program courses in the single subject credential program;
- Earned a baccalaureate degree from an accredited college or university;
- Passed the Basic Skills Requirement via an appropriate option;
- Passed a Subject Matter Knowledge Exam (CSET) or have completed a Subject Matter Waiver Program;
- Completed character and identification clearance (fingerprints);
- Demonstrated knowledge of the U.S. Constitution by providing evidence of having studied the U.S. Constitution or by passing the U.S. Constitution test;
- Completed an application for the intern credential; and
- Verification of employment.

To be Awarded a Teaching Credential, all Interns Must:

- Pass the PACT to receive a teaching credential.
- Successfully complete the Single Subject Intern Program.

Master of Arts in Education with Concentration in Curriculum, Teaching, and Learning

The Master of Arts in Education degree program in Curriculum, Teaching, and Learning offers courses of graduate study to prepare candidates for specialized teaching and for curriculum and instructional leadership responsibilities in schools, government agencies, or corporate settings. The program, a minimum of 30 units, provides for areas of concentration in curriculum, teaching, and learning. Students must maintain a 3.00 grade point average in all coursework in the approved master's degree program.

The Curriculum, Teaching, and Learning concentration provides flexibility in program development for a wide range of professional educators, government officials, and private sector employees. Candidates need not possess a teaching credential.

The required Curriculum, Teaching, and Learning area concentration courses are:

EDCT 585 Curriculum Development: Theory, Practice and Evaluation	3
EDCT 586 Teaching and Learning: Research and Application in the Classroom	3

Total area concentration units	6
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The remaining units are taken in an approved area of emphasis (AREM). The area of emphasis is comprised of 12-16 units that the students must complete as part of the Curriculum, Teaching, and Learning Master of Arts program. The AREM is designed by the student and a Curriculum, Teaching, and Learning faculty advisor. Students may select courses from other education M.A. concentrations or courses in other University schools and departments. A field component may comprise part of the area of emphasis. The AREM must be approved by a faculty advisor before any AREM courses are taken.

An AREM in educational technology is available for those interested in applying aspects of technology in educational or private sector settings. A written rationale must accompany the AREM proposal. The total number of units in the Curriculum, Teaching, and Learning Master of Arts Program is 30-36 units. All candidates must complete the required master's degree core courses, and all AREM and program courses.

Curriculum, Teaching and Learning Recommended Course Advising Pathway

By following the advising pathway below, students are assured that they will complete the required Curriculum, Teaching, and Learning (CT&L) coursework and take the courses in the sequence required by the program. This pathway assumes that students will take TWO classes per semester. For changes to this pathway, students must see the CT&L advisor. Students may not take an AREM course without an approved AREM.

If You Begin Fall Semester:

Fall
EDUC 570
EDCT 585

Spring
EDCT 586
AREM

Fall
EDUC 571 or AREM
AREM

Spring
AREM
AREM or EDUC 571

*Fall***

(see the M.A. Graduate Student Handbook for a discussion of the thesis, cognate, and individualized examination pathway options for completing your program)

Spring
EDUC 599

If You Begin Spring Semester:

Spring
EDUC 570
AREM

Fall
EDCT 585
AREM

Spring
EDCT 586
EDUC 571 or AREM

Fall
EDUC 571 or AREM
AREM

*Spring***

Fall
EDUC 599

***Candidates MUST have the thesis/project committee identified and advancement to candidacy approved (i.e. portfolio approved by your thesis/project committee) before enrolling in EDUC 598, EDUC 572, or EDUC 573.*

Master of Arts in Education with a Concentration in Teaching English to Speakers of Other Languages (TESOL)

A master of arts in education with a concentration in TESOL provides advanced education in the theories, research, and practices for teaching English language learners in K-12 settings, as well as in adult education settings, such as community colleges. The concentration will also prepare candidates to teach English abroad and for doctoral studies in related fields in education. Courses in the concentration can be used to apply for a TESOL certificate and to meet the requirements for the CTEL authorization from the California Commission on Teacher Credentialing.

Prerequisites:

1. Two years of university foreign language study or equivalent
2. A general linguistics course, such as English 341

Courses in Concentration (18 units):

EDTE 540 Theories and Research in Second Language Acquisition	3
EDTE 541 Advanced Pedagogical Grammar for Teaching ESL/EFL	3
EDTE 542 Teaching Multilingual Writers	3
EDTE 543 Practicum in Teaching English as a Second Language	3
EDTE 544 Advanced Methods of Teaching ESL/EFL	3
EDTE 545 Special Topics in ESL/EFL	3

MA Core Requirements (6 units)

EDUC 570 The Reflective Educator	3
EDUC 571 Research Paradigms in Education	3

Listed below is a recommended course of study. The number of electives you take will depend on whether you decide to pursue the thesis, cognate, or individualized exam pathway to completion.

If you begin Fall Semester you may take:

Fall
EDUC 570 or 571
EDTE 540

Spring
EDUC 570 or 571
EDTE 541

Fall
EDTE 544
EDTE 545

Spring
EDTE 543
EDTE 542

Fall
Elective
Elective or EDUC 598 + 599

Spring
Elective + EDUC 572 or 541

If you begin Spring Semester you may take:

Spring
EDUC 570 or 571
EDTE 541

Fall
EDUC 570 or 571
EDTE 540

Spring
EDTE 542
Elective

Fall
EDTE 544
Elective

Spring
EDUC 543

Fall
EDTE 545
EDUC 572 or EDUC 573 or
EDUC 598 + 599

EDUCATION: EDUCATIONAL LEADERSHIP AND SPECIAL EDUCATION (ELSE)

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Department Overview

The Department of Educational Leadership and Special Education exists to provide state-of-the-art professional preparation for educators in the fields of educational administration and special education. The core values of the department center upon a dedication to educational excellence as a pivotal contributor to social progress. Indices of this notion of excellence include a view of schools as a crucible for an effective democracy, societal inclusivity, respect for differences in students, and an unflinching concentration on educational efficacy.

The faculty is comprised of teachers, administrators, scholars, researchers, and program developers who possess wide and varied experience. The faculty, having won wide recognition and numerous educational awards and honors, are dedicated to preparing educators with the knowledge, skills, and ethical commitment to improve society through powerful and effective schools.

The credential and M.A. programs, described below, offer a full complement of courses and fieldwork for students to achieve Preliminary Education Specialist (known as PASC I and II in the case of educational administration) credentialing, as well as master of arts degrees. Both traditional and intern programs exist. Courses are scheduled in the late afternoon, evenings, on Saturdays, and some are partially delivered online, in order to accommodate practicing educators.

Students in the Department of Educational Leadership and Special Education may expect to encounter programs that present cutting-edge information and skills, delivered by an expert, committed faculty, and scheduled for maximum access. Moreover, students can expect to be afforded respect, dignity, and profession-

ally courteous treatment and be asked to provide similar regard to faculty and to one another.

Note: Since some specific program requirements change periodically, both via mandates of the California Commission on Teacher Credentialing and University-based modifications, prospective students are advised to consult the School of Education's Credential Office for updates on program details and policy statements and to visit the education website at www.sonoma.edu/education.

Programs Offered

BASIC TEACHING CREDENTIALS

Education Specialist (special education)/Preliminary and Intern: Mild/Moderate, Moderate/Severe Disabilities

SERVICE CREDENTIALS

Administrative Services - Preliminary, Intern, and Professional

MASTER'S DEGREE (M.A.) PROGRAMS

Educational Leadership
Special Education

Doctorate of Education (Ed.D.)
Educational Leadership (jointly with UC Davis).
For information call 707-664-4051.

The Education Specialist (special education) credentials are offered in the area of mild/moderate and moderate/severe disabilities and authorize the holder to provide services in K-12 inclusion programs, resource specialist program classes (RSP), special day classes (SDC), or other related fields, including work with adults with disabilities. At the completion of the educational specialist credential programs, candidates will have met the requirements to teach students who are English learners.

The Administrative Service Credentials, Preliminary Administrative Services (PASC I), and Professional Administrative Services (PASC II) prepare graduates for positions of leadership in K-12 educational institutions. PASC II is offered alternate years on an as-needed basis.

M.A. in education programs are designed with both full-time and part-time students in mind. Some master's degree programs may be taken concurrently with advanced credential programs. Note: Program requirements change periodically, and current information may not be available in this catalog. For more detailed information on credentials and other education programs, please see the University's special bulletins and the School of Education's current program brochures and policy statements or visit the education website www.sonoma.edu/education.

Preliminary Level I Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities

A Preliminary Education Specialist Credential Program is offered in the areas of mild/moderate (M/M) disabilities and moderate/severe (M/S) disabilities, authorizing the provision of services to individuals in grades K-12 in inclusion programs, resource specialist program (RSP) settings, special day class (SDC), and working with adults. The credential in M/M disabilities authorizes the teaching of individuals with specific learning disabilities, mental retardation, other health impairment, and serious emotional disturbance. The credential in M/S disabilities authorizes the teaching of individuals with autism, mental retardation, deaf-blindness, serious emotional disturbance, and multiple disabilities.

A multiple subject or single subject credential is not required as a prerequisite for admission to a credential program in special education. The Preliminary Education Specialist Credential Program in M/M disabilities and in M/S disabilities includes specified course work in multiple or single subject teacher education for those Education Specialist Credential candidates who do not hold a multiple subject or single subject credential.

Successful completion of the Preliminary Education Specialist Credential Program in mild/moderate disabilities or in moderate/severe disabilities will allow the candidate to receive a preliminary Certificate of Eligibility, which authorizes the individual to seek initial employment as a special educator. On securing a special education teaching position, the candidate is eligible to receive a Preliminary Credential that is valid for five years. The Preliminary Education Specialist Credential holder must complete a Professional Credential Program within five years of the date of issuance of the Preliminary Credential.

Education Specialist Course Requirements

Co-Requisites (3 semester units):

EDSP 400 Foundations of Special Education (Required course for all E.S. candidates) 3

General Teacher Education Coursework (7 semester units):

EDMS 463 Teaching Reading and Language Arts in Elementary School (includes a field work component) 3

EDSS 446 Language and Literacy across the Curriculum: Middle and Secondary Schools) 4

Common Core For Education Specialists (15 semester units):

EDSP 421A Effective Practices that Support Students with Diverse Learning Needs 3

EDSP 421B Early Field Experience 1

EDSP 421C Using Educational and Assistive Technology 1

EDSP 422A Case Management and Transition Planning in Special Education 3

EDSP 422B Participant Observation/Fieldwork 1

EDSP 423 Assessment, Curriculum and Instructional Strategies for Students with Disabilities 3

EDSP 424 Positive Behavior Support for Students with Disabilities 3

Credential-Specific Curriculum (7-9 semester units):

Mild/Moderate Disabilities

EDSP 425 Developing Academic Performance for Students with Disabilities 4

EDMS 474 Mathematics in the Elementary School 3

Moderate/Severe Disabilities

EDSP 428 Teaching Students with Moderate to Severe Disabilities 5

EDSP 426 Communication Development: Assessment & Instruction 4

**Student Teaching (13 semester units):

EDSP 460 Teaching Event Seminar (all candidates) 4

EDSP 465 Student Teaching: M/M candidates only 9

EDSP 467 Student Teaching: M/S candidates only 9

** Taking more than 5 additional units of coursework while enrolled in student teaching and the associated seminar requires prior approval of the department.

Educational Specialist Intern Program

The Education Specialist Intern Program at Sonoma State University is a partnership with the North Coast Beginning Teacher Program (NCBTP), a state approved university-based program. This program allows the intern to complete the requirements for an Education Specialist Level Preliminary (ES-1) credential concurrent with their first year or two in a paid special education teaching position. The program includes coursework at the university, university supervision in the K-12 classroom, a district support provider, and special support seminars provided by NCBTP. Completion of an internship program results in the same credential as is earned through the traditional teacher preparation program.

To qualify for an internship program, an individual must:

- Be formally admitted to the university and the ES-1 program;
- Possess a bachelor's degree;
- Satisfy the U.S. Constitution requirement;
- Have a job offer as a special education teacher;
- Successfully complete the Intern Application Evaluation which includes approval from the Special Education Program faculty and the School of Education Credential Analyst; and
- Meet Pre-Service Requirements.

The Intern Application Evaluation form verifies that these requirements have been met and is available online at <http://www.sonoma.edu/education/programs.html#esinternship> or in the School of Education.

Interns are bound by the same program requirements, policies and procedures as all ES-1 candidates except for the student teaching requirement. Instead of student teaching in the final semester of the program, which is typical in the ES-1 credential program, interns are provided with university supervision in their K-12 classrooms throughout their internship, typically ranging between two and three semesters. Supervision includes candidates attending the intern seminar (EDSP 481) where they meet with their supervisor and other interns to discuss their classrooms while bridging theory and practice, gathering suggestions and support, and discussing topics that are applicable to their current teaching situations.

Because of the increased responsibilities that an internship demands, interns are not allowed to take more than 12 units each semester. This sometimes alters an ES-1 candidate's original program plan, delaying completion of the credential program by one or two semesters. The intern credential is valid for up to two years, provided the intern continues to be enrolled in university classes and employed as a special education teacher. It is important that the intern completes both the university course work and all statutory requirements before the intern credential expires. Interns who do not hold a previous multiple or single subject credential must also pass the Reading Instruction Competence Assessment (RICA) as part of their statutory requirements.

Employment Verification

Employment must be verified by a letter of employment, on official letterhead from the employing school or district, verifying the date employment began, the type of assignment and location, and whether it is a full time or part time position (if it is part time the letter needs to specify the percentage of time you will be working).

Intern Application Interview

The Intern Coordinator conducts the intern application interview. The interview evaluates the candidate's academic achievement, progress, professional dispositions and responsibilities.

Please note: eligibility and admissions requirements to the Intern Program are subject to change. Please contact the Intern Advisor for current eligibility and admissions requirements.

Master of Arts with a Concentration in Special Education

The Master of Arts in Education (M.A.) with a concentration in Special Education provides advanced academic study for persons working with or on behalf of individuals with disabilities. Candidates who possess a valid Education Specialist Credential may pursue this degree. Candidates from related disciplines may pursue this advanced degree with consent from the Department of Educational Leadership and Special Education.

Candidates must apply and be admitted both to the University and to the M.A. in Education-Special Education Concentration program in order to pursue this degree. The course of study (described below) includes the M.A. core curriculum (12-19 units) and relevant elective course work (units vary). Candidates will select one of the following pathway options for completing their M.A. course of study:

- Thesis/Project option (30 units)
- Cognate option (36 units)
- Individualized Examination option (33 units)

Special Education Concentration

The Special Education coursework, taken in addition to the M.A. core curriculum, includes six 3-unit courses.

EDSP 512 Advanced Issues in Assessment, Curriculum, and Instruction of Students with Disabilities	3
EDSP 513 Current and Emerging Research and Practice in Special Education	3
EDSP 514 Advanced Communication, Collaboration, and Consultation in Special Education	3
EDSP 515 Advanced Legal Issues in Special Education	3
EDSP 590 Critical Issues in Special Education	4
EDSP 595 Special Topics in Special Education	3

Electives

Candidates have the opportunity to seek breadth or depth in a related area of study through completion of elective courses. The number of elective units needed to complete the M.A. requirements varies depending upon the culminating option selected. Elective coursework may be drawn from other graduate programs in the School of Education or other departments at Sonoma State University, such as psychology, counseling, kinesiology, or others. These courses are selected with the advice and approval of the M.A. special education advisors.

Advising

All M.A. candidates within the special education concentration will be assigned to a special education faculty advisor for the purpose of developing an individualized program of study. Electives will be determined in consideration with the advisor, in an effort to provide a broader program of study that responds to varying student interests.

Educational Leadership Program Administrative Service Credentials

The Administrative Services Credential programs were designed collaboratively with school administrators to prepare graduates for positions of leadership in K-12 educational settings. Both the PASC I (Preliminary Administrative Services Credential) and the PASC II (Professional Administrative Services Credential) credentials authorize the holder to serve as a vice principal, principal, coordinator, program director, superintendent, or in other district or county level positions. The Intern Credential authorizes individuals to serve in administrative positions while completing the approved program of PASC I study. Areas of competence addressed in each program are developmental and expand upon prior learning and experiences included in each level of preparation. Throughout all programs, participants progress from concrete applications of what is being studied to more advanced applications of theory into practice that call for the critique and redefinition of one's knowledge base. Likewise, throughout the programs, multiple learning opportunities are provided that emphasize the acquisition of personal awareness and personal reflection about leadership.

Preliminary Administrative Services Credential

The Preliminary Administrative Services Credential (PASC I) program focuses on entry-level skills for effective administration with particular emphasis on the responsibilities of school site administrators. The program is 27 semester units and can be completed in one year of intensive study. The classes are offered on a cohort basis in late afternoons, evenings, and/or in periodic weekend class sessions (Friday evening and Saturday) spread throughout the semester.

Requirements for Admission for Preliminary Administrative Services Credential

1. General admission requirements for advanced credential programs (application, transcripts, etc.)
2. Verify three years of appropriate full-time experience on school or district letterhead (noting inclusive dates, level, and responsibilities) authorized by a teaching or services credential;
3. Secure favorable recommendations from two school administrators or other school leaders indicating possession of administrative and leadership potential;
4. Submit evidence of successful passage of CBEST before or within the first semester of program course work; and
5. Attend a program admissions interview and/or submit an application, including a statement of professional goals.

Internship Program In Educational Administration

Candidates to be employed immediately may enter the program as an administrative intern at any point in the calendar year as long as there is a supporting educational agency request. Candidates enrolled as interns complete the same coursework as PASC I candidates; however, the fieldwork is modified to suit the needs of an intern.

PASC I/Intern Program Course Of Study

EDEL 580A Introduction to Educational Leadership and School Mgmt	3
EDEL 580B Advanced Educational Leadership and School Mgmt	3
EDEL 581 Mgmt of Educational Personnel: Policies and Procedures	3
EDEL 582 Educational Policy and Politics	3
EDEL 583 School Law	3
EDEL 588 Educational Curriculum, Instruction, and Program Assessment	3
EDEL 589 Leadership for Diverse Populations and Communities	3
EDEL 587A Beginning Field Experience in Administration	3
EDEL 587B Advanced Field Experience in Administration	3
Total units for PASC I/Intern programs	27

The program is usually completed in two semesters and sometimes summer session(s); however, candidates can extend the time needed for program completion by meeting with an advisor and customizing the program to meet individual needs. Typically candidates who do not have an M.A. go on to complete the M.A. in education with emphasis in education leadership.

Professional Administrative Services Credential

The Professional Administrative Services Credential program (PASC II) offers advanced study and fieldwork for practicing administrators in all areas of educational leadership. The program consists of 12 semester units of coursework and focuses on candidates examining the six administrative standards adopted by the CCTC. This program is offered alternative years on an as-needed basis. Please contact the ELSE department for current information. The course work is offered in periodic weekend class sessions spread throughout the semester.

In addition to the general admission requirements for advanced credential programs, Professional Administrative Services Credential (PASC II) candidates must:

1. Verify grade point average of at least 3.00 in the last 30 semester units;
2. Secure favorable recommendations from two school administrators indicating applicant's administrative and leadership capability and current administrative activities and accomplishments; and
3. Provide two photocopies of a valid Preliminary Administrative Services Credential.

The Professional Administrative Services Credential program is restricted to those formally admitted to the program. Employment in an administrative position requiring a Preliminary Administrative Services Credential is required for admission into the program.

PASC II Program Course Of Study

EDEL 590A Induction Plan	2
EDEL 596A Introduction to Advanced Educational Problems	2
EDEL 596B Completion of Advanced Educational Problems	2
EDEL 596C Introduction to Collaborative Action Research	2
EDEL 596D Completion of Collaborative Action Research	2
EDEL 590B Assessment of Completion of Induction Plan	2
Total units for PASC II program	12

Master of Arts with a Concentration in Educational Leadership

The objective of the M.A. degree program with concentration in educational leadership is to provide a strong academic foundation for competent administrative practice. The program is 30 semester units inclusive of course requirements for the PASC I program.

The M.A. degree with an emphasis in educational leadership is built upon the M.A. core curriculum of the School of Education. Candidates may refer to the previous section on requirements for the M.A. Degree in education for a complete description of the master of arts program.

CANDEL

The CANDEL (Capital Area North Joint Doctorate in Educational Leadership) Program is a doctoral program designed to produce exemplary educational leaders for schools, community colleges and related areas in the field of education. The program is designed for working professionals in leadership positions.

CANDEL is a joint program of Sonoma State University and the University of California, Davis. Graduates of this program are prepared to provide visionary leadership to complex organizations, put policy into practice, use data for decision-making, and build community in a diverse society.

The program is three years in length. Through the preparation of scholar-leaders, the program emphasizes practical problem-based learning through critical examination of important issues in our schools and community colleges.

Dr. Paul Porter of the School of Education Department of Educational Leadership and Special Education serves as the SSU CANDEL Director. For more information and an application, please visit the CANDEL website at <http://candel.ucdavis.edu/>.

EDUCATION: LITERACY, ELEMENTARY, AND EARLY EDUCATION (LEEE)

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Programs Offered

The Department of Literacy, Elementary, and Early Education offers the following programs: Early Childhood Minor, Child Development Permit, Multiple Subject Credential, M.A. in Education with an emphasis in Reading and Language Education, Reading Certificate (an advanced credential), Reading and Language Arts Specialist Credential, and M.A. in Education with an emphasis in Early Childhood Education.

The goal of the Department of Literacy, Elementary, and Early Education is to prepare teachers to play a vital role in California public schools. The diversity of our school population in terms of culture, social class, gender, language, and race is a significant focus of our course work and field experiences.

The University and the school districts within our service area view teacher education as a shared responsibility. The University provides a broad base of information about research and theory necessary for teaching, while school districts provide the classrooms for field experiences and student teaching. Collaboration between University-based teacher-educators and school district teachers provides a strong foundation for the program's goal of excellence.

Multiple Subject Teaching Credential Programs

This credential authorizes the holder to teach in a self-contained classroom, preschool through grade 12. It is most frequently used for teaching in elementary classrooms and early childhood settings.

Multiple Subject Credential Program

The Multiple Subject Credential Program is a two semester program with additional prerequisites required.

The Multiple Subject Program is based on the belief that learning to teach requires building a professional knowledge base honed by practice in varied classroom settings. Thus, our curriculum integrates course work with field study in order to develop practical theory and to promote collaboration between the University and the public schools. The Multiple Subject Program prepares candidates to provide instruction for English language development and academic language.

The multiple subject emphasis prepares candidates to teach in self-contained classrooms with significant populations of students who are learning English as a second language in grades K-12. This program prepares candidates to provide instruction for language development and subject matter content in English. Because self-contained classes are located primarily in elementary schools, professional course work and field experiences focus on elementary classrooms.

SB2042 Multiple Subject Program Courses

The Department of Literacy, Elementary, and Early Education offers a **Multiple Subjects Emphasis Certificate** providing professional preparation for aspiring teachers to play a vital role in California public schools. The diversity of our school population in terms of culture, social class, gender, language, and race is a significant focus of our course work and field experiences. Upon completing the program, candidates will have both breadth and depth of knowledge about teaching and learning, and candidates will be capable of making informed decisions in diverse settings. The design of Sonoma State University's Multiple Subjects Professional Teacher Preparation Program is based on models of learning, human development, and interaction supported by current policy, research and practice. The program is developmental and sequential.

Prerequisites And Co-requisite

The prerequisites/corequisites are offered every semester and must be taken before admission into the program.

EDUC 417 School and Society, or approved alternative	3
EDEC 420 Child Development in Family, School, and Community	3
EDMS 470 Multicultural Pedagogy (co-requisite)	3

Total Prerequisite/co-requisite units for Multiple Subject Program 9

Phase I

All Phase I courses require admission to the Multiple Subject Program or the Special Education Program. Courses are grade only.

EDMS 411 Second Language Pedagogy	3
EDMS 463 Teaching Reading & Language Arts to Beginning Learners	3
EDMS 474 Teaching Mathematics in the Elementary School	3
EDMS 475 Teaching Science in the Elementary School	3
EDMS 476F Participant Observation	3
EDMS 476S Participant Observation Seminar	2
Total Phase I units	17

Phase II

EDMS 464 Teaching Reading to Older and Struggling Readers	3
EDMS 471 Teaching Social Science in a Multicultural Society	3
EDMS 482F Student Teaching and Seminar	10
EDMS 482S Student Seminar	2
Concurrent with 482F	
Successful completion of Performance Assessment of California Teachers (PACT)	
Total Phase II units	18
Total Program	35

Field Experiences in the Multiple Subject Program

The primary goal of the Multiple Subject Program is to prepare candidates to teach successfully in California's public schools. This requires both a theoretical basis for teaching and learning and a practical understanding of children, classrooms, curriculum, schools, and the society in which they all operate. For this reason, all of the curriculum courses have been designed to include significant field experiences in schools. In each phase, field experiences are coordinated with one or more academic courses to help establish the relationships between the theories and practices learned at the University and the realities of classroom life. Involvement in the schools culminates in full-time student teaching during the last phase of the credential program.

Collaboration for Renewal of Education (CORE): Professional Development Through Teacher Preparation

Our model of teacher preparation, Collaboration for the Renewal of Education (CORE), goes beyond that of a traditional student teaching placement. CORE has grown out of a rich history with roots in the clinical observation, peer coaching, and team models of professional development. CORE draws from this background and incorporates the best characteristics from these models. CORE is purposely structured to give equal voice to all participants, to honor all participants as lifelong learners, and to view everyone as a co-teacher. The model attempts to breakdown the stereotypes of the ivory tower and to bridge the gap between public school and university educators. Simply stated, everyone is an expert in areas of strength and everyone has something to learn. The Multiple Subject Program has developed a flexible organization for teacher preparation that acknowledges the contribution made to candidates' teacher preparation by public school teachers and administrators.

The program purposefully builds in time to meet with mentors at the CORE site, to hear what they are thinking, to implement their ideas into the program, and to learn together. It is not typical for university faculty to commit to spending one day a week in a public school for the purpose of supervising student teachers. That the LEEE faculty eagerly participates in this experience is evidence of the value placed on this aspect of the Multiple Subject Program.

CORE School Sites

The LEEE department has developed a variety of CORE sites in the SSU service area. CORE sites are established in Sonoma County (Cotati/Rohnert Park, Petaluma, Santa Rosa, Windsor), Marin County, and Napa County.

Overview of Field Experiences

There are two components of supervised fieldwork in Sonoma State University's Multiple Subject Credential Program, occurring in the first and second phases. These field experiences take place in a school that has been selected as a University/Public School CORE Collaboration Site. During both of these field experiences, the credential candidates are supervised by both a University faculty member and a mentor teacher who has met specific criteria for selection and who meets with University faculty regularly each semester. Those who opt to complete the program in more than two phases, the FLEX students, will complete these supervised classroom experiences during their last two semesters.

During the two semesters that candidates are placed at a CORE site, they are expected to experience the full range of teaching that one is likely to meet as a salaried teacher: candidates are expected to teach connected reading and language arts lessons, connected hands-on math and science lessons, and culturally relevant multicultural social studies lessons. Candidates are expected to have experience working with individual students, small groups, and whole class instruction. Candidates are expected to prepare curriculum plans that reflect an understanding of first and second language learners' needs and demonstrate sound methodologies and strategies. Candidates are expected to design and deliver curriculum for all learners including those with special needs such as special education students and the students who are gifted or those who are progressing at a higher rate than is typical. Candidates are expected to use the methodologies, curriculum, and strategies that introduce thematic teaching to help students make connections across subject areas. Candidates are expected to contribute to the building of community in the classroom and their curriculum should reflect sound multicultural principles.

Teaching Performance Assessment

A teaching performance assessment (TPA) is required for all those seeking a multiple subject teaching credential. The Performance Assessment for California Teachers (PACT) is the teacher performance assessment used by the Multiple Subject Program. This assessment is comprised of a teaching event that is an extended documentation of a segment of student teaching. It is the capstone performance

assessment that integrates learning throughout the teacher education program. It includes 3-5 connected lessons of teaching that are videotaped and analyzed by the student. It is structured in sections corresponding to developing a context for learners, planning, teaching, assessing, academic language, and reflection on teaching. A subject matter expert scores the teaching event. The teaching event takes place in Phase II (student teaching) of the program. All students must pass the PACT to receive a teaching credential.

Multiple Subjects Intern Program

Student teaching while employed in a school program is permitted, contingent upon approval of the School of Education Credential Analyst and the Intern Coordinator. The department Chair may be consulted at any point during the process of approval. The intern coordinator is available to assist prospective interns in each of the following application and program steps.

Intern Process

As part of the approval process a student must be:

- Formally admitted to the University;
- Formally admitted to the Multiple Subject Program;
- Meet the program statutory requirements; and
- Meet the pre-service requirements.

Application Process

An application, initiated by the student, must be made to the credential analyst in the School of Education. When the applicant is cleared of all statutory requirements, he or she must schedule an appointment with the Intern Coordinator for a review of the course requirements and make a program plan for the completion of the Multiple Subject Program.

The Multiple Subject Intern Application can be found on the School of Education website at <http://www.sonoma.edu/education/programs.html#msinternship>.

Additional Requirements

- A letter of employment clearly stating the percentage of teaching time, the dates of employment, and a brief job description; and
- Interns and their school sites need to provide a school site mentor responsible for working with and supporting the intern on site.

Role of an Intern

An intern is the same as a paid student teacher. Multiple Subject Program candidates may become interns when they complete the application process and meet both the statutory and pre-service requirements. An intern may be either part-time or full-time in the classroom. However, a part-time intern must be employed for at least a 50% contract. Interns must follow the same expected competencies as a student teacher as outlined in the Multiple Subject

Program handbook, be observed by an assigned University supervisor periodically, meet the same assessment portfolio criteria, and spend the same amount of time in the classroom and no less than that of a non-paid student teacher. Interns and University supervisors follow the same roles and responsibilities as outlined in the Multiple Subject Program handbook.

A calendar of formal observation and evaluation will be determined among the Intern Coordinator, the University supervisor, the school principal, and site mentor. The intern is expected to assist in the scheduling and coordination of observation, debriefs, and evaluation. Recommendation of the individual who is student teaching in a paid situation is not automatic; all appropriate standards as outlined in the Multiple Subject Program handbook must be met before the credential will be recommended.

Early Childhood Programs

The Department of Literacy Studies and Elementary Education offers a minor in early childhood education and a master of arts in education with concentration in early childhood education. Candidates may also use early childhood education courses to satisfy requirements for the Child Development Permit currently in effect for teachers of California state-funded preschool and after-school programs.

Early Childhood Education Minor

The minor in early childhood education gives students from any major at Sonoma State University a concentration in the study of early childhood development and learning. This minor is useful for students interested in pursuing careers involving work with young children from birth through age eight in fields such as education, counseling, psychology, social work, nursing, and others. For a minor in early childhood education, students must take four upper-division core courses in early childhood education (15 units) and an additional nine units of elective courses, for a total of 24 units. Complete information about the requirements for the minor and complete application packets may be found online at http://www.sonoma.edu/users/f/filp/ece/ece_minor.htm.

Program Course Work

The early childhood education minor involves 24 units of coursework: 15 units of upper-division core courses and 9 units of electives, which may be lower-division courses. The courses can be completed in four semesters, together with the coursework for the major.

CORE COURSES

EDEC 420 Child Development in the Family, School and Community offered every semester	3
EDEC 331 Child Study Practicum offered fall semesters	4
EDEC 437 Integrated Multicultural Curriculum in Preschool and Kindergarten offered spring semesters	4
EDSP 432 Designing Inclusive Environments in Early Childhood Education offered fall semesters of even years	4

ELECTIVE COURSES

Select 3 courses from:

EDEC 239 Introduction to Early Childhood Education
EDUC 250 Teaching in a Changing World
EDMS 470 Multicultural Pedagogy
EDUC 417 School and Society
KIN 410 Life Span Motor Development
AMCS 405 Ethnic Families in America
or CALS 405 The Chicano Latino Family
AMCS 460 Multiethnic Children's Literature
or CALS 450 Chicano Latino Children's Literature
ENSP 440 Education and the Environment
THAR 460 Drama for Children
THAR 470 Dance for Children

Other elective courses may apply; please consult with an advisor.

Child Development Permit

The California Child Development Permit is issued by the Commission on Teacher Credentialing (CTC). The permit is organized into different levels, each authorizing the holder to perform different levels of service in child development programs. Sonoma State University is authorized to process Child Development Permit applications at the assistant teacher, associate teacher, and teacher levels for preschool programs. Additional information and application packets are available online at <http://www.sonoma.edu/users/f/filp/ece/permit.htm>.

Program Course Work

Child Growth and Development

PSY 302 Development of the Person	3
PSY 410 Child Development	4
EDEC 420 Child Development in the Family, School and Community	3
EDEC 538 The Development of Language and Thinking, Infancy through Middle Childhood	3
EDEC 532 Social-Moral Development in Childhood	3

Child, Family, and Community

PSY 418 Psychology of the Family	3-4
*EDEC 420 Child Development in the Family School and Community	3
SOC 345 Family Systems	4
AMCS 405 Ethnic Families in America	3-4

Early Childhood Programs/Curriculum

EDEC 331 Child Study and Observation	4
EDEC 437 Integrated Curriculum Preschool through Elementary School	4
**EDEC 537 Authentic Assessment in Preschool and Primary Programs	3

General Early Childhood Development

LING 430 Language Acquisition and Communicative Development	3
PSY 411 Seminar: Behavioral and Emotional Problems of Children	3-4
PSY 448 Cognitive Development	4
EDSP 432 Designing Inclusive Environments in Early Childhood Education	4
**EDEC 531 Play and its Role in Development and Learning	3

*EDEC 420 can be used to satisfy either the child growth and development requirement or the child/family/community requirement, but not both. You must choose an additional course to satisfy both requirements.

**Courses at the 500-level are graduate level courses.

Master of Arts in Education - Concentration in Early Childhood Education

The early childhood education concentration of the master of arts in education degree is designed to prepare teachers to work in school- and community-based programs that serve children from infancy through third grade (ages birth to age eight), and to take leadership roles in the field of early childhood education.

Required coursework focuses on advanced study of development in cognition, language, physical ability, morality, and social and emotional skills; work with diverse families and young children; and improvement of classroom curriculum and assessment from infancy through the primary grades. Candidates do not need to possess a teaching credential, since they may prepare for leadership and advocacy positions in a variety of settings. However, a basic course in child development and at least one year of experience working with children in educational settings are prerequisites for admission to the program. Complete information about the program is available online at http://www.sonoma.edu/users/f/filp/ece/ma_ece.htm.

Program Coursework

The total number of units of the program varies from 30-36 semester units, depending on the culminating path selected by the students. The following is a list of the courses that Early Childhood Education master's candidates take.

Education Core (6 units in EDUC courses)

EDUC 570 Reflective Educator	3
EDUC 571 Research Paradigms in Education	3

Required ECE Core Courses in Concentration (12 units)

EDEC 531 The Role of Play in Development and Learning offered fall of odd numbered years	3
EDEC 532 Social-Moral Development in Childhood offered fall of even numbered years It will be taught in the framework of Action Research	3
EDEC 537 Authentic Assessment in Preschool and Primary Programs offered spring of odd numbered years	3
EDEC 538 The Development of Language and Thinking in Infancy through Middle Childhood offered spring of even numbered years	3

PLUS

Electives (6 units)

At least two courses in the areas of special education, curriculum teaching and learning, reading and language, and/or special topics ECE-M.A. courses as offered will be chosen in consultation with the ECE advisor and the graduate advisors of the above mentioned areas. Some examples of course options are:

Special Education

EDSP 422 Collaborative Partnerships in Special Education
EDSP 423A Assessment, Curriculum and Instructional Strategies
EDSP 432 Designing Inclusive Environments in Early Childhood Education

Curriculum Teaching and Learning

EDCT 585 Curriculum Development: Theory, Practice and Evaluation
EDCT 586 Teaching and Learning: Research and Application in the Classroom

Reading and Language

EDRL 507 Research in Language and Literacy
EDRL 521A Language Development in First and Second Languages
EDRL 524 Literature and Literacy

Reading and Language Programs

The Department of Literacy Studies and Elementary Education offers three graduate programs to support in-depth exploration of language development, literacy learning, and teaching. The programs feature hands-on experiences that are immediately applicable in the classroom. Many of our students earn a state license and a master's degree simultaneously. Please explore our site at www.sonoma.edu/lsee/reading/index.html.

The Reading and Language Program is dedicated to excellence in the preparation of teachers and the on-going professional development of practicing teachers in the areas of bilingual education, and reading and language arts education. Our programs are based on sound educational practice, current research knowledge, sensitivity to the needs of K-12 education, appreciation for diversity, and respect for all learners.

M.A. in education programs are designed with both full-time and part-time students in mind. Some master's degree programs may be taken concurrently with advanced credential programs.

Note: Program requirements change periodically, and current information may not be available in this catalog. For more detailed information on credentials and other education programs, please see the University's special bulletins, the University website, and the School of Education's current program brochures and policy statements.

The Department of Literacy Studies and Elementary Education offers graduate programs in reading and language including the master's degree with an emphasis in reading and language; the Reading Certificate; an advanced credential; and the Reading and Language Arts Specialist Credential. Many students earn a state license and a master's degree simultaneously. These programs may be taken individually or candidates may complete the M.A. degree program and the Reading Certificate/Reading and Language Arts Specialist Credential simultaneously.

Reading and Language Master's Degree Program

The reading and language concentration is designed to prepare teachers for specialized teaching of reading and language arts and for curriculum and instructional leadership in the field of language and literacy. Required course work focuses on the nature of literacy

development and the improvement of classroom curriculum, and methods that emphasize the relationship of reading to other language and concept learning.

Program Coursework (30-36 units)

Reading/Language Core Courses (9 units)

EDRL 507 Research in Language and Literacy	3
EDRL 521A Language Development in First and Second Languages	3
EDRL 522 Assessment and Teaching in Reading and Language Arts	3

Education Core Courses (9-12 units)

EDUC 570 The Reflective Educator	3
EDUC 571 Research Paradigms in Education	3

Supporting Course Work (9 Units)

The M.A. in reading/language education allows you to take 9 elective units (three courses, typically) in the reading/language project or in other approved areas, such as bilingual education, curriculum, ESL, and early childhood education.

Students who wish to pursue a Reading Certificate, Reading and Language Arts Specialist Credential, and an M.A. degree in reading and language education may complete the programs concurrently.

Reading Certificate Program

The Reading Certificate prepares individuals to take a leadership role at the school site and emphasizes work with students who experience difficulties with reading. Reading Certificate teachers assist and support other classroom teachers, assess student progress, and monitor student achievement while providing instruction and intervention. They also play a consultative role in materials and program selection at the district and may take leadership responsibility within the more limited realm of the school site. The Certificate is the first part of a continuum of services to students and teachers in the area of reading and language arts. Teachers completing the Reading Certificate Program are encouraged to continue to earn the Reading and Language Arts Specialist Credential (currently under review by the California Commission on Teacher Credentialing).

Program Prerequisite

A basic teaching credential is required for admission.

Reading Certificate Prerequisite

Three years of teaching experience is required for awarding of the Reading Certificate, however it is not necessary to have three years of experience when entering the program.

Block One: Developing a Personal Model of Literacy

Spring

Students take part in an integrated investigation of Literacy Research/Theories/Beliefs/Practices aimed at developing a working understanding and reflective stance for each of these themes through in-depth case studies of English language learners. The breadth and depth of the themes ensure that candidates examine and understand the nature of fluent reading and comprehension, assessment approaches, planning and delivery of reading intervention and instruction, and best practices in assisting classroom teachers of English-only

and English language learners. Focused field experiences and assessment that lead to purposeful reading instruction permeate this block.

EDRL 521A Language Development in First and Second Languages	3
EDRL 522 Assessment and Teaching in Reading and Language Arts	3
On-Campus Reading and Writing Clinic	

Summer

Public school students attend SSU for reading improvement and enrichment in a supervised clinical setting. Certificate candidates assess and teach these students, deepening knowledge of reading and language arts assessment, intervention, and instructional strategies, in collaboration with, and under the supervision of, clinical faculty, University faculty, and Reading and Language Arts Specialist candidates.

EDRL 527A Clinical Field Experience in Reading and Language Arts	3
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Block Two: Developing a Professional Model of Literacy

Fall

Investigation of research/theories/beliefs/practices in teaching reading and writing, designed to produce a professional knowledge base for each of these themes. Candidates develop a comprehensive set of strategies for promoting fluent reading and comprehension, planning and delivery of literature-based reading curriculum, and assessment-based intervention and instruction. Candidates are prepared for literacy and language arts leadership roles at the school level.

EDRL 521B Reading and Language Arts in First and Second Languages	3
EDRL 524 Literature and Literacy	3

Reading and Language Arts Specialist Credential

The Reading and Language Arts Specialist Credential prepares candidates to work with students in various settings and to perform multiple roles, including assisting and supporting classroom teachers in the appropriate assessment and instruction of reading and writing for all students across all grade levels. The specialist may also:

- Provide direct services to students to help them attain independence in reading and writing, including comprehension and critical thinking skills;
- Do demonstration teaching and curriculum planning for groups and individuals;
- Organize and manage language arts programs at the district or school level;
- Assess teaching strategies to assist teachers in creating a literacy learning environment;
- Provide leadership in materials, textbook, and program selection at the district or school level; and
- Plan and conduct in-service professional development activities for teachers, administrators, school board members, parents, and members of the community at the district or school level.

Credential prerequisite requirements: All Reading Certificate courses including Certificate prerequisites

Block Three: Developing Research-Based Literacy Theory

Spring

Continued investigation of research/theories/beliefs/practices aimed at developing thorough understanding and a reflective stance for each theme. Candidates examine and critique research-based curricular practices and assessment approaches in professional literature and field settings. Topics include fluent reading; comprehension, planning, and delivery of literacy curriculum; intervention strategies; best practices in assisting classroom teachers; and assessments that lead to purposeful reading and writing instruction.

EDRL 523 Curriculum Development in Language and Literacy	3
EDRL 529 Evaluation in Reading and Language Arts Programs	3

Summer Reading and Writing Academy

Summer

Public school students attend at summer reading and writing academy in the Roseland School District. Graduate students attend for supervised and observed coursework in assessing, analyzing and teaching reading and writing to students from grades 2-8 for reading improvement and enrichment. Specialist Credential candidates supervise Certificate candidates in assessment and intervention strategies with the students with diverse reading abilities and backgrounds. Candidates also demonstrate effective teaching for second language learners of English and struggling readers, conduct clinical conferences, review clinical reports, and monitor overall clinical experiences.

EDRL 527B Advanced Clinical Field Experience in Reading and Language Arts	3
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Block Four: Developing Professional Literacy Models

Fall

Advanced and intensive investigation of research/theory/beliefs/practice. All coursework and field experiences are aimed at articulating a professional knowledge base for each theme. Candidates critique research into reading and writing for diverse student populations, conduct their own literacy studies, and hone their leadership skills for assisting classroom teachers and other educational professionals with literacy education through focused field experiences.

EDRL 507 Research in Language and Literacy	3
EDRL 525 Leadership and Policy in Literacy Programs	3

Graduate Reading Advisor

Dr. MaryAnn Nickel of the School of Education LEEE Department serves as the Graduate Reading Advisor. For more information, please visit the Reading Program website at www.sonoma.edu/lsee/reading or contact Dr. Nickel at nickel@sonoma.edu.

ENGINEERING SCIENCE

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Programs Offered

Bachelor of Science in Engineering Science
(Electrical Engineering with minor in Mathematics)

Minor in Electrical Engineering for non-ES majors

Master of Science in Computer and Engineering Science
(Three tracks: Bioengineering, Communications and Photonics, and Computer Hardware and Software Systems)

Effective Fall 2011: Bachelor of Science in Electrical Engineering

As defined in *Webster's Unabridged Dictionary*, "Engineering is the science by which the properties of matter and the sources of energy in nature are made useful to [humankind]." The study of engineering science, with focus in electronics and communications, deals with the processing of information and energy in electrical and magnetic forms involving conceptualization and formulation of the ideas, design to manufacturing to application of many diverse electrical, electronic, and magnetic devices and systems.

The Bachelor of Science in Engineering Science (BSES) curricu-

lum is the electrical engineering curriculum with focus in electronics and communications. The program has been designed to prepare students for an exciting career in designing and manufacturing of electronic systems, communications systems and networks, micro-processors and computers, microwave and lightwave communications, and integrated circuits. The graduates of the proposed program will be well grounded in the rigorous scientific and theoretical foundations of the discipline. This will prepare them not only to have a successful career in the industry in the region and beyond, but also to enter and be successful in any advanced level graduate program of their choosing. The technical and liberal arts components of the curriculum provide students with the opportunity for gaining self-development, technical competence, and awareness of economic and ethical responsibilities.

The MS-CES curriculum, recognized as Professional science Masters (PSM) programs by the Council of Graduate Schools (cgs), is designed to further the working skills and practical knowledge of engineers, computer scientists and similar professionals and prepares them to be successful in the real world, exposing students to management training and providing practical real world experience through internships and graduate seminars. The firm base in mathematics, computer science and physics is augmented with a selection of engineering course options, which prepares the students for tackling real-world problems.

Careers in Engineering Science

The BSES program has been designed to prepare students for an exciting career in industries or to pursue graduate degrees. The graduates will find opportunities in industry in areas such as:

- Designing and manufacturing of electronic systems;
- Communications systems;
- Networking;
- Computer engineering;
- Telecommunications;
- Optical fiber communications;
- Integrated circuits;
- Research and development in the areas above; and/or
- Sales, marketing, and management in the areas above.

Some examples of the corresponding job titles are electronics engineer, computer engineer, hardware designer, systems engineer, communications engineer, communications analyst, telecommunications engineer, network engineer, network analyst, sales engineer, applications engineer, and field engineer.

Graduate degrees can be pursued in any one of the many fields such as electronics, communications, networking, computer engi-

neering, and computer science.

Bachelor of Science in Engineering Science (Electrical Engineering with focus in Electronics and Communications)

Consistent with the mission of the University, the mission of the Bachelor of Science in Engineering Science program is “to prepare students to be learned men and women who are capable of pursuing fulfilling careers in a changing world,” and “to fulfill the undergraduate technical education needs of the community, business, and industry of the North Bay region.” A broader mission is to enable graduating engineers to acquire knowledge and experiences to prepare them to pursue lifelong learning, advanced study, and leadership roles in business and community.

The B.S. in engineering science at Sonoma State University is an innovative program in which the curriculum has been designed to provide students with education in electrical engineering science with focus in electronics and communications.

The curriculum includes 51 units of General Education courses; a 35-unit core in mathematics, computer science, and basic sciences (9 units overlap with GE units); a 49-unit core in engineering sciences which includes electrical, computer, electronics, and communications engineering subjects such as circuits, analog/digital electronics, electromagnetic fields, microprocessors, analog and digital communications, and networking; and 6 units of engineering science electives which provides senior-level choices for more depth in students’ areas of interest. Theoretical and practical learning experiences are an important part of all course work. The senior year also gives students the opportunity to consolidate their educational experiences with a capstone design project. The curriculum develops students’ abilities to formulate problems, analyze alternatives, make decisions, and solve problems. Internship and co-op experiences will be encouraged to provide the students a real-world experience and to enhance students’ communication and interpersonal skills.

Program Educational Objectives

- Educate and prepare students to be successful in the profession of electrical engineering, particularly in the fields of electronics and communications;
- Educate students to successfully pursue graduate degrees; and
- Provide a strong foundation to the students for lifelong learning and to be responsible citizens.

Program Outcomes

The students will attain:

- An ability to apply knowledge of mathematics, science, and engineering;
- An ability to design and conduct experiments, as well as to analyze and interpret data;
- An ability to design a system, component, or process to meet

desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;

- An ability to function on multidisciplinary teams;
- An ability to identify, formulate, and solve engineering problems;
- An understanding of professional and ethical responsibility;
- An ability to communicate effectively;
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
- A recognition of the need for, and an ability to engage in lifelong learning;
- A knowledge of contemporary issues;
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
- Knowledge of basic sciences, advanced mathematics and engineering and ability to apply that knowledge to analyze and solve practical problems in the field of electronics and communications; and
- Expertise to design and conduct scientific and engineering experiments, analyze data and interpret results.

Degree Requirements	Units
*GE courses	51
Major requirement	49
Support courses (physics, computer science, and mathematics)	35
Technical electives	6
Total units needed for graduation	132

*A list of recommended GE courses is posted at the department’s website and is available in the department office.

*9 units overlap with GE units.

Engineering Science

ES 110 Introduction to Engineering & Lab Experience	2
ES 210 Digital Circuits & Logic Design	4
ES 220 Electric Circuits	3
ES 221 Electric Circuits Laboratory	1
ES 230 Electronics I	3
ES 231 Electronics I Lab	1
ES 310 Microprocessors & System Design	4
ES 314 Adv. Program., Modeling and Simulation	4
ES 330 Electronics II	3
ES 400 Linear Systems Theory	3
ES 440 Analog & Digital Communications I	3
ES 441 Analog & Digital Communications II	3
ES 443 Introduction to Optical Fiber Communication	3
ES 465 Introduction to Networking and Network Management	3
ES 430 Electromagnetic Theory & Applications	3
Approved Technical Elective I	3
Approved Technical Elective II	3
ES 492 Senior Design Project Planning	2

ES 493 Senior Design Project	3
ES 497 Engineering Science Colloquium	1

Subtotal 55

Current List of Technical Electives

ES 480 Artificial Intelligence	3
ES 432 Physical Electronics	3
ES 445 Photonics	3

Computer Science

CS 115 Programming I	4
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Subtotal 4

Physics

PHYS 114 Introduction to Physics I	4
PHYS 116 Introductory Lab Experience	1
PHYS 214 Introduction to Physics II	4

Subtotal 9

Mathematics

MATH 142E Discrete Mathematics for Engineering	2
MATH 161 Calculus I	4
MATH 211 Calculus II	4
MATH 241 Calculus III	4
MATH 261 Calculus IV	4
MATH 345 Probability Theory	4

Subtotal 22

General Education

(Excluding math, physics, and CS courses)	
ENGL 101 Expository Writing & Analytical Reading	3
Remaining GE courses	39

Subtotal 42

GPA Requirements

Please refer to this catalog and the department office for various general academic regulations and specific requirements for undergraduate students, such as grade point average requirement, course repeat policy, continuation in the program, etc.

Minor in Mathematics

The course ES 400 Linear Systems Theory is crosslisted with MATH 430. As such, the BSES curriculum includes 25 units of mathematics including 6 units in upper-division (MATH 345 and MATH 430) required to minor in mathematics. Therefore, a student satisfying BSES degree requirement is automatically completing a minor in mathematics.

Minor in Electrical Engineering (EE)

A pathway to minor in EE is currently being approved to provide an opportunity to students interested in gaining ability and training in

the field of electrical engineering. Students interested in receiving a minor in electrical engineering require 10 to 43 units depending upon the student's major field of study. A list of requirements for a minor in EE by students majoring in chemistry, computer science, mathematics, and physics disciplines is posted at the department's website and is available in the department office.

Minor in Electrical Engineering (EE)

The Department offers a minor program in EE to provide an opportunity to any non-ES major student interested in gaining ability and training in the field of Electrical Engineering. Students interested in receiving a minor in Electrical Engineering require 10 units to 43 units depending upon the student's major field of study and the units available as free electives in the major that can be used by the EE minor program. The EE minor requirements are as follows.

I. Course Requirements

To minor in Electrical Engineering, students must complete 24 units of Engineering science courses, 15 units of core courses and 9 units of electives, and 19 units of support courses in Mathematics, Physics as follows:

Core Courses (15 Units):

ES 110 Intro. to Engineering & Lab Experience	2
ES 210 Digital Circuits & Logic Design	4
ES 220 Electric Circuits	3
ES 221 Electric Circuits Laboratory	1
ES 230 Electronics I	3
ES 231 Electronics I Lab	1
ES 497 Engineering Science Colloquium	1

Electives From The Following List (9 units):

ES 314 Adv. Program., Modeling and Simulation	4
ES 310 Microprocessors & System Design	4
ES 330 Electronics II	3
ES 400 Linear Systems Theory	3
ES 430 Electromagnetic Theory & Applications	3
ES 432 Physical Electronics	3
ES 440 Analog & Digital Communications I	3
ES 445 Photonics	3
ES 465 Intro. to Networking	3

Support Courses:

PHYS 114 Introduction to Physics I	4
PHYS 214 Introduction to Phys II	4
PHYS 116 Introductory Physics lab	1
MATH 142E Discrete Structures I	2
MATH 161 Calculus I	4
MATH 211 Calculus II	4

Total units without support courses 24

Total units including support courses 43

Additional support courses may be needed depending upon the

Sample Four-year Program for Bachelor of Science in Engineering Science

SEMESTER 1:: 15 Units	
ES 110 Introduction to Engineering & Lab Experience	2
CS 115 Programming I	4
MATH 142E Discrete Mathematics for Engineering	2
MATH 161 Calculus 1	4
ENGL 101 Expository Writing & Analytical Reading	3
SEMESTER 2:: 15 Units	
PHYS 114 Introduction to Physics I	4
PHYS 116 Introductory Lab Experience	1
MATH 211 Calculus II	4
GE	6
SEMESTER 3:: 18 Units	
PHYS 214 Introduction to Physics II	4
MATH 241 Calculus III	4
ES 220 Electric Circuits	3
ES 221 Electric Circuits Lab	1
GE	6
SEMESTER 4:: 18 Units	
ES 210 Digital Circuits & Logic Design (w/lab)	4
ES 230 Electronics I	3
ES 231 Electronics I Laboratory	1
MATH 261 Calculus IV	4
GE	6
SEMESTER 5:: 17 Units	
ES 314 Adv. Program., Modeling and Simulation	4
ES 330 Electronics II (w/lab)	3
MATH 345 Probability Theory	4
ES 400 Linear Systems Theory	3
GE	3
SEMESTER 6:: 16 Units	
ES 310 Microprocessors and System Design	4
ES 440 Analog and Digital Communications I	3
ES 430 Electromagnetic Theory & Applications	3
GE	6
SEMESTER 7:: 18 Units	
ES 441 Analog and Digital Communications II	3
ES 443 Introduction to Optical Fiber Communications	3
ES 465 Introduction to Networking (w/lab)	3
ES 492 Senior Design Project Planning	2
ES 497 Eng. Science Colloquium	1
GE	6
SEMESTER 8:: 15 Units	
ES 493 Senior Design Project	3
Approved Technical Elective I	3
Approved Technical Elective II	3
GE	6
TOTAL UNITS:: 132	

electives chosen. For example, ES 400: Linear Systems Theory requires a prerequisite of Math 241: Differential Equations with Linear Algebra and ES 314 requires a prerequisite of CS 115.

II. Grade Requirement

The student must complete each course applied towards minor in Electrical Engineering with a grade of C or higher.

III. Pathway Examples

Examples of the pathways to minor in EE by the students majoring in Chemistry, Computer Science, Mathematics, and Physics disciplines are posted on the department website at url http://www.sonoma.edu/engineering/bses/ee_minor_pathway_examples.pdf. The interested students should contact ES Department for advising and developing a plan of study.

The Professional Science Masters (PSM) Programs, Master of Science in Computer and Engineering Science

- **Bioengineering;**
- **Communications and Photonics; and**
- **Computer Hardware and Software Systems.**

The Master of Science degree in Computer and Engineering Science (MS-CES) at Sonoma State University is a multidisciplinary degree built on a strong foundation of Physics, Mathematics, Computer Science and/or Electrical Sciences and recognized as PSM programs by the Council of Graduate Schools. The Professional Science Masters (PSM) degree is a unique professional degree grounded in science and/or mathematics and designed to prepare students for a variety of career options. The degree combines advanced coursework in science and/or math with an appropriate array of professional skill-development activities to produce graduates highly valued by employers and fully prepared to progress toward leadership roles.

The MSCES program emphasizes the application of Physics, Mathematics, Computer Science and/or Electrical Sciences fields to the design, analysis and synthesis of engineering problem solutions, exposes the student to management training and provides practical real world experience through internships and graduate seminars. The MS-CES faculty is composed of professors from Sonoma State University, whose interests traverse the fields of science and engineering, as well as professionals from the local community who have cutting-edge expertise in the various engineering disciplines of interest and are qualified to be adjunct faculty in SSU. A linkage with local industry in the form of an Industry Advisory Board (IAB) is an integral part of the program. Such an advisory board is critical to ensure the Program meets local community needs. The IAB provides the Program with valuable input regarding the new scientific and technological developments and educational needs of the industry. It also facilitates internship opportunities for students, joint student

research/project development and supervision, faculty-scientists/engineers joint project opportunities, equipment and financial support from the industries. Through this linkage of academic learning and practical application, students obtain a solid education indispensable for working in a professional environment. The MS-CES is a self-supported program that is underwritten by local industry as well as student tuition revenue. Therefore, as of this writing, tuition fee for this Program is \$500 per unit for all students, resident and non-resident. The MS-CES is 32-35 unit program, not including any prerequisite work.

MSCES Program Educational Objectives

- Educate and prepare students to be independent investigators;
- Educate students to be leaders in their professions; and
- Educate students to be socially responsible engineers, committed to community service.

MSCES Program Outcomes

The students of this program will acquire:

- Knowledge of the theory of high performance computing, communications and/or networking (and bioengineering in case of Bioengineering Track);
- Critical thinking ability and analytical and simulation tools to do system performance evaluation;
- Ability to model and analyze scientific and engineering problems (particularly in biological environment in case of Bioengineering Track);
- Ability to apply theory to design and to implement efficient computing and/or communications systems (ability to apply theory to design and develop solutions for health-related products and techniques in case of Bioengineering Track);
- Ability to integrate knowledge from multiple interrelated disciplines to formulate, design, and/or implement interdisciplinary projects;
- Ability to investigate and formulate research problems and/or design projects independently; and
- Ability for effective written and oral communication skills.

Admission to the Program

For admission, the applicant must have:

1. A baccalaureate degree in a scientific or technical discipline from an U.S. institution accredited by an appropriate accreditation body, or an equivalent baccalaureate degree from a foreign institution of high reputation;
2. Attained grade point average of at least 3.00 (A=4.00) in the last 60 semester (90 quarter) units attempted;
3. Applicants whose native language is not English and who have not spent at least three years of school at the secondary level (or beyond) where English is the principal language of instruction must present a minimum score of 212 on the

computerized Test of English as a Foreign Language (550 on the paper form or 79-80 on Internet version);

4. Demonstrated competency in writing by one of the Written English Proficiency Test criteria for MS-CES students given below. If the applicant plans to use the essay criteria, it should be submitted with the application for admission; and
5. Completed the following SSU courses or equivalent at the undergraduate level with a GPA of 3.00 or higher:
 - 3 semesters of Calculus (MATH 161, 211, 241) and one semester of Probability Theory (MATH 345);
 - 1 semester of each of the following subjects: Electric Circuits with lab, Electronics with lab and Digital Circuits and Logic Design with lab (ES 220/221, ES 230/231 and ES 210);
 - 2 semesters of Programming in an approved high level Procedural Language, modeling and simulation (CS 115 and ES 314); and
 - Biology prerequisite (for Bioengineering Track) or ES 310: Microprocessors and System Design (for the other tracks).

Note: Occasionally, the department offers compressed prerequisite courses to enable students to satisfy the prerequisite requirements in an expeditious manner.

Conditional Admission

The applicants whose GPA is less than 3.00 but greater than 2.50, or who lack not more than 18 units of prerequisite work (generally, 6 courses), may be accepted conditionally and must complete a program of study specified by the graduate coordinator at the time of admission before being given full admission.

Written English Proficiency Test Requirement

All students are required to demonstrate competency in written English. A student can satisfy the Written English Proficiency Test (WEPT) requirement by meeting any one of the following five criteria:

1. A student who has obtained his/her bachelor's degree from a CSU institution will be deemed to have satisfied WEPT requirement.
2. A student who has obtained a bachelor's degree and a master's degree from an accredited institution(s) with English as the medium of instruction for both the degree programs will be deemed to have satisfied WEPT requirement.
3. A student who scores at least 3.5 in the analytical writing portion of the GRE test will be deemed to have satisfied the WEPT requirement.
4. A student who takes and passes the campus WEPT test.
5. A student who writes and submits an article of at least 500 words in length to demonstrate his/her writing proficiency

in English, if accepted by the curriculum committee, will be deemed to have satisfied the WEPT requirement.

Program Requirements

The program requires completion of a total number of thirty-two OR thirty-five semester hours, depending upon the culminating experience path chosen, of work as follows:

- 24 (Plan A and Plan B) to 27 units (Plan C) in technical courses;
- 3 units in a business and management course;
- 3 units in Culminating Experience;
- 1 unit in internship; and
- 1 unit in graduate seminar.

The Culminating Experience requirement can be completed in one of three different ways, referred above as Plan A (thesis), Plan B (design project) and Plan C (Lab and Technical Report Experience).

Program of Study

The program offers three tracks or areas of specialization:

- **Track 1: Bioengineering** - This area of specialization prepares students to apply engineering principles in the areas of communications, photonics and computer hardware and software systems to develop solutions for health-related products and techniques that improve the quality of life. This specialization includes topics such as computational techniques for biomolecules, biomedical instrumentation, biophotonics, and medical image processing.
- **Track 2: Communications & Photonics** - This area of specialization provides students with expertise in the areas of (i) analog and digital electronics, (ii) semiconductor and photonics components and devices, (iii) communications techniques (wireless, wireline, and optical fiber media), (iv) local and wide area networking, and (v) broadband access technology.
- **Track 3: Computer Hardware & Software Systems** - This area of specialization is intended to deepen students' ability to analyze and design computer systems. This specialization includes topics such as embedded systems, digital data compression, software engineering, and computer networks.

A student chooses one of the three tracks at the time of admission but can change it during their course of study. However, that may mean taking additional courses to meet the requirements of the new track. A student's program of study consists of the following four components: a common core, a track core, culminating experience, and technical electives. Details of these components are as follows.

I. Common Core Curriculum (11 units)

CES 400 Linear Systems Theory	3
CES 440 Intro. Networking & Network Management	3

CES 506 Operations Management	3
CES 591 Internship	1
CES 597 Graduate Seminar	1

II. Discipline-Specific Curriculum Group 1 (9 units from the list of selected discipline)

(a) Computer Hardware and Software Systems program

CES 432 Physics of Semiconductor devices	3
CES 530 Analog and Digital Microelectronics	3
CES 512 Theory of Software Systems	3
CES 514 Data Mining	3

(b) Communications and Photonics program

CES 430 Photonics	3
CES 530 Analog and Digital Microelectronics	3
CES 540 Digital Data Transmission	3
CES 543 Optical Fiber Communications	3
CES 544 Wireless Communications	3

(c) Bioengineering program

CES 561 Computational Techniques for Biomolecules	3
CES 562 Biomedical Instrumentation	3
CES 563 Biophotonics	3
CES 564 Medical Image Processing	3
CES 592B Selected Topics in Bioengineering	3

III. Discipline-Specific Curriculum Group 2 (3 units from the list of selected discipline)

(a) Computer Hardware and Software Systems program

CES 500 Queuing and Transform Theory	3
CES 510 Intelligent Systems Design	3
CES 516 High Performance Computing	3
CES 520 Embedded Systems	3
CES 522 VLSI Design	3

(b) Communications and Photonics program

CES 500 Queuing and Transform Theory	3
CES 542 Digital Signal Processing	3
CES 546 Data Compression	3
CES 547 Digital Switching: Techniques and Arch.	3
CES 552 Network Architecture and Protocols	3
CES 554 Broadband Access Technology	3

(c) Bioengineering program

CES 561 Theory of Software Systems	3
CES 562 Data Mining	3
CES 563 High Performance Computing	3
CES 564 Data Compression	3

IV. Culminating Experience

Thesis (Plan A), Project (Plan B) or Lab and Technical Report Experience (Plan C)	3
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V. Approved Technical Electives

(Plan A: 6 units; Plan B: 6 units; Plan C: 9 units)

Choose from the following list of courses:

CES 430, CES 432, CES 500, CES 510, CES 512, CES 514, CES 516, CES 520,

CES 522, CES 524, CES 530, CES 532, CES 540, CES 542, CES 543, CES 544, CES 546, CES 547, CES 552, CES 554, CES 561, CES 562, CES 563, CES 564, CES 590, CES 592, CES 592B

Duration of Program Completion

Courses for these programs are offered in the evening hours to facilitate joining these programs by working professionals. The entire Program requires 32 (Plan A and B) or 35 (Plan C) semester hours to complete. A full time student taking 9 semester hours of average load per semester can complete the 35-unit Program in four semesters and a working professional taking 6 semester hours of average load per semester is likely to complete this program in 6 semesters.

Student Mentoring Plan

Each student in a program is assigned a faculty advisor who helps the student develop a plan of study based his/her interest. The faculty advisor monitors the student's progress and address any difficulties that the student may be having in making satisfactory progress in the program. At an appropriate time, generally midway through the completion of the coursework, the student is advised to choose a master's project guide, who then takes over as the student's mentor. The mentor helps the student find an Industry mentor who can help the student in his/her master's project and internship placement in an industry. Roles of the two mentors are to guide and prepare the student to succeed in the real world and be a leader in his/her field of work.

Culminating Experience through Thesis/Design Project/Lab and Technical Report Experience

All students are required to complete a culminating experience which may take one of the following three forms:

- Research and Thesis (Plan A)
- Design Project (Plan B)
- Lab and Technical Report Experience (Plan C)

A supervisory committee is appointed for the students who choose Plan A or Plan B. A supervisory committee consists of three faculty members. One of the three members can be an adjunct faculty. A student interested in choosing Plan A or B chooses a faculty member to be his/her thesis/project supervisor. Subsequently, the faculty supervisor becomes chairman of the student's supervisory committee. In consultation with the faculty supervisor, two other members of the committee are selected. For a student choosing Plan C, an advisor is appointed by the Program Director to guide the student through this plan.

Under Plan A, a student chooses to do thesis research and write a thesis under the guidance of the faculty supervisor and members of the supervisory committee.

Under Plan B, a student chooses to prepare a design project focused on the design of devices, instruments, or systems. As in the case of Plan A, the project is mentored by the student's faculty supervisor and members of the supervisory committee.

Upon approval by the student's supervisory committee, the thesis research or design project may be carried out at the student's company's site (if the student is working) under the supervision of an approved senior scientist/engineer of the company. However, a SSU faculty supervisor must oversee the research/project and regularly examine the student's progress. While not a requirement for graduation, it is expected that the results of the research/project will be presented in an appropriate technical conference and/or published in a relevant professional journal.

Plan C, Lab and Technical Report Experience (LTR Experience), provides students with the opportunity to take more courses to develop a deeper knowledge in their areas of interest instead of carrying out research or design projects, gives extensive exposure of the state-of-the art equipment in various laboratories, and develops technical report writing skills.

Internship Requirement

As a part of culminating experience, each MS-CES student is required to do an internship in an industry, university, laboratory, utility company, government organization, etc. The objectives of the internship must be to gain hands-on training in dealing with and solving real world engineering problems within the scope of the student's plan of study, develop teamwork and presentation skills and develop an understanding of the differences in ideal and real world situations. The internship must be completed within one semester or semester term. The number of hours worked as an intern should be at least 45, preferably much more. The supervisory committee's and graduate coordinator's approval must be obtained before starting the internship. After completion of the internship, a report of the work done and achievements certified by the intern-supervisor must be submitted to the supervisory committee and department for its acceptance.

Students with industrial experience can petition for a waiver of the internship requirement. However, the petition may be considered by the student's supervisory committee and the graduate coordinator of the MS-CES program only if the student can support the petition with proper supporting evidence that he/she fulfills this requirement based on his/her past industrial experience.

GPA Requirements

Please refer to this catalog and the department office for various general academic regulations and specific requirements for graduate students such as grade point average requirement, course repeat policy, continuation in the program, etc.

Laboratories

The program has the following eight state-of-the art laboratories in various areas of interest located in the Cerent Engineering Sciences Complex in Salazar Hall.

- AFC Access Technologies Laboratory
- Agilent Technologies Communications Laboratory
- Rolf Illsley Photonics Laboratory

- William Keck Microanalysis Laboratory
- Networking Laboratory
- Human-Computer Interaction and Systems Laboratory
- Software Engineering Laboratory
- Electronics Laboratory

These labs provide excellent facilities to our students and faculty for hands-on experience, research, project development, implementation, and testing. Many of these labs are sponsored by the high-tech industries in the North Bay region of the San Francisco area.

ENGLISH

DEPARTMENT OFFICE

Nichols Hall 362
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Sherril Jaffe
Catherine Kroll
Mira-Lisa Katz
John Kunat
Noelle Oxenhandler
Thaine Stearns
Greta Vollmer
Timothy Wandling
Chingling Wo

Programs Offered

Bachelor of Arts in English
 Literature concentration
 Creative Writing concentration
 Secondary Teaching Credential Preparation

Master of Arts in English

Minor in English

Minor in Linguistics

English remains one of the most various, comprehensive, and liberalizing of the liberal arts. It familiarizes us with the written documents that define the past and give meaning and purpose to the present; it investigates the sources and structure of language; it enriches our awareness of language in written and oral forms; it stirs the creative and recreative impulses; and it provides us with multiple ways to envision our world and ourselves through the study of fiction, poetry, drama, and the essay.

The English Department is one of the University's largest departments. In addition to its majors, the department serves many other students who take English courses to improve their writing, to

develop a minor or double major field, or to pursue interests in some aspect of literature, language, or creative writing. English is the field most frequently chosen by students combining fields of study in an interdisciplinary major—for example, literature and sociology; literature and history; literature and art; and linguistics and psychology.

Students who wish to major in English may choose one of three plans, each of which provides a coherent program with a particular emphasis. After a core of required courses, students will follow programs leading to a major in English and American literature, creative writing, or secondary teaching, which prepares students to enter postbaccalaureate teacher credentialing programs.

Students who have majored in English work in business, public relations and advertising, broadcasting, journalism, law and government service, as well as in elementary, secondary, and college teaching. All of these fields require an understanding of human motivation and of the conflicts and dilemmas that people face. Our graduates enter those fields able to express themselves clearly, logically, and with passion. They understand the relationship between language and authority.

The English Department also serves students in the applied arts minor, which may be of special interest to those seeking the Multiple Subject (elementary level) Teaching Credential and the University's pre-law and pre-health professions programs.

The English Department publishes the following professional and student publications: *Zaum*; and *Volt, A Magazine of the Arts*. Students wishing to participate in the production of these publications should contact the English Department office.

To be admitted to the English major, students must receive a grade of at least B- in ENGL 101 and 214 or their equivalents. A student with a grade lower than B- in either ENGL 101 or 214 may petition for a review by the department. The review will be based on the contents of an appeal folder, containing three essays from the class being reviewed, and a one-to-two-paragraph explanation of the basis of appeal.

Bachelor of Arts in English

Degree Requirements	Units
General education	51
Major requirements, core (20 units) and concentration (20 units)	40
General electives	29
Total units needed for graduation	120

Major Core Requirements for All English Majors

(Except secondary teaching concentration students; please see Secondary Teaching Preparation, below.)

An Introductory Course

Complete the following course:

ENGL 301 Literary Analysis: Seminar

4

A Survey Course*Complete one of the following courses:*

ENGL 237 Survey: Early American Literature	4
ENGL 238 Survey: Later American Literature	4
ENGL 239 Survey: Early British Literature	4
ENGL 240 Survey: Later British Literature	4

A Shakespeare Course*Complete one of the following courses:*

ENGL 339 Introduction to Shakespeare	4
ENGL 439 Studies in Shakespeare	4

A Theory Course*Complete one of the following courses:*

ENGL 401 Introduction to Modern Critical Theory	4
ENGL 487 Studies in Rhetoric	4

A Senior Level Literature Course*Complete one of the following courses:*

ENGL 436 Studies in Postcolonial Literature	4
ENGL 439 Studies in Shakespeare	4
ENGL 447 Studies in Comparative Literature	4
ENGL 448 Periods in British Literature	4
ENGL 450 Periods in American Literature	4
ENGL 451 Feminist Perspectives in Literature	4
ENGL 470 Studies in Poetry	4
ENGL 472 Studies in the Novel	4
ENGL 474 Studies in Drama	4
ENGL 480 Studies in California Literature	4
ENGL 481 Studies in British Literature	4
ENGL 482 Studies in American Literature	4
ENGL 483 Individual Authors: American	4
ENGL 484 Individual Authors: British	4
ENGL 485 California Authors	4

Total units in the major core 20*Note: English majors must choose one of three concentrations: literature, creative writing, or secondary teaching.***Literature Concentration***Three General Literature Courses:*

Two of these courses (8 units) must be at the 400 level, and must be in literatures before 1914.

Electives	8
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Total units in the Literature concentration 20**Creative Writing Concentration***Four Or More Courses In Creative Writing:*

At least three of these courses (12 units) must be at the 300/400 levels, and course selections must include two different writing genres (poetry, fiction, scriptwriting, or creative nonfiction).

ENGL 207 Introduction to Creative Writing	3
ENGL 307 Introduction to Fiction Writing	4
ENGL 318 Introduction to Poetry Writing	4
ENGL 352 Personal Essay	4
ENGL 407 Advanced Fiction Writing	4

ENGL 409 Master Class in Fiction Writing	4
ENGL 418 Advanced Poetry Writing	4
ENGL 430 Creative Writing: Selected Genres	1-4
ENGL 435 Directed Writing	4-8
ENGL 475 Master Class in Nonfiction	4
Electives	4

Total units in the Creative Writing concentration 20**English Education Concentration (Secondary Teaching Preparation)*****Collateral Requirements: 9 Units***Complete the following courses:* 9 Units

ENGL 201 Written and Oral Discourse	3
ENGL 214 World Literature	3
COMS 202 Methods of Media Criticism	3
Field Work in Education	45 hours

Core Requirements: 44 Units*Complete the Following Courses:* 32 Units

ENGL 301 Literary Analysis: Seminar	4
ENGL 313 Classical Literature and Mythology	4
ENGL 341 Explorations in Language	4
ENGL 343 Youth and Literature	4
ENGL 379 Pedagogical Grammar	4
ENGL 491 Teaching Composition	4
ENGL 492 Reading and Responding to Literature	4
ENGL 496 English Education Senior Capstone	4

Complete one of the following courses: 4 units

ENGL 237 Survey: Early American Literature	4
ENGL 238 Survey: Later American Literature	4

Complete one of the following courses: 4 units

ENGL 239 Survey: Early English Literature	4
ENGL 240 Survey: Later English Literature	4

Complete one of the following courses: 4 units

ENGL 339 Introduction to Shakespeare	4
ENGL 439 Studies in Shakespeare	4

For the extended studies portion of the single-subject credential concentration, students will choose either Strand 1 or Strand 2:**Strand 1***Extended Studies: Literature and Text Analysis:* 8 Units*Complete two of the following courses:*

ENGL 315 California Ethnic Literature	3
ENGL 315L California Ethnic Literature Lab	1
ENGL 345 Women Writers	3
ENGL 448 Periods in British Literature	4
ENGL 450 Periods in American Literature	4
ENGL 481 Seminar in British Literature	4
ENGL 482 Seminar in American Literature	4
ENGL 483 Individual Authors: American	4
OR an elective to be determined with and approved by an advisor	

Strand 2

Extended Studies: Composition, Rhetoric and Linguistics: 8 Units

Complete two of the following courses:

ENGL 307, or 318, or 352 Creative Writing Course	4
ENGL 375 Advanced Composition	4
ENGL 487 Studies in Rhetoric	4
ENGL 489 Topics in Linguistics	4
ENGL 495 Tutor in Writing Center	4
ANTH 480 Studies in Language Use	4
OR an elective to be determined with and approved by an advisor	

**Total units in the English Education
(Secondary Teaching Preparation) concentration 52**

**All single subject concentration courses must be passed with a grade of C or better in order to qualify as meeting the waiver requirements. In addition, students must achieve a minimum GPA of 3.00 (in single subject program courses) to qualify for waiver approval.*

Teaching Credential Preparation

The English Education concentration is a program of study that satisfies the subject matter preparation requirement for entry into an English teaching credential program and exempts the student from taking the CSET (California Subject Examination for Teachers) in English. English majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the CSET Multiple Subjects Assessment. For more information, contact the English Department Office at (707) 664-2140.

Sample Four-Year Program for Bachelor of Arts in English

Literature Concentration

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE Area A2: ENGL 101 (3)	GE Area A3: PHIL 101 (3)
GE (3)	GE Area B1 (3)
GE Area B2: BIOL 115 (3)	GE Area D2 (3)
Electives (6)	GE Area C2: ENGL 214 (3)
	Electives (3)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE Area A1: ENGL 201 (3)	GE Area C1 (3)
GE Area B3 (3)	ENGL 238 or 240 (4)
ENGL 237 or 239 (4)	GE Area D3 (3)
Electives (5)	Electives (5)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE Area C3 UD (3)	ENGL 339 (4)
ENGL 301 (4)	GE Area C4 UD (3)
UD Major Literature Course (4)	Major Elective (4)
Electives (4)	GE Area D1 (3)
	Electives (1)

SENIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 401 (4)	400 Level Major Lit. Course (4)
400 Level Major Literature Course (4)	400 Level Major Lit. Course (4)
GE Area E UD (3)	GE Area D5 (3)
Electives (4)	Electives (4)

TOTAL UNITS:: 120

Advising Clarifications

1. Six units of English Community Involvement Programs may be included among the electives with permission of advisor.
2. Additional courses in upper-division writing (which may be repeated for credit) or additional literature courses may be taken as electives.
3. No course should be listed above if it has already been used for GE requirements. (ENGL 214, 215, 314, 315, 345 are exceptions.)

Only one course may be double counted for both English and GE area C2. No courses from other GE areas or from other universities may double count. However, if a course is counted toward area C2 by an Admissions and Records evaluator, it

may still count toward the major if the student elects to take an additional English Department area C2 course in its stead.

4. At least 24 units of the courses listed above must be upper-division.
5. The 40 units listed above will be used in computing the major GPA in accordance with University policy; no courses taken Cr/NC may be counted toward the major unless they are offered with that option only.
6. Additional units in English, beyond the 40 units listed above, will be counted as general college electives and should not be listed on the Major/Minor Requirements form.

In accordance with University policy, courses in Independent Study (495, 595) shall not duplicate regularly offered courses listed in our catalog.

Minor in English

Students majoring in other fields may develop, in consultation with an English Department advisor, a 20-unit English minor.

Required: Literary Analysis (ENGL 301), a survey course (to be selected from ENGL 237, 238, 239, 240, or equivalent), and an upper-division writing course (to be selected from ENGL 307, 318, 352, 375, 475, or other at the recommendation of your advisor). A minimum of one course must be taken at the 400 level. All courses must be taken for a grade to count toward the minor. Nine units must be taken in residence at SSU.

Minor in Linguistics

Students majoring in English or other fields may develop, in consultation with one of the linguistics program advisors, a 20-unit linguistics minor.

Required: one introductory linguistics course (to be selected from ENGL 203, ENGL 341, or SPAN 304), and one methodological course (to be selected from ENGL 489, ENGL 588, ANTH 480, SPAN 400, or SPAN 490). All courses must be taken for a grade to count toward the minor. Nine units must be taken in residence at SSU.

Master of Arts in English

The graduate program in English at Sonoma State University consists of 34 units of graded work. Literature and creative writing are emphases within the degree available to the student.

Admission to the Program

The English Department M.A. program accepts applicants only for the fall semester of each year and requires at least a 3.00 GPA in the last 60 academic units taken. Program applicants must file the University application form and have all their academic transcripts sent to the University Admissions and Records Office by the admission deadline set by the department for that year, typically December 31. Applicants must also send to the English Department, care

of the graduate advisor, the following: a second set of transcripts (the first goes to Admissions and Records); three letters of recommendation; a brief cover letter indicating the applicant's interest in the program and anticipated field of study (creative writing, literary criticism, or rhetoric/composition); a sample of persuasive prose of between 10 and 20 pages in length; and, for those applying in creative writing, a sample of creative work. These policies and procedures are described in the "MA in English Handbook," which is available online at <http://www.sonoma.edu/english/ma.html>.

The English Department Graduate Committee reviews all complete application files that meet campus and departmental admission standards and admits the most qualified of these applicants to the program. Applicants may enter the program with conditional or classified status. Classified status is usually granted to admitted applicants with undergraduate majors in English; conditionally classified status, which requires the completion of 4 to 24 additional units in English, is usually granted to admitted applicants with an undergraduate major in another field. Please see the catalog section on Graduate Degrees for more information.

Advancement to Candidacy

Students are advanced to candidacy when they have 1) completed their coursework (except for completion units), 2) passed either the department's qualifying oral exam or the Literature GRE (minimum score at the 65th percentile), and 3) completed the second-language requirement. Advancement to candidacy is formalized by the filing of a GS01 form with Graduate Studies.

Program Requirements

The M.A. in English requires 34 units. Students who select the thesis or creative project as a culminating option complete 28 of these units through coursework; the remaining 6 will be taken either as thesis units (599) or as directed writing units (535). Students who select the exam as their culminating option complete 32 units of coursework **plus** an additional 3 units of English 597 (directed reading) during their final semester for a total of 35 units. No more than 4 units of directed writing units (535) may be counted toward the degree prior to the culminating option.

In addition to the 494 reading course recommended for all graduate students studying for the qualifying exam prior to advancement to candidacy, students may take one course at the 400 level (senior seminar level) toward completion of their M.A. Research assistantship units (460) and the 494 course do not count toward the 34-unit total; nor, except at the discretion of the graduate advisor, do independent study units (595).

Degree Options

All options require candidates to take English 500 and two 500-level seminars. One course may be taken at the 400 level for degree credit.

To fulfill the requirements for the degree, the student must select one of the three following options:

1. Thesis Option: 28 units of coursework, plus 6 units of ENGL 599 for researching and writing a thesis;
2. Creative Writing Option: 28 units of coursework, plus 6 units of directed writing, ENGL 535, for writing a creative project prefaced with a critical introduction; or
3. Directed Reading Option: 32 units of coursework, plus preparation of a specialized reading area (3 units of ENGL 597 required) and passage, with a B- or better, of a written exam in this area. Note that this option requires 32 units of graded course work plus three units of ENGL 597, which is graded Cr/NC.

Students choosing the thesis or directed reading option are required to take an oral examination. Those choosing the directed writing option are required to give a public presentation of their work.

English Courses

A list of courses offered with descriptions appear in the separate course-listing section of this catalog. Please see the Schedule of Classes for most current information and faculty assignments.

- A. ENGL 101 and 214 or their equivalents are prerequisites for upper-division courses.
- B. These classes (or their equivalents), and ENGL 301, are prerequisites for English 400-level and 500-level courses; or by consent of instructor.
- C. Prerequisites apply to both major and minor.

ENVIRONMENTAL STUDIES AND PLANNING

DEPARTMENT OFFICE

Rachel Carson Hall 18
(707) 664-2306
www.sonoma.edu/ensp/

DEPARTMENT CHAIR

Thomas Jacobson

ADMINISTRATIVE COORDINATOR

Jo-Ann Smith

Faculty

Caroline Christian / Conservation and Restoration
Thomas Jacobson / Planning
Steven Orlick / Planning
Rocky Rohwedder / Education and the Environment, Outdoor Leadership
Alexandra von Meier / Energy Management and Design
Laura Watt / Conservation and Restoration

Programs Offered

Bachelor of Arts in Environmental Studies
Education and the Environment
Energy Management and Design
Conservation and Restoration
Outdoor Leadership
Planning Concentration
Water Quality and Hazardous Materials Management
Concentration
Bachelor of Science in Environmental Studies
Energy Management and Design
Water Quality and Hazardous Materials Management
Concentration
Minor in Environmental Studies and Planning
Elementary Teacher Credential Multiple Subject
Preparation in Environmental Studies
Double Major with Economics

Dedicated to producing environmental problem solvers, the Department of Environmental Studies and Planning (ENSP) offers a distinctive program of interdisciplinary study. Students and faculty work together to develop an understanding of environmental “sustainability” in all its dimensions. The program addresses current environmental concerns that have far-reaching implications for human society, natural systems, and the fate of diverse species of plants and animals. This involves an integration of knowledge from a variety of disciplines to understand the functioning of ecological systems and the nature of human impact upon these systems at local, regional, and global scales. The department’s two goals are to: prepare students for careers in the environ-

mental professions, for graduate studies, and for positive action in their own lives; and to promote environmental literacy in order to help maintain and enhance the quality of the human and natural environments.

All students receive fundamental instruction related to the environment based on knowledge from the biological, physical, and social sciences and from the humanities. This broad understanding is applied in a particular area of environmental concern through a student’s selecting one of the ENSP study plans. Career-oriented study plans are offered in conservation and restoration, energy management and design, education and the environment, outdoor leadership, city and regional planning, and water quality and hazardous materials. These study plans are described below. Many students pursue double majors, or a major and minor, in conjunction with traditional disciplines to prepare for specific careers related to the environment.

All students complete a senior project or internship.

Supporting Programs

In addition to the programs above, our department is the academic sponsor of three professional certificate programs offered by the School of Extended Education.

Green Building Professional Certificate
Sustainable Landscape Professional Certificate
Sustainable Development and Climate Change Certificate

Admission Requirements

When applying to Sonoma State University, a student may declare a major in Environmental Studies and Planning. A student considering this major should make an appointment to see a faculty member for academic advising. (Students seeking financial aid to assist them in their studies should contact the financial aid office. Several scholarships are provided specifically for ENSP students through the University scholarship program; please refer to the Scholarships section of this catalog.)

Advisory Plans for the Freshman and Sophomore Years

In fulfilling their general education requirements, students who intend to major in Environmental Studies and Planning should select courses that will also meet the prerequisites for their intended study plans. Required and recommended prerequisites may be obtained by contacting the department office.

A broad-based program of lower-division work in the liberal arts and sciences is generally sufficient to meet the requirements for the B.A. degree. This program should include at least one course in biology; one in geology, chemistry, or physics; one in philosophy; and two or more in the social sciences, including a course in

introductory economics (either microeconomics or macroeconomics is recommended). Additional coursework is required for certain study plans.

Required Courses

All ENSP majors are required to complete:

ENSP 200* Global Environmental Issues (3)

ENSP 201 Environmental Forum (1)

In addition, in consultation with an advisor, students must complete one of the six study plans described below. Details of each study plan, including specific courses and options, are available from the office of the Department of Environmental Studies and Planning.

At least 24 units of ENSP course work are required for the B.A. and B.S. degrees.

Courses required for the major must be taken for a traditional letter grade, except for courses that are offered Cr/NC only.

Bachelor of Arts in Environmental Studies

Degree Requirements	Units
General education	48 or 51
Major requirements	36-53
General electives	16-36
Total units needed for graduation	120

Bachelor of Science in Environmental Studies

A bachelor of science degree is available for students in the Energy Management and Design, and Water Quality and Hazardous Materials plans.

Degree Requirements	Units
General education	48 or 51
Natural science support courses	32-34
Major requirements	22-35
General electives	10-18
Total units needed for graduation	120

The following natural science support courses are required for the B.S. degree, in addition to the specific requirements for Energy Management and Design, and Water Quality and Hazardous Materials Management.

CS 101 Introduction to Computers and Computing	3
CHEM 115A* General Chemistry	5
CHEM 115B* General Chemistry	5
ENSP 403 Computer Modeling	3
MATH 161* Calculus I	4
MATH 211S Calculus II	2
MATH 165 Elementary Statistics	4
PHYS 210A* General Physics (Algebra/Trig or Calculus-based)	3-4
PHYS 210B General Physics	3-4
Total units natural science support courses	32-34

* Courses that meet general education requirements.

Study Plans

In consultation with an advisor, students must complete 26-56 upper-division units in one of the six study plans outlined below. Details of each plan, including specific courses and options, are available from the office of the Department of Environmental Studies and Planning.

Education and the Environment (B.A. degree option)

This study plan is designed for students interested in working with youth or a teaching career in public or private school settings. Coursework is designed to help students pass the California Subject Matter Examination for Teachers (CSET) as well as equip them with environmental science literacy, effective educational techniques, and extensive field experience. After completion of this B.A. degree track, many students go on for a multiple subject teaching credential.

Energy Management and Design (B.A. and B.S. degree options)

This program is designed to prepare students for careers or for graduate studies in the fields of residential and commercial energy management, energy-efficient architecture and design, energy planning in industry and government, renewable energy applications, and other energy-related businesses.

Conservation and Restoration (B.A. degree option)

Track 1, Biological Emphasis, is for students interested in science-based conservation, restoration, conservation planning, land management, and preservation. Students participate in an interdisciplinary curriculum that combines course work in ecology and biology with environmental policy, law, and/or planning. A minor in biology is strongly encouraged. Track 2, Social Science Emphasis, is for students interested in the human dimensions of conservation and restoration. Coursework focuses on the political, historical, and/or geographic aspects of land and resource conservation, planning, and management, while also covering a solid interdisciplinary foundation of ecological understanding. A minor in geography is strongly encouraged.

Outdoor Leadership (B.A. degree option)

This study plan combines relevant coursework in environmental science, kinesiology, leadership and small business management along with field experience to prepare the next generation of outdoor leaders. Career opportunities include the growing outdoor recreational field, eco and adventure tourism, and adventure and multi-sports programs at schools and universities, as well as activities for youth-at-risk and other special needs populations.

Planning Concentration (City and Regional Planning) (B.A. degree option)

Students in the CSU-approved planning concentration follow a general preprofessional curriculum in planning and may choose to develop a specialization to suit their interests through a program of recommended electives. Focus is on sustainable community planning, including land use, growth management, environmental impact assessment, transportation, and natural resource planning. Graduates may work for a wide variety of governmental agencies or private firms, or may pursue graduate studies in planning or related fields. Also, students interested in future careers in environmental law typically follow the planning concentration.

Water Quality and Hazardous Materials Management Concentration (B.A. and B.S. degree options)

This CSU-approved concentration prepares students for employment in environmental enforcement agencies, large private corporations, engineering firms which serve the public and private sectors, and public agencies that provide water or treat wastewater. Some of these agencies and firms are very small and rural; others are large and urban. The course work provides a comprehensive foundation in the science of environmental quality. Our program welcomes students who are new to this field, provides upper-division course work for students who have had previous training in community college hazardous materials and water technology programs, and also gives additional training to workers already employed in water-related occupations.

Double Major with Economics

The double major in economics and environmental studies and planning is intended for those students whose particular academic and career interests lie in natural resource economics, economic development planning, energy management, and/or community development and redevelopment. The double major is also designed especially for students who intend to pursue graduate studies in natural resource management, urban planning, law, or related career fields.

Students considering this double major should meet with their ENSP advisor to discuss requirements.

Minor in Environmental Studies and Planning

The purpose of the minor in environmental studies and planning is to help students from traditional disciplines apply their expertise to environmental and planning problems and issues. A minimum of 20 units is required. Students considering the ENSP minor should meet with an ENSP advisor to discuss requirements.

Special Resources in ENSP

The department utilizes several valuable learning environments and facilities on and off campus. They include:

The Fairfield Osborn Preserve: A 220-acre field station that provides environmental education programs and opportunities for scientific research. The preserve is a fifteen-minute drive from campus, atop Sonoma Mountain.

The SSU Botanical and Kenneth M. Stocking Native Plant Garden: A showcase of diverse California plant communities and a quiet place for education and relaxation. Located near the campus lakes, the garden includes a guided trail through woodland, marsh, and riparian ecosystems.

The Environmental Technology Center: A model for sustainable building techniques and technologies, this center includes energy and water-efficient landscaping, "smart building" control technologies, environmentally-sensitive materials, passive solar heating and cooling, and more. It serves as a training facility for building professionals and teachers and as an educational and research site.

The Institute for Community Planning Assistance/Center for Sustainable Communities: A research arm for the department, the institute carries out contract studies for local communities and public agencies, utilizing paid student assistants.

Galbreath Wildlands Preserve: A 3,670 acre preserve nestled in the Coast Range of northern California. The mission of the Preserve is to promote environmental education and research, as well as the effective stewardship of this diverse landscape.

FILM STUDIES

PROGRAM OFFICE

Art Building 128
(707) 664-2364

Faculty

Stephen Galloway / Art and Art History
Ajay Gehlawat / Hutchins
Michael G. Litle / Communication Studies

Programs Offered

Minor in Film Studies

Major in Film: See Art History: Film Emphasis

The film studies minor is an interdisciplinary and interdepartmental program that analyzes the history, theory, and practice of film in the larger context of humanistic studies. Students will study a broad range of film texts, from the classic narrative to abstractionist and experimental, and learn to appreciate the aesthetics and filmmaking practices of both Western and non-Western cultures. While exploring the medium's connection with several disciplines and art forms, students will also become familiar with the phases of film production and learn to approach film and the cinema in a critical and analytic manner. The film studies minor offers students a flexible curriculum that complements several existing major degree programs in the humanities and constitutes excellent supplementary preparation for a number of careers. In consultation with the program coordinator, students can design a minor with an emphasis relevant to their academic and career objectives.

Minor in Film Studies

The minor consists of a minimum of 18 semester units distributed among a core (9 units) and a choice of electives (9 or more units).

Minor Core Requirements

ARTH 212A or B Introduction to World Film History	3
ARTH 361 Classic Narrative Film	3
ARTH 363 Other Cinemas	3
Total units in the minor core	9

Minor Electives

Students may complete the film studies minor by choosing additional courses in film history or three courses within any one of the following four options. Because of rare or one-time offerings in film studies throughout the University, this list of electives is not comprehensive. In light of this and the variations of scheduling throughout the disciplines, students are advised to work closely with one of the faculty advisors listed above in order to insure progress in the minor.

Film and Literature Option

These courses study different aspects of the complex relationship between film and literature: the role of screenwriting in the process of film production, the problems of adaptation, the comparative study of literary and filmic texts, and the special contribution that literary analysis has made to the study of film.

ENGL 377 Film and Literature	3
FREN 415 Special Topics in French Culture	4

Total units in the option 9-12

Critical Perspectives Option

Each of the following courses brings a specific disciplinary approach to bear on the study of film, drawing on perspectives from the humanities and social sciences: aesthetics, ethics, structuralism, semiology, politics, and sociological analysis.

COMS 202 Methods of Media Criticism	3
COMS 402 Senior Seminar	3
PHIL 368 Philosophy and Film	3
SOCI 434 Cinema and Society	4

Total units in the option 9-13

Film and the Fine Arts Option

This group of courses focuses on the relationship of film with artistic and theatrical traditions and practices: film analysis and theories of visual aesthetics; film and artistic movements in the 20th Century (such as expressionism, futurism, and surrealism); film and the media arts; film and the theatrical arts of production design, acting, and directing.

ART 208 Basic Black and White Photography	1-4
ARTH 464 History of Modern Art: 20th Century	3-4
ARTH 465 History of Modern Art: American	3-4
COMS 201 Storytelling via Video	3
THAR 120 Acting Fundamentals	2
THAR 144A Scenery	2
or THAR 144B Lighting	2
THAR 350 Directing Workshop	2

Total units in the option 9-12

International and Cross-Cultural Perspectives Option

These courses develop an understanding of aesthetics and filmmaking practices that stand outside the dominant model of the classic narrative film and the representation of the cultural “other” within the dominant Western tradition.

AMCS 392 Ethnic Images in Film and Media	3
CALS 393 Chicano/Latino Cinema	3
FREN 415 Special Topics in French Culture	3
NAMS 338 Native Americans and the Cinema	3

Total units in the option 9-12

Total units in the minor 18-21

Note: No more than 6 units of work in the student's major may be counted toward the film studies minor. Students are encouraged to take at least one elective course with a regional or intercultural perspective.

GEOGRAPHY

DEPARTMENT OFFICE

Stevenson Hall 3066
(707) 664-2194
Fax (707) 664-3332
www.sonoma.edu/geography

DEPARTMENT CHAIR

Rheyra Laney

Faculty

Jeffrey Baldwin
Matthew Clark
Rheyra Laney

Programs Offered

Bachelor of Arts in Geography

- Environment and Society Concentration
- Geospatial Techniques Concentration
- Biophysical Environment Concentration
- Globalization and Identity Concentration

Minor in Geography

Teaching Credential Preparation

Geography is the academic discipline that bridges the natural and social sciences. Geographers study and analyze the relationships between human activities and the natural and built environment. They take a multidisciplinary approach to solving real-world problems at all spatial scales, from local to global. Thus, Geography provides students with the conceptual frameworks needed to understand the complex processes shaping the world around us. It also provides students with the skills needed to help create a more sustainable and just future.

Geography at Sonoma State University has developed four concentrations, reflecting four major fields of study within the broader discipline. These study plans provide an opportunity for students to strengthen their backgrounds and to develop an expertise in these particular areas.

The Environment and Society Concentration focuses on human-environment relations, sustainable development, and natural resource management.

The Globalization and Identity Concentration focuses on global economic and political change, how this affects people's access to wealth and power, and how it shapes their sense of self in an ever-changing world.

The Biophysical Environment Concentration focuses on natural environment systems from global to local scales, including weather and climate change, landform history, and biological patterns and processes.

The Geospatial Techniques Concentration focuses on geographic information science and its application in resource management,

land-use planning, and land-change science.

All Geography Majors, no matter their concentration, take a range of core courses that ensure that they have a strong background in both the natural and social sciences. They also take geospatial techniques and field methods courses that develop their research and problem-solving skills. In addition, the curriculum strengthens students' writing, critical thinking, and oral presentation skills; areas that are important for any successful career. The department's strong intern program affords students on-the-job experience.

Geography majors may apply for the Terrence M. Smith Geography Scholarship, the Geography Alumni Scholarship, or the Claude Minard Memorial Scholarship. Students pursuing studies in climatology or meteorology are eligible to compete for the annual Call Memorial Scholarships.

Careers in Geography

Sonoma State University graduates in geography find employment opportunities in both the public and private sectors. Private sector employers include consulting companies in fields such as agriculture, viticulture, environmental management, land use mapping, land change analysis, and marketing. Non-profits that regularly hire geographers range from international organizations, such as the Nature Conservancy or the International Crisis Group, to small local organizations such as the Sonoma Ecology Center. Government employers include the Environmental Protection Agency, U.S. Forest Service, State Department, Department of Homeland Security, CalTrans, California Division of Forestry, as well as various city and county departments in areas such as parks and recreation, open space, water, urban planning, and others.

Geographers work for these organizations in various capacities, including as geographic information technicians and analysts, remote sensing analysts, planners, location analysts, park rangers, resource managers, and consultants.

Many SSU geographers decide to go into teaching, from the elementary level to higher education. Please visit the department website for more information and career ideas.

SSU graduates in geography often decide to continue on to graduate school, entering various programs across the country. Fields of study include geography, international development, rural development, urban planning, transportation planning, journalism, law, and a host of others.

Geography Department Resources

Geospatial Technology Instructional Laboratory

The Geography Department has a well-equipped computer laboratory that supports advanced instruction in geographic information systems (GIS), satellite image processing, and digital cartography.

The GIS Lab includes 15 workstations supported by a file server, as well as ArcGIS Arc/Info, ERDAS Imagine, IDRISI, Adobe Illustrator, geobrowsers, digitizing tablets, and a color plotter and printer.

The Center for Interdisciplinary Geospatial Analysis (CIGA)

The Center for Interdisciplinary Geospatial Analysis promotes the application of geospatial technology to social and environmental problems through research, education, and community service. The lab seeks interdisciplinary collaboration among campus and external researchers, students, and other organizations in projects that involve geographic information and spatial analysis at local to global scales. The CIGA provides computer, software and data resources, Geographic Information System (GIS) and remote sensing expertise, consulting services, educational courses, and community outreach. Students are given a unique opportunity to broaden and refine their education by working on real-world problems in CIGA research projects and service contracts.

Map Library

The Map Library houses an extensive collection of digital and paper maps, wall maps, aerial photographs, remotely sensed imagery, and one of the most complete historical weather libraries in California.

Biophysical Geography Laboratory

The department's biophysical laboratory is equipped with various types of equipment and technology to support both instruction and research. It maintains a collection of high-precision GPS mobile receivers. It houses a complete weather station that provides students with current weather data to complement historical resources. The lab also possesses a fully equipped soils and geomorphology lab for research and analysis.

Bachelor of Arts in Geography

Degree Requirements	Units
General education	51
Geography Courses	42
Supporting Courses	8
General Electives	10
Total units needed for graduation	120

Note: Courses required for the major must be taken for a traditional letter grade, except for courses that are offered CR/NC only. Students must earn a C- or better in any course applied to the major.

Core Requirements for the Major (16 units)

<i>Lower Division Core</i>	8
GEOG 203 Cultural Geography or GEOG 202: World Regional Geography	3
GEOG 204 Global Environmental Systems	4
GEOG 205 Map Reading and Interpretation	1
<i>Regional Synthesis</i>	4
GEOG 392 Latin America and the Caribbean	4
GEOG 394 Africa, South of the Sahara	4
GEOG 396 Special Topics in Area Studies	4

<i>Geographic Research and Synthesis</i>	4
GEOG 490 Senior Seminar	4

Environment and Society Concentration

This concentration is designed for students interested in human-environment relations, sustainable development, and natural resource management

Breadth Courses (10 Units)

<i>Geospatial Techniques</i>	4
GEOG 380 Remote Sensing and Image Processing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

The Biophysical Environment

GEOG 360 Geomorphology	4
GEOG 370 Weather and Climate	4

Field Course and Internship

GEOG 314AB Field Experience, Northern California	1-2
GEOG 314C Field Experience Beyond Northern California	1-2
GEOG 314D Field Experience Abroad	2-3
GEOG 315 Field Methods in Geography	2
GEOG 499 Internship	2-5

Concentration Courses (16 Units)

GEOG 322 Liberation Ecologies: Globalization, Environment, and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 345 Tourism Geographies	4
GEOG 365 Biogeography and Landscape Ecology	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	4

Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor.

ANTH 345 Anthropology and the Environment	4
ANTH 354 Quest for the Other: Tourism and Culture	4
ECON 381 Natural Resources and Environmental Economics	4
ENSP 307 Environmental History	4
ENSP 310 Introduction to Planning	3
ENSP 330 Energy, Technology, and Society	4
ENSP 404 Environmental Law	3
ENSP 416 Environmental Planning	3

Globalization and Identity Concentration

This concentration is designed for students interested in focusing on global economic and political change, how this affects people's access to wealth and power, and how it shapes their sense of self in an ever-changing world.

Breadth Courses (10 Units)**Geospatial Techniques**

GEOG 380 Remote Sensing and Image Processing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

The Biophysical Environment

GEOG 360 Geomorphology	4
GEOG 365 Biogeography and Landscape Ecology	4
GEOG 370 Weather and Climate	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	4

Field Course and Internship

GEOG 314AB Field Experience, Northern California	1-2
GEOG 314C Field Experience Beyond Northern California	2
GEOG 314D Field Experience Abroad	2-3
GEOG 315 Field Methods in Geography 2	2-3
GEOG 499 Internship	2-5

Concentration Courses (15-16 Units)

GEOG 302 World Regions in Global Context	4
GEOG 320 Geopolitics	4
GEOG 322 Liberation Ecologies: Globalization, Environment, and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 338 Social Geography	3
GEOG 345 Tourism Geographies	4
GEOG 350 Urban Geography	4

Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor

ANTH 352 Global Issues	4
ANTH 354 Quest for the Other: Tourism and Culture	
ECON 303 International Economics	4
ECON 403 Seminar in Economic Development	4
POLS 303 Intro to Comparative Government and Global Systems	4
POLS 304 Introduction to International Relations	4
POLS 452 Third World Political Systems	4
WGS 385 Gender and Globalization	4

Biophysical Environment Concentration

This concentration is designed for students interested in focusing on the natural environment, including weather and climate change, landform processes, and biophysical patterns and processes.

Breadth Courses (12 Units)**Geospatial Techniques**

GEOG 380 Remote Sensing and Image Processing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

Human Geography

GEOG 320 Geopolitics	4
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GEOG 322 Liberation Ecologies: Globalization, Environment, and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 345 Tourism Geographies	
GEOG 350 Urban Geography	4

Field Course and Internship

GEOG 314AB Field Experience, Northern California	1-2
GEOG 314C Field Experience Beyond Northern California	2
GEOG 314D Field Experience Abroad	2-3
GEOG 499 Internship	2-5

Concentration Courses (14 Units)

GEOG 315 Field Methods in Geography	2
GEOG 360 Geomorphology	4
GEOG 365 Biogeography and Landscape Ecology	4
GEOG 370 Weather and Climate	4
GEOG 372 Global Climate Change	4
GEOG 375 Natural Hazards	4

Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor

ENSP 309 Soil Science	3-4
ENSP 322 Conservation Biology	3-4
ENSP 427 Conservation Design	3
BIOL 300 Ecology	4
BIOL 330 Plant Taxonomy	4
BIOL 485 Biometry	4
GEOG 303 Advanced Principals of Geology	3
GEOG 304 Geological Mapping and Report Writing	1
GEOG 323 Hydrology	3
MATH 165 Elementary Statistics	4

Geospatial Techniques Concentration

This concentration is designed for students interested in geographic information science and its application in resource management, land-use planning, and land-change science.

Breadth Courses (9-10 Units)**Human Geography**

GEOG 320 Geopolitics	4
GEOG 322 Liberation Ecologies: Globalization, Environment, and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 345 Tourism Geographies	4
GEOG 350 Urban Geography	4

The Biophysical Environment

GEOG 360 Geomorphology	4
GEOG 365 Biogeography and Landscape Ecology	4
GEOG 370 Weather and Climate	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	4

Field Course and Internship	1-2
GEOG 314AB Field Experience, Northern California	1-2
GEOG 314C Field Experience Beyond Northern California	2
GEOG 314D Field Experience Abroad	2-3
GEOG 499 Internship	2-5

Concentration Courses (16-17 Units)

GEOG 315 Field Methods in Geography	2
GEOG 380 Remote Sensing and Image Processing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4
GEOG 487 Advanced GIS	3

Supporting Courses (7-8 Units)

Suggested courses, with substitutions possible in consultation with an advisor

Math 165 Elementary Statistics	4
CS 101 Introduction to Computers and Computing	3
CS 115 Programming I	4

Geography Major Without Concentration

This option is intended for students who wish to design their own major. It allows students to take a broader range of courses.

Breadth Courses (11-12 Units)

Geospatial Techniques	4
GEOG 380 Remote Sensing and Image Processing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

Human Geography

GEOG 320 Geopolitics	4
GEOG 322 Liberation Ecologies: Globalization, Env. and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 350 Urban Geography	4

Upper-Division Physical

GEOG 360 Geomorphology	4
GEOG 365 Biogeography and Landscape Ecology	4
GEOG 370 Weather and Climate	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	4

Elective courses in Geography (14-15 Units)

Supporting courses outside Geography (8 Units)

Minor in Geography

GEOG 203 Cultural Geography or GEOG 202: World Regional Geography	3
GEOG 204 Global Environmental Systems	4
Upper-division courses chosen in consultation with advisor	13

Total units in the minor 20

Sample Four-year Program for Bachelor of Arts in Geography

This suggested plan urges students to take one of the lower-division introductory geography courses in the spring of their freshman year. This plan does not identify a concentration, elective courses within the major, or supporting courses, both of which should be chosen after consultation with the Geography advisor(s). The sequence of courses is a suggestion only, so please see your Geography advisor each semester for assistance.

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
GE MATH (B4) (3)	GE PHIL 101 (A3) (3)
GE ENG 101 (A2) (3)	GE UNIV 200 (A1) (3)
GE (3)	GE GEOG 203 (D2) (3)
GE (3), University Elective (3)	GE (3), University Elective (3)

SOPHOMORE YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (14 Units)
GE (3)	GEOG 204 (B3) (4)
GE (3), GE (3)	GE (3), GE (3)
GE (3)	GE (3)
University Elective (3)	GEOG 205 (1)

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
Upper-Division GE (3)	Upper-Division GE (3)
GEOG (Upper-Div Regional) (4)	GEOG (Upper-Div. Human) (4)
GEOG (Upper-Div. Techniques) (4)	GEOG (Upper-Div. Physical) (4)
Upper-Div. Supporting (4)	University Elective (4)

SENIOR YEAR:: 31 Units

Fall Semester (16 Units)	Spring Semester (15 Units)
Geography Elective (4)	GEOG 490 (4)
Geography Elective (3-4)	Upper-Division Supporting (4)
Geography Elective (2)	Course or Internship (4)
Upper-Division GE (3)	Geography Elective (4)
University Elective (3-4)	University Elective (3)

TOTAL UNITS:: 120

Teaching Credential Preparation

The Geography Department participates in a teacher preparation program that certifies the subject matter competence in social sciences required for entry into a teaching credential program and exempts the student from taking the Praxis II Subject Assessment Examination in the social sciences. Geography majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact Miriam Hutchins, School of Social Sciences, (707) 664-2409.

GEOLOGY

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Programs Offered

Bachelor of Science in Geology
Bachelor of Arts in Earth Sciences
Minor in Geology
Minor in Paleontology
Secondary Education Teaching Credential Preparation

Geology is the study of the materials, structures, processes, and history of the earth. Philosophically, it allows us to realize our place in the physical universe within the enormity of geologic time. Practically, it leads to understanding of earth processes, the formation of rocks and minerals, and the energy supplies and materials that support our civilization.

The evolution of modern geologic thought is based on field studies and empiricism. A solid foundation in quantitative field and laboratory analysis provides a firm background in the principles of geology. Students take a fundamental curriculum that concentrates on the analysis of rocks and minerals, geologic mapping, and report writing. Required courses in physics, chemistry, and mathematics support understanding of geologic principles.

Careers in Geology and Earth Sciences

Within the general field of geology, students may choose from major programs that lead to either a B.S. in Geology or a B.A. in Earth Science. The B.S. in Geology provides an excellent background for graduate school and for work in geology in such fields as engineering geology, environmental geology, hydrology, and mineral exploration. Many of our geology graduates work for consulting firms with

specialties in one or more of these areas. The B.A. in Earth Science provides our students with the background to become teachers, environmental consultants, to work in the energy industry or in governmental positions. Because of the selectivity involved in choosing a program that meets their own particular interests and goals, students must consult with a departmental advisor about their plan of study and their course load each semester.

Bachelor of Science in Geology

This plan is intended to give the student basic professional competence in geology. A calculus-based series of support courses is highly recommended for students intending to pursue a more quantitative geoscience career. It provides an excellent foundation for graduate school or a professional career in the geosciences such as a Professional Geologist, Hydrologist, or Geophysicist registered with the State of California.

Degree Requirements	Units
General education	42*
Major requirements	50
Supporting courses	22-24
General electives	4-6
Total units needed for graduation	120

Major Core Requirements

GEOL 205/205a Mineralogy	4/1
GEOL 303 Advanced Principles of Geology	4*
GEOL 304 Geologic Mapping and Report Writing	1
GEOL 307 Igneous and Metamorphic Petrology	4
GEOL 308 Igneous and Metamorphic Field	1
GEOL 309 Computer Application in Geology	4
GEOL 311 Sedimentary Geology	4
GEOL 312 Sedimentary Geology Field	1
GEOL 313 Paleontology	4
GEOL 314 Paleontology Field	1
GEOL 317 Structural Geology	4
GEOL 318 Structural Geology Field	1
GEOL 420 Integrative Field Experience	4
GEOL 427 Advanced Field Geology	4
Total units in the major core	41

Major Electives

Choose 9 units of upper-division geology electives in consultation with a departmental advisor.

Total units in major electives 9

Required Supporting Courses

CHEM 115AB General Chemistry	10
PHYS 114 Introduction to Physics I or PHYS 210A General Physics	3/4

PHYS 116 Introductory Laboratory or PHYS 209A General Physics Laboratory	1
PHYS 214 Introduction to Physics II † or PHYS 210B General Physics †	3/4
PHYS 216 Introductory Laboratory † or PHYS 209B General Physics Laboratory †	1
MATH 161 Calculus I with Analytic Geometry	4*

Total units in supporting courses 22/24

Total units in the major 72/80

* The standard 51 units of GE are reduced by 3 units each from GEOL 102, GEOL 303, and MATH 161, which are major requirements. These three classes satisfy requirements in GE categories B1, B3, and B4, respectively.

† GEOL 310 may be substituted.

Sample Four-year Plan for Bachelor of Science in Geology

FRESHMAN YEAR:: 29 Units

Fall Semester (14 Units)	Spring Semester (15 Units)
GEOL 102 (3)	MATH 161 (4)
CHEM 115A (5)	CHEM 115B (5)
GE (6)	GE (6)

SOPHOMORE YEAR:: 28 Units

Fall Semester (15 Units)	Spring Semester (13 Units)
GEOL 303 (4)	GEOL 313 (4)
GEOL 304 (1)	GEOL 314 (1)
GEOL 205 (4)	GEOL 311 (4)
GEOL 309 (4)	GEOL 312 (1)
GE (2)	GE (3)

JUNIOR YEAR:: 29 Units

Fall Semester (14 Units)	Spring Semester (15 Units)
PHYS 114 (4)	GEOL 307 (4)
PHYS 116 (1)	GEOL 308 (1)
GEOL 317 (4)	GEOL 310 (4)
GEOL 318 (1)	GEOL 323 (3)
GE (4)	GE (3)

SENIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
GE (12)	GEOL 420 (4)
Geology Elective (3)	Geology Elective (3)
	GE (8)

SENIOR SUMMER:: 4 Units

GEOL 427 (4) [Summer Field Camp]

TOTAL SEMESTER UNITS:: 120

Bachelor of Arts in Earth Sciences

At the printing of this catalog, the B.A. in Earth Sciences has not completed the full approval process. The Geology Department hopes/plans to have the B.A. in Earth Sciences completely approved by the start of the Fall semester, 2011. Please see the department web page for updates on the B.A. in Earth Sciences.

Minor in Geology

Completion of a minimum of 20 units from Geology Department courses will constitute a minor in geology. Six of the 20 units must be upper-division. Students should consult with an advisor in the Geology Department regarding required courses.

Minor in Paleontology

PROGRAM COORDINATOR

Matthew J. James / Geology Department (707) 664-2301,
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ADVISORS

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Minor in Paleontology

The Minor in Paleontology offers students from any major on the SSU campus a cross-disciplinary concentration in the study of ancient life on Earth. Paleontology is by its very nature an interdisciplinary field of study, blending both laboratory and field studies of modern organisms and extinct organisms. Some paleontologists approach the field from a geological perspective, and others approach it from a biological perspective. For a Minor in Paleontology, students must complete 20 units as described below.

Minor Core Requirements

	Units
GEOL 102 Our Dynamic Earth	3
GEOL 313 Paleontology	4
BIOL121 Diversity, Structure, and Function, or BIOL 122 Genetics, Evolution, and Ecology	4

Total units in the minor core 11

Minor Electives

In addition to the Minor Core, choose 9 units of electives from other paleontology courses and/or courses with an emphasis on

interpreting the history of life on Earth, and at least 1 unit that is a field course (marked by asterisk below). All SSU majors may select the Minor in Paleontology, and if you are majoring in either Biology or Geology, at least 3 upper division elective units must be from outside your home department. Additional courses may be counted toward the minor with approval of one of the minor advisors above. The 9 elective units must include at least one 4-unit upper division course with a laboratory from the following list:

ANTH 301 Human Fossils and Evolution	4
ANTH 326 Bioarchaeology [Topics in Archaeology]	4
ANTH 412 Human Osteology	4
†ANTH 415 Forensic Anthropology	4
†BIOL 220 Human Anatomy	4
†BIOL 322 Invertebrate Biology	4
†BIOL 327 Vertebrate Biology	4
†BIOL 328 Vertebrate Evolution and Morphology	4
BIOL 385 Biology of the Dinosaurs	3
GEOG 370 Weather and Climate	4
GEOG 372 Climate Change	4
GEOL 105 The Age of Dinosaurs	3
GEOL 120 Regional Field Geology	3
GEOL 302 Geology of Climate Change	3
†GEOL 303 Advanced Principles of Geology	4
*GEOL 304 Geologic Mapping and Report Writing	1
*GEOL 314 Paleontology Field Course	1
*GEOL 321 Burgess Shale Paleontology	3
†GEOL 326 Stratigraphy and Earth History	4
Total elective units in the minor	9

* Field courses – one course is required for the minor

† 4-unit laboratory courses – one course is required for the minor

Some of these elective courses above might have additional prerequisites not listed here. Refer to the University catalog for additional information.

Total units for the paleontology minor 20

Secondary Education Teaching Credential Preparation

Geology and Earth Science students must demonstrate competence in the natural sciences by passing the subject matter examination required by the California Commission on Teacher Credentialing (CCTC). One part of the examination will test breadth of knowledge in biology, chemistry, physics, astronomy, and geology. Another part of the examination will test depth of knowledge in a particular area, such as geology. The B.S. in Geology or the B.A. in Earth Science degrees are recommended to prepare for the part of the examination that tests depth of knowledge in geology. For recommended course selection to help prepare for the part of the examination that tests breadth of scientific knowledge, please see the Teaching Credential section of the SSU catalog. GEOL 107, Introduction to Earth Science, is specifically designed for students who are preparing to take the CCTC single-subject exam.

For more information, please contact the Department of Geology, (707) 664-2334.

Department Policy for Senior Theses (GEOL 426A/426B)

1. The student must have a 3.00 or higher departmental grade point average.
2. The student must have demonstrated ability to work independently and do quality work in both the lecture and field classes.
3. The student must have time in his/her schedule to complete two semesters of research (three credit hours each) and register for both 426A (in the Fall) and 426B (in the Spring).
4. The student must submit a detailed proposal of research, a schedule, a budget and an initial hypothesis.
5. The student must have a faculty sponsor who is willing to advise the project and will set up a schedule of meetings for this purpose.
6. Two copies of the final paper/report will be filed with the department office before a grade will be assigned.
7. The student will present the results of her/his project at the department colloquium.

GERONTOLOGY

DEPARTMENT OFFICE

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PROGRAM COORDINATOR

Susan Hillier Ferreira

ADMINISTRATIVE ANALYST

Janet Henker

ADMINISTRATIVE COORDINATOR

Mary Hanson

Programs Offered

Minor in Gerontology

Certificate in Gerontology

Career Minor in Health Systems Organization (Career Minors)

Master's Degree Option (Interdisciplinary Studies)

The study of gerontology provides students with a broad, multidisciplinary perspective to examine the aging process and to understand the significance of age in biological, social, cultural, psychological, and political processes. Participation in the gerontology program encourages students to view aging as a normal part of the life cycle, to become aware of the aging process so that they may view it in others with understanding, and eventually in themselves with equanimity, and to consider work in the field of aging.

Careers in Gerontology

Gerontology prepares students for working directly with elders in program development (health promotion, intergenerational activities, social service centers, community agencies, and retirement communities); direct care (care to frail, ill, or impaired elders in hospitals, clinics, nursing homes, adult day care, or home care programs); counseling elders and their families about caregiving issues, employment, death and dying, or mental health; and advising elders about estate planning and investments, financing long-term care, or housing options. It also prepares students for working on behalf of elders, by analyzing issues related to elders such as retirement opportunities, income maintenance, health care and housing; planning, administering, and evaluating community-based services and service delivery systems for older persons; advocating with or on behalf of elders; designing products to meet the special interests and needs of elders; and advising business, industry, and labor regarding older workers and consumers. Many students continue their education through graduate work in social work, nursing, psychology, and kinesiology.

The gerontology program focuses primarily upon the experience of aging in the United States, although comparative analyses of other societies are developed. By applying an integrated liberal arts perspective to the issues, problems, and dilemmas posed by a longer

life span and a dramatically increased population of older persons, students develop their critical faculties and problem-solving abilities. The field of gerontology offers students opportunities to engage in firsthand research, to develop conceptual analyses, and to plan community projects, as well as to develop a strong background for career development. Those who already work as volunteers or staff in agencies serving the elderly will find the gerontology program valuable in updating their training. Students who plan to pursue professional degrees in psychotherapy, medicine, dentistry, nursing, or social work will find that participation in the gerontology program will assist them in understanding the problems of their future clients. Students may choose to complete (1) the minor in gerontology, (2) a certificate in gerontology, or (3) a special major in gerontology at either the bachelor's or master's levels. In the special major program, students construct individually designed interdisciplinary majors in consultation with the gerontology program coordinator and special major advisor.

Minor in Gerontology

Students must complete the following 22-unit program:

Minor Core Requirements

BIOL 318 Biology of Aging	3
GERN 300 The Journey of Adulthood	3
GERN 319 Aging and Society OR	
GERN 432 Group Work with Older Adults	4
GERN 499 Gerontology Practicum	4
GERN 421 Psychology of Aging	4
Total units in the minor core	18

Minor Electives

Choose courses to total a minimum of 4 units from the following list:

AMCS 435 Ethnicity and the Life Cycle	3
BIOL 224 Human Physiology	3
BIOL 307 Human Nutrition	4
GERN 304 Sibling Relations	4
GERN 312 Adult Development Lecture Series	2
GERN 332 Death and American Culture	4
GERN 408 Transitions in Adult Development	4
GERN 422 Living and Dying	4
GERN 452 Health Care and Illness	4
GERN 493 Narrative: Theories & Methods	4
NURS 493 Health Care Delivery and Financing	3
KIN 360 Physiology of Exercise	4
KIN 410 Lifespan Motor Development	3
NURS 504A Health Care Delivery and Financing	2
NURS 504B Health Care Delivery and Financing	2
PSY 404 Psychology of Women	4

Total units in minor electives 4

Total units in the minor 22

Certificate in Gerontology

The 28-unit certificate program is open to those students who are completing or who have received a bachelor's degree.

Certificate Core Courses

BIOL 318 Biology of Aging	3
GERN 300 The Journey of Adulthood	3
GERN 319 Aging and Society OR	
GERN 432 Group Work with Older Adults	4
GERN 499 Gerontology Practicum	8
GERN 421 Psychology of Aging; or	
GERN 500 Social and Psychological Issues in Aging	4
Total units in the certificate core	22

Certificate Electives

Choose courses to total a minimum of 6 units from the minor electives list above.

Total units in the certificate electives	6
Total units in the certificate	28

GLOBAL STUDIES

DEPARTMENT OFFICE

Geography and Global Studies
Stevenson Hall 3066
(707) 664-2194

MAJOR COORDINATOR

Rheyne Laney (707) 664-2183

Programs Offered

Bachelor of Arts in Global Studies

Minor in Global Studies

The Bachelor of Arts in Global Studies is an interdisciplinary program that prepares students for international or intercultural service through the study of other cultures, world history, political and economic systems, world geography and environment, cross-cultural communication and conflict resolution, and a modern language. Recognizing the increasing interdependence of the world and the global nature of contemporary issues, the major is designed to increase awareness and understanding of other cultures and systems as well as global issues, while developing the skills needed to work effectively in a global or multicultural context.

The major requirements include foundational courses, basic areas, an integrative seminar, a field of concentration, a capstone seminar project, intermediate (or better) proficiency in a second language, a cross-cultural living or work experience, and a service internship. Since the foundational and basic area requirements include general education courses, students may meet 18 units of GE while completing major requirements. The approved concentrations include Europe, Latin America, Asia, international economic development, and global environmental policy. In exceptional cases, with the approval of the Global Studies Steering Committee, students may also develop individual concentrations in other disciplines or regions.

Intermediate-level (or higher) proficiency in a modern language other than English is required of all global studies majors. Students may demonstrate this proficiency either by passing an intermediate-level proficiency exam or by completing a fourth-semester standard language course (202 [plus lab] or equivalent) with a grade of C or better.

All global studies majors are expected to participate in an intensive cross-cultural experience of at least three months duration, during which they speak primarily a language other than their mother tongue. Students normally will meet this expectation by studying or working abroad. When travel abroad is impossible, students may arrange an extended cross-cultural experience closer to home, e.g., living and working for a summer in an immigrant community. (Students who have spent extended time in other than mainstream-U.S.-American circumstances, speaking a language other than English, may already have met this expectation.)

Students interested in declaring a global studies major are urged to take MATH 165 to meet the GE requirement for mathematics, category B.

Careers in Global Studies

Most global studies majors intend to pursue international careers. Positions most readily available to new graduates without specialized training are with non-profits such as the federal government (Peace Corps, Foreign Service), international service agencies (CARE, UNICEF, or Direct Relief International), and English-language teaching jobs.

Many overseas careers require an advanced degree (e.g., law, business, and international affairs) and/or working your way up within an organization and positioning yourself for an international assignment.

Bachelor of Arts in Global Studies

Degree Requirements	Units
General education	51
Foundational requirements	14-31
Breadth Requirements	14-15
Concentration	20
Capstone requirements	11
General electives	0-5
Total units needed for graduation	120-134

Note: Courses required for the major must be taken for a traditional letter grade, except for courses that are offered Cr/NC only. Students must earn a C- or better in any course applied to the major.

I. Foundational Requirements (14-31 units)

1. Language Skills (0-16 units)

Intermediate level proficiency in a modern language other than English, except where noted

2. Global Cultures (choose one)

ANTH 203 Cultural Anthropology (D1)	3
GEOG 203 Cultural Geography (D2)	3

3. Global Environment (choose one)

ENSP 200 Global Environmental Issues (D5)	3
GEOG 204 Global Environmental Systems (B3)	4

4. Economic Perspectives

ECON 204 Macroeconomics (D5)	4
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5. Global Issues (all required)

GLBL 300 Local Responses to Global Issues (D1)	3
GLBL 350A Introduction to Community Service	1
GEOG 302 World Regions in Global Context (D5)	4

II. Breadth Requirements (14-15 Units)

(One course from each of the following four areas)

1. Political Ideas and Institutions

POLS 303 Comp. Govt and Global Systems	4
POLS 304 Intro. to International Relations	4
POLS 315 Democracy, Capitalism, Socialism (D5)	4
POLS 452 Third World Political Systems	4

2. Historical Perspectives

HIST 202 Dev. of the Modern World (D2)	3
HIST 380 20th Century World (D2)	3

3. Globalization and its Social Impact

ANTH 352 Global Issues	4
GEOG 322 Liberation Ecologies: Globalization, Environment, and Social Movements	4
WGS 385 Gender and Globalization	4

4. Religious and Ethical Perspectives

PHIL 302 Ethics and Human Value Theory (C3)	3
SOC 305 Holocaust Lecture Series (D5)	4
SOC 431 Sociology of Religion (C3)	4
HUM 301 War and Peace Lecture Series (C3)	3

III. Upper-Division Concentrations (20 units minimum)

Students take at least 20 upper-division units in one of the five approved concentrations: Europe; Latin America; Asia; Economic, Political and Social Development; and global environmental policy. Concentrations are described below. In exceptional cases, with the approval of the Global Studies Steering Committee, students may also develop individual concentrations in other disciplines or regions.

No courses used to satisfy breadth requirements may be used to satisfy the concentration requirements. The combination of courses chosen to meet concentration requirements must be approved by the Global Studies advisor.

IV. Capstone Requirements (11 units)

1. Experiences

Cross Cultural Experience

All majors are expected to participate in an intensive cross-cultural experience of at least three months' duration, during which they speak primarily a language other than their mother tongue. Students normally will meet this expectation by studying or working abroad.

GLBL 497 Community Service Internship	3
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2. Classes

GEOG 320 Geopolitics	4
GLBL 498 Senior Capstone Thesis	4

Europe Concentration

Students must take two survey courses from group I, and choose more courses in their regional specialty (groups II-V) to meet the 20-unit minimum.

Students choosing groups III, IV, and V must demonstrate advanced proficiency (American Council on the Teaching of Foreign Languages scale definition) in the language of the respective culture (French, Spanish, German, or other appropriate language), either by passing an advanced-level proficiency exam or by successfully completing a third-year standard language course with a grade of "C" or higher.

Group I: Survey Courses (select two)

HIST 410 Early Modern Europe (1350-1789)	4
HIST 411 the Enlightenment to WWI (1650-1914)	4
HIST 412 Europe Since 1914	4
POLS 350 European Parliamentary Democracies	4
POLS 345 Model United Nations (when European focus)	4

Group II: British Isles

HIST 426 Britain and Ireland (1399-1714)	4
HIST 428 Modern Britain (1714-present)	4
ENGL 240 Survey: Later English Literature (post 1789)	4
ENGL 448 Periods in English Literature (Victorian to the present)	4
HIST 498 Senior Sem: The Atlantic World (1450-1800)	4

Group III: France

FREN 320 France Yesterday (prereq= FREN 300)	4
FREN 321 France Today (prereq= FREN 300)	4
FREN 411 French Literature (prereq= FREN 321)	4
FREN 415 Special Topics in French Culture	4
HIST 420 The French Revolution	4
HIST 498 Senior Sem: The Atlantic World (1450-1800)	4

Group IV: Iberia

HIST 382 The Mediterranean World (1400-1700)	4
HIST 498 Senior Sem: The Atlantic World (1450-1800)	4
HIST 422 Imperial Spain	4
SPAN 306 Cultures of Spain	4
SPAN 401 Peninsular Literature	4
SPAN 491 Seminar in Literature (with Iberian topic)	4

Group V: Central / Eastern Europe

HIST 415 Eastern Europe (1815-1918)	4
HIST 416 Eastern Europe (1918-1989)	4
HIST 417 Origins of Modern Russia	4
HIST 418 Fall of European Communism	4
HIST 419 Soviet Union	4
HIST 498 Senior Seminar (when Eastern European topic)	4
POLS 351 Politics of Russia	4
POLS 352 Politics of Eastern Europe	4
MUS 324 Sonoma County Bach Choir	2
MUS 343 Studies in Musical Genres (when European)	2
SOCI 305 Holocaust Lecture Series	3

Latin America Concentration

Students must take two survey courses from group I and choose more elective courses to meet the 20-unit minimum.

Group I: Survey Courses (select at least two)

GEOG 392 Latin American and the Caribbean	4
HIST 339 Ancient and Colonial Latin America	4
HIST 342 Modern Latin America	4
POLS 453 Political Systems of Latin America	4
SPAN 307 Cultures of Latin America	4

Group II: Elective Courses

GEOG 314D Field Experience Abroad (when Latin America)	2-3
ECON 403 Seminar in International Economic Development	4
HIST 348 Race and Ethnicity in Latin America	4
HIST 433 History of Mexico	4
HIST 449 Gender and Sexuality in Latin America	4
SPAN 402 Latin American Literature	4
SPAN 491 Seminar in Literature (when Latin American focus)	4
POLS 345 Model United Nations (when Latin American focus)	4

Asia Concentration

Students must take four history and political science courses from group I and choose two arts and humanities classes (group II) to meet the 20-unit minimum.

Group I: History and Political Science (select four)

HIST 338 Early Japan to 1650	4
HIST 438 Modern Japan	4
HIST 335 Early China to 1500	4
HIST 435 History of Modern China	4
HIST 436 Class and Gender in Modern East Asia	4
HIST 498 Senior Sem: The Pacific since 1500	4
HIST 498 Senior Sem: Asian Revolutions	4
POLS 450 The Politics of Asia	4
POLS 345 Model United Nations *	4

Group II: Arts and Humanities (choose classes from different departments)

ARTH 474 Islamic Art	3
ARTH 480 Selected Topics *	3-4
LIBS 320C The Arts and Human Experience *	3
MUS 301 The Sacred Traditions of South Asia	3
MUS 352 History, Music and Secular Traditions of South Asia	3
PSY 342 Psychology of Meditation	3-4
PSY 352 Psychology of Yoga	3-4
PHIL 390 Advanced Topics in Philosophy *	4

* when Asian Topic

Economic, Political and Social Development

Students select courses in consultation with an advisor, with no more than 8 units from a single department.

ANTH 352 Global Issues	4
ANTH 354 Quest for the Other: Tourism and Culture	4
BUS 393 Introduction to International Business	4
BUS 494 International Business Strategy	4
COMS 321 International Communications	4
ECON 303 International Economics	4
ECON 403a Seminar in Int'l Economic Development (prereq ECON 303)	4
ECON 403b Seminar in Int'l Trade (prereq ECON 303)	4
ENSP 330 Energy, Technology, and Society	4
GEOG 322 Liberation Ecologies: Globalization, Environment and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 345 Tourism Geographies	4
POLS 304 Introduction to International Relations	4
POLS 345 Model United Nations, when developing world	4
POLS 447 Nonviolent Strategies in International Relations	4
POLS 448 Political Violence, Terrorism and Law	4
POLS 452 Third World Political Systems	4
POLS 486 International Political Economy	4
WGS 385 Gender and Globalization	4

Global Environmental Policy Concentration

Students select courses in consultation with an advisor, with no more than 10 units from a single department. Please be attentive to prerequisites within the ENSP major.

ANTH 345 Anthropology and the Environment	4
COMS 323 Environmental Communications	4
ECON 381 Natural Resource and Environmental Economics	4
ENSP 302 Applied Ecology	3-4
ENSP 303 The Physical Environment	3-4
ENSP 306 Environmental Ethics	3
ENSP 307 Environmental History	4
ENSP 310 Introduction to Planning	3
ENSP 315 Environmental Impact Reporting	3
ENSP 322 Conservation Biology	4
ENSP 330 Energy, Technology, and Society	4
ENSP 401 Environmental Policy	4
ENSP 416 Environmental Planning	3
GEOG 322 Liberation Ecologies	4
GEOG 340 Conservation of Natural Resources	4
GEOG 345 Tourism Geographies	4
GEOG 372 Global Change: Past, Present, and Future	4
SOCI 482 Sociology of the Environment	4

Overseas Concentrations (20 units)

A wide variety of concentration options exist for students who study abroad under the auspices of the CSU International Program (IP). Coursework to be included in such concentrations will depend on the offerings available at the respective foreign universities. Students interested in pursuing such an individualized concentration should consult their Global Studies advisor and the SSU Study Abroad advisor as soon as they have decided which IP study abroad option they intend to pursue.

Global Studies Minor

With the exception of courses taken to fulfill the language skills requirement, only 4 units may double count with a student's GE requirements. Students who have met requirements through GE will take additional elective classes to meet the 20 unit minimum.

Core Courses (all required)

ECON 204 Macroeconomics (D5)	4
GEOG 302 World Regional Geography (D5)	4
GLBL 300 Local Responses to Global Issues (D1)	3
HIST 380 20th Century World (D2)	3

Language Requirement

Students will demonstrate an intermediate-low level proficiency in a foreign language. This may be met by taking 4-5 units of a foreign language at the 102 level or higher.

Global Cultures (choose one)

ANTH 203 Cultural Anthropology (D1)	3
GEOG 203 Cultural Geography (D2)	3

Globalization and its Social Impact (choose one)

ANTH 352 Global Issues	4
GEOG 322 Liberation Ecologies	4
WGS 385 Gender and Globalization	4

Electives (take additional classes to meet the 20 unit minimum)

ANTH 352 Global Issues	4
ANTH 354 Quest for the Other: Tourism and Culture	4
BUS 393 Introduction to International Business	4
COMS 321 International Communications	3
ECON 303 International Economics	4
ENSP 330 Energy, Technology, and Society	4
GEOG 322 Liberation Ecologies	4
GEOG 335 Global Food Systems	4
GEOG 345 Tourism Geographies	4
POLS 304 Introduction to International Relations	4
POLS 345 Model United Nations	4
POLS 447 Nonviolent Strategies in International Relations	4
POLS 448 Political Violence, Terrorism and Law	4
POLS 452 Third World Political Systems	4
POLS 486 International Political Economy	4
WGS 385 Gender and Globalization	4

HEALTH PROFESSIONS ADVISORY PROGRAM

Darwin Hall 200
(707) 664-2535
www.sonoma.edu/hpac

The Health Professions Advisory Program at Sonoma State University is an advising and support system for undergraduates and post-baccalaureate students preparing for careers in various health professions, including allopathic medicine, osteopathic medicine, dentistry, veterinary medicine, podiatry, optometry, pharmacy, physical therapy, physician assistant, and chiropractic medicine. Please note that advising for physical therapy and nursing are done by the Departments of Kinesiology and Nursing, respectively.

Students interested in entering the health professions will select an appropriate major for undergraduate study. Since a majority of the courses required for admission to health-related programs are in the sciences, most students earn degrees in biology or chemistry before going on to professional schools, although many non-science majors are being accepted.

Most health professions schools require a bachelor's degree for admission, although schools of dentistry, pharmacy, physician assistant, and chiropractic medicine may require fewer units and courses for admission. The following outline of courses will meet the requirements for admission to most medical schools. Since medical schools generally have the most rigid course requirements among the health professions schools, these courses will generally meet or exceed the requirements for other health professions schools. However, it is important to examine closely the requirements for any program and school and take courses to fulfill those requirements. Requirements for entrance into the University of California, Davis, Veterinary Medicine program are different from those for other health professions schools. Pre-veterinary students should consult an advisor in the biology department.

Courses Required for Admission to Health Professions Schools

The following courses are most generally required for admission to health professions schools:

<i>Biology</i>	<i>Units</i>
General biology (through cellular and molecular biology)	8-12
Some medical schools also require an upper-division course in cell biology or genetics.	
<i>Chemistry</i>	
Inorganic or general chemistry	10
Organic chemistry	8-10
Some schools also require biochemistry.	
<i>English</i>	
Composition and Literature	6
<i>Physics</i>	
A one-year course with lab	8

Mathematics

Some schools require a year of college mathematics and/or a calculus course or statistics. 4-8

Foreign Language

A few schools recommend a modern foreign language course. 0-8

Psychology

An introductory psychology course is recommended by some schools. 3

Courses for Health Professions

The following courses at Sonoma State University will generally fulfill the required or recommended courses suggested above:

BIOL 121* Diversity, Structure, and Function	4
BIOL 122* Genetics, Evolution, and Ecology	4
BIOL 123* Molecular and Cell Biology	4
BIOL 328 Vertebrate Evolutionary Morphology	4
BIOL 349 Animal Physiology	4
BIOL 342 Molecular Genetics	4
BIOL 344 Cell Biology	4
BIOL 472 Developmental Biology	4
CHEM 115AB* and 116AB* General Chemistry and Lab	10
CHEM 335AB* Organic Chemistry	8
CHEM 446 Biochemistry	3
PHYS 210AB* and 209AB* General Physics and Lab	8
ENGL 101 and 214 Expository Writing and Literature	6
MATH 161 Calculus	4
MATH 165 Elementary Statistics	4
PSY 250 Introduction to Psychology	3

* Required courses for all California medical schools.

Applicants with a grade point average below 3.00 are almost never considered by medical school admissions committees, and few students with a grade point average below 3.40 are accepted.

In addition to the required courses, most health professions students are required to take an appropriate standardized examination such as the Medical College Admissions Test, Dental Admissions Test, or the Graduate Record Examination at, or before, the time of application.

The School of Science and Technology Health Professions Advisory Committee (HPAC) has been established to offer assistance to students interested in careers in the health professions. The main functions of the committee are to:

1. Advise students on how best to prepare for admission to health professions schools. Since the Sonoma State University campus is small, the HPAC has the opportunity to communicate with students on a personal basis. Individual departments may also have pre-health professions advisors;
2. Evaluate candidates and write letters supporting their admission to health professions schools;

3. Provide a practice admissions interview for candidates applying to health professions schools;
4. Coordinate a one-credit university course (Science 150, Introduction to Careers in the Health Professions – offered in fall semester only). This course offers general information sessions by the course coordinator and several guest speakers (health care providers and health professions school admissions officers); and
5. Maintain career information related to health professions, including catalogs from various schools and registration materials for examinations, and centralized application services required for admission to certain programs such as medicine, osteopathic medicine, veterinary medicine, podiatry, and dentistry.

There is a student-run Pre-Health Professions Club on campus. This club meets bi-weekly and brings students of similar interests in the health professions together. In addition, the club arranges for field trips to many health professions schools and speakers related to different health professions.

The chair of the HPAC is the advisor to the Pre-Health Professions student club.

Students interested in a career in the health professions are strongly encouraged to meet with a health professions advisor immediately upon enrolling at Sonoma State University. Appointments to meet with the chair of the HPAC can be made through the HPAC office in Darwin Hall, Room 200, (707) 664-2535. Visit the committee website (www.sonoma.edu/hpac) for more information.

HISTORY

DEPARTMENT OFFICE

Stevenson Hall 2070

(707) 664-2313

www.sonoma.edu/history

DEPARTMENT CHAIR

Michelle Jolly

ADMINISTRATIVE STAFF

Jill Martin, Julie Wood

Faculty

*Judith Abbott / Medieval Europe and Rome

Theresa Alfaro-Velcamp / Mexican, Latin American, Borderlands History

Stephen Bittner / Russia, Soviet Union, Eastern Europe

Randall A. Dodgen / Asia and the Pacific Basin

Steve Estes / Modern United States History

Mary Halavais / Early Modern Europe, Spain and Latin America

Michelle Jolly / Colonial and Antebellum U.S., California and the West, U.S. Women's History

Amy Kittelstrom / U.S. 1870-1920, Transnational Culture, Ideas, and Religion

Kathleen Noonan / Britain and Ireland, Early Modern Europe, Colonial America

*William Clay Poe / Ancient Near East, Archaeology and Egyptology, Religious Ideas

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Arts in History

Master of Arts in History

Minor in History

Teaching Credential Preparation

The study of history involves the study of all human thought and action, ranging from the economic and the political to the psychological and the artistic. Combining the perspectives and methods of the social sciences and the humanities, it seeks to comprehend the problems and challenges faced by individuals and societies in the distant and recent past, nearby and far away. This understanding of the human experience provides the necessary historical perspective to explain the present. In the process of making sense of our collective and individual past, the student of history develops research, analytical, and communication skills which can be drawn upon in a variety of careers. History majors from Sonoma State have developed careers in journalism, teaching, law, business, public consulting and research, museum and records management, genealogy, library science, and government service.

The history major is designed both to provide the basis for a solid liberal arts education and to meet the needs of individual students. Within the specific requirements of the major, students receive basic instruction in the history of the United States as well as that of other countries. They are also introduced to the methods of historical inquiry, techniques of historical writing, differing philosophies of history and historiography, past and present. Beyond these basic requirements, students may arrange course work to fit their needs and interests. Upper division classes are generally small and offer ample individual attention, guidance, and interaction between students and faculty.

Careers in History

A history major's skills in historical analysis, writing, and research are highly useful in a variety of careers and professions. In addition to preparation for teaching and graduate work within the discipline of history, the history major provides an excellent background for many post-baccalaureate programs, including law, business, library sciences, and cultural resources management. Public history is a growing field, with careers in government, museums, and historic parks.

Students who plan to pursue graduate work or a teaching career should seek advising early regarding their plan of study. Those who plan extensive graduate study are strongly encouraged to take foreign language courses and to consider the history honors program. Prospective K-12 teachers should prepare for the credential program by taking the relevant prerequisites in education, working with young people of the appropriate grade level, and preparing early for the state teacher and content exams. Through the history department internship program, students may earn credit for history-related internships in a wide variety of areas, such as local museums, historical societies, businesses, and schools.

History Department Learning Objectives

The History Department at Sonoma State prepares its students to analyze primary and secondary sources and understand the subjectivities inherent in such texts. During their final year, students must take Senior Seminar (HIST 498), where they write and orally present twenty- to forty-page research papers, which are based on primary and secondary sources, and which identify key historiography.

Objectives:

1 – Analyze and use primary and secondary sources.

Students learn to differentiate between primary and secondary sources and to evaluate the reliability of such sources.

2 – Understand historical debate and controversies.

Students learn to understand diverse interpretations and to examine different sides of historical debates.

3 – Gain an understanding of historiography in given region and time period.

Students learn to understand the ways historians in given regions and time periods have approached history and how the field has changed as new evidence is uncovered and re-examined.

4 – Understand how to use evidence in writing research papers.

Students learn to use leading historical journals, texts, and primary sources to examine the ways historians build arguments from evidence. Students in the history program also learn to use proper citations.

5 – Productive skills: writing and oral expression.

Students hone their writing and speaking skills and learn to articulate an argument regarding key historical events.

History Honors Program

Eligible* students must have completed the major core requirements, except for the Senior Seminar, to earn the honors degree:	12
HIST 498 (or designated Senior Seminar)	4
HIST 499 Honors Seminar (to complete an Honors Thesis)	4
Total units needed for history honors degree	44

*Eligibility for the history honors degree:

1. A 3.50 GPA at Sonoma State University or overall; and
2. Demonstrated proficiency in a foreign language.

Minor in History

Students contemplating a minor in history should consult the History Department for advising early in their academic careers. Courses graded Cr/NC are not applicable to the history major.

Minor Core Requirements

<i>One Lower-Division Course in World History</i>	3
EITHER HIST 201 Foundations of World Civilization	
OR HIST 202 Development of the Modern World	
<i>(Completion of either HIST 201 or HIST 202 also satisfies GE area D2.)</i>	

<i>One Lower-Division Course in United States History</i>	3
EITHER HIST 251 History of the United States to 1877	
OR HIST 252 History of the United States since 1865	
<i>(Completion of either HIST 251 or HIST 252 also satisfies GE area D3.)</i>	

Total units in the minor core 6

Minor Electives

To finish the history minor, students must complete 16 units of upper-division work in history, usually 4 courses. Students may not count additional lower-division units toward the minor.

Total units in minor electives 16

Total units in minor 22

Bachelor of Arts in History

The B.A. in history is a 40-unit program that students plan in consultation with a departmental advisor. Courses graded Cr/NC are not applicable to the history major, except in the cases of HIST 497 Internships and HIST 496 History Journal, where 3 units of Cr/NC are accepted.

Degree Requirements	Units
General education	51
Major requirements	40
General electives	29
Total units needed for graduation	120

Major Core Requirements

HIST 201 Foundations of World Civilization	3-4*
HIST 202 Development of the Modern World	3-4*
<i>*History majors may replace HIST 201 with HIST 303, 335, 339, 400, 401 OR replace HIST 202 with HIST 337, 342,383,411, or 412. Either HIST 201 OR HIST 202 MUST be taken. Completion of either HIST 201 or HIST 202 satisfies GE requirement, Area D2.</i>	
HIST 251 The United States to 1877	3-4**
HIST 252 The United States Since 1865	3-4**
<i>**History majors may replace HIST 251 with HIST 351 OR replace HIST 252 with HIST 252, 445, 446, 468, 470, or 477. Either HIST 251 OR HIST 252 MUST be taken. Completion of either HIST 251 OR HIST 252 satisfies GE requirement, Area D3.</i>	
HIST 498 Senior Seminar	4
Total units in the major core	16-18

Major Electives

To finish the major, students must complete additional units in history to total 40 units. These units must include one upper-division course in European history and one course on an area of the world other than the United States or Europe (upper-division substitute for HIST 201/202 may not count for this). Three (3) units of electives can be lower-division; the remaining 20-21 units must be upper-division.

Total units in major electives 22-24

Total units in the major 40

Sample Four-Year Program for Bachelor of Arts in History

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)

GE PHIL 101 (A3) (3)
 GE ENGL 101 (A2) (3)*
 GE Electives (B1, C1, C2) (9)

Spring Semester (15 Units)

GE HIST 201 (3)*
 GE HIST 251 (D3) (3)*
 GE Electives (A1, B2, B4) (9)

SOPHOMORE YEAR:: 31 Units

Fall Semester (15 Units)

GE HIST 202 (3)*
 GE HIST 252 (3)*
 GE Electives (C2, B3, D5) (9)

Spring Semester (16 Units)

GE Electives (6)
 Electives (including HIST) (10)

JUNIOR YEAR:: 30 Units

Fall Semester (16 Units)

History Elective (4)
 History Elective (4)
 UD GE (D4) (3)
 Electives (5)

Spring Semester (14 Units)

History Electives (8)
 UD GE (C4) (3)
 UD GE (C5) (3)

SENIOR YEAR:: 29 Units

Fall Semester (14 Units)

History Electives (8)
 Electives (6)

Spring Semester (15 Units)

HIST 498 (4)
 Electives (11)

TOTAL UNITS:: 120

* ENGL 101 (or its equivalent) is a prerequisite for HIST 201, 202, 241, 242, 251 and 252.

Teaching Credential Preparation

History majors—or majors in other programs—interested in seeking a general elementary credential or secondary school credential for social sciences may demonstrate subject matter competency by passing the CSET Multiple Subjects Exams or the CSET Single Subject Exam in Social Science. For further information and guidance, contact Steve Estes, Department of History, (707) 664-2424.

Master of Arts in History

Requirements for Admission

1. B.A. degree from an accredited institution. Students with undergraduate majors in fields other than history will be required to complete prerequisites before entering the program;
2. Grade point average of 3.00 or better in the undergraduate history major (and in previous graduate courses attempted) as evidenced by the transcripts furnished. Grade point average of 3.20 or better in history for non-majors;

3. Completion of the general test Graduate Record Examination with scores acceptable to the departmental Graduate Studies Committee;
4. Three letters of recommendation, completion of program application and personal statement, and a writing sample;
5. Completion and acceptance of separate application for admission to the University (Office of Admissions and Records). GRE test scores required; and
6. Favorable recommendation for admission by the departmental Graduate Studies Committee after review of the complete file. This confers advancement to classified standing as a graduate student.

For more information, please refer to Graduate Degrees in the Degree Requirements section of this catalog.

Requirements for the M.A.

1. Advancement to candidacy form (M.A. in history) signed and submitted to Graduate Office;
2. Grade point average of 3.00 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 chair and the graduate advisor, a maximum of 9 units of post-graduate transfer or extension credit (or any combination of the two) may be included as part of the student's specific pattern of study. All courses are to be taken for letter grade;
3. All requirements for the M.A. degree in history, including language and conditional requirements stipulated at the time of admission to candidacy, must be satisfactorily completed within seven years from the time the first course is completed. Completion of Requirements form must be signed and submitted to the graduate office; and
4. With the approval of the student's committee chair and the departmental graduate advisor, the satisfactory completion of one of the following two options:

Master's Thesis Option

(Chosen in consultation with committee chair):

Courses at the 300 or 400 level	15
Graduate courses at the 500 level (including two seminars)	9
HIST 599 Master's Degree Thesis Research	6

Total units required for the M.A. 30

Comprehensive Examination Option

(Chosen in consultation with committee chair):

Courses at the 300 or 400 level	15
Graduate courses at the 500 level (including HIST 500 and 510)	9
HIST 598 Comprehensive Examination Reading and Research	6

Total units required for the M.A. 30

HUMAN DEVELOPMENT

PROGRAM OFFICE

Stevenson Hall 3066
(707) 664-2194

HUMAN DEVELOPMENT COORDINATOR

Rita Butterfield
Stevenson Hall 3057
(707) 664-2453

e-mail: rita.butterfield@sonoma.edu

www.sonoma.edu/humandevlopment

Students interested in earning a major in Human Development should consult an advisor.

HUMAN DEVELOPMENT ADVISORS

Karin Enstam Jaffe / Biological Anthropology (707) 664-2944 /
email: karin.enstam@sonoma.edu

Johanna Filp-Hanke / Early Childhood Education (707) 664-2280 /
email: johanna.filp@sonoma.edu

*Susan Hillier Ferreira / Gerontology/Psychology (707) 664-2586 /
email: hillier@sonic.net

Gerryann Olson / Psychology (707) 664-2265 / email: olson@
sonoma.edu

Richard J. Senghas / Linguistics and Anthropology (707) 664-2307 /
email: richard.senghas@sonoma.edu

Charlene Tung / Women's and Gender Studies (707) 664-2086 /
email: charlene.tung@sonoma.edu

**Faculty Early Retirement Program*

Program Offered

Human Development is an interdisciplinary liberal arts program that focuses on human growth and development across the life span, the underlying processes and structures that support that development, and the relationship between the individual and the complex familial, social, and cultural environments in which development is situated.

The Human Development major is designed to provide students with a comprehensive grounding in complementary theoretical approaches to human development across the life span in comparative cross-species, cross-cultural, and multicultural, as well as class and gender perspectives. All students are required to take the core, plus perspectives, one methodology course, and to complete a senior project. Students must receive C or better in the core and elective courses.

Careers in Human Development

A B.A. in Human Development will help prepare students for professional, managerial, service, and educational careers in human development and human services serving infants, children, adolescents, families, and elders. This degree will complement students' preparation for graduate studies in traditional fields such as psychology, sociology, anthropology, and human development.

Bachelor of Arts in Human Development

Prerequisites to the Major

- Sophomore standing.
- 2.50 GPA.
- Completion of the following required GE categories with a C or better:
 - A2 (ENGL 101).
 - A3 (Critical Thinking).
- Completion of or enrollment in the following GE courses:
 - BIOL 110, BIOL 115 Introduction to Biology or ANTH 201 Introduction to Biological Anthropology (BIOL 115 or ANTH 201 meet prerequisite for ANTH 318).
 - MATH 165 Elementary Statistics.
 - ANTH 203 Introduction to Cultural Anthropology, PSY 250 Introduction to Psychology, or SOCI 201 Introduction to Sociology.
 - ENGL 203 Introduction to Linguistic Studies or ANTH 200 Introduction to Linguistic Anthropology.

Total units required for B.A. in Human Development

Degree Requirements	Units
General education	51
Major requirements*, including 22-24 units core requirements 16-18 units electives, selected from comparative, sociological, psychological, and methodology categories	40
Electives	29
Total units needed for graduation	120

** This is the minimum number of units; more units may be required for certain course choices.*

Major Core Requirements (22-24 units)

HD 391 Seminar in Human Development (taken in the junior year)	2
ANTH 342 Organization of Societies or	3-4
ANTH 340 Living in a Pluralistic World (GE-E) or	3
WGS 385 Gender and Globalization or	3-4
SOCI 485 Organizations and Everyday Life	
ANTH/HD 318 Human Development: Sex and the Life Cycle (GE-E)	3
GERN/PSY 421 Psychology of Aging or	
GERN/PSY 408 Adult Development	4
KIN 410 Lifespan Motor Development	3
PSY 410 Child Development or	
PSY 412 Adolescent Development or	
EDEC 420 Child Development in Family, School, and Community (GE-E)	3-4
WGS 350 Gender, Sexuality, and Family	3
HD 490 Senior Project (taken in last semester)	1

Major Electives

Students choose a minimum of 16 units from among the following groups of courses, taking one or two courses from each category for a total of 40 upper-division units (core + electives = 40 units). In addition, service learning and internship courses are strongly recommended. Classes in foreign languages commonly spoken in California are strongly recommended.

Substitutions can be made in elective courses with the consent of an advisor.

Comparative Perspectives

ANTH 302 Biological Basis of Sex Differences	4
ANTH 340 Living in a Pluralistic World (GE-E)	3
ANTH 380 Language, Culture, and Society	4
ANTH 386 Sign Language and Signing Communities	4
EDUC 417 School and Society	4
GERN/SOCI 319 Aging and Society	3
ANTH 383 Language in a Sociopolitical Context	4
PSY 328 Cross-Cultural Psychology	4
WGS 375 Gender, Race, and Class (GE-D1)	3

Sociological Perspectives

CCJS 441/SOCI 314 Deviant Behavior	4
EDMS 470 Multicultural Pedagogy	3
GERN/SOCI 332 Death and American Culture	4
GERN/PSY/SOC 432 Group Work with Older Adults	4
SOCI 312 Sociology of Gender	4
SOCI 315 Socialization	4
SOCI 326/PSY 326 Social Psychology (GE D1)	3-4
SOCI 445 Sociology of Childhood and Adolescence	
WGS 440/SOC 440 Sociology of Reproduction	3
WGS 390 Gender and Work	4

Psychological Perspectives

EDEC 420 Child Development in Family, School, and Community (GE-E)	3
PSY 302 Psychology of the Person (GE-E)	3
PSY 411 Behavioral and Emotional Problems of Children	3-4
PSY 412 Adolescent Psychology	3-4
PSY 418 The Psychology of the Family	3-4
PSY 447 Learning and Behavior	4
PSY 448 Cognitive Development	4
PSY/GERN 422 Seminar in Living and Dying	3-4
PSY 461 Personality Development	4

Methodology

Choose one of the following:

ANTH 451 Applied Ethnographic Methods	4
ANTH 480 Studies of Language Use	4
EDEC 331 Practicum in Child Study	3
PSY/GERN 493 Narrative Methods	4
PSY 380 Introduction to Psychological Research Methods	4
PSY 441 Qualitative Methods	4
SOCI 300 Sociological Research Methods	4
WGS 425 Feminist Research Methods	4

HUTCHINS SCHOOL OF LIBERAL STUDIES

DIRECTOR

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Francisco H. Vázquez

**Faculty Early Retirement Program*

Overview

A nationally recognized leader in the movement for reform in higher education, the Hutchins School has maintained its commitment to innovative pedagogy and interdisciplinary inquiry into vital issues of modern concern since its inception in 1969. The program is designed to encourage students to take themselves seriously as readers, writers, and thinkers capable of continuing their own educational process throughout their lives.

The Hutchins School is an interdisciplinary school within Sonoma State University offering lower-division students an alternative General Education program that integrates material from the humanities, the social sciences, and the natural sciences. It offers upper-division students a similarly integrated major in Liberal Studies leading to a B.A. degree. It offers a multiple subject preparation program for pre-credential students, and a blended program leading to a B.A. and multiple subject teaching credential in four years. A minor in integrative studies is also offered.

The Hutchins School has several distinctive features:

- Courses organized around themes or questions, rather than according to the traditional division of subject matter into disciplines (Please see course descriptions below.);
 - Encouragement to engage in independent study projects and study abroad programs;
 - Internship/field study to bridge academic studies with career placements and community service; and
 - An opportunity for student-instructed courses.
- Hutchins is also committed to offering students opportunities for contributing to and learning from local communities. Some seminars include a service learning component which enhances the reading, writing, and discussion of shared materials through applied service projects. These seminars provide hands-on experience for students while also creating valuable partnerships with local community organizations. Through service, Hutchins students can draw connections between what they discuss in seminar with how they live their lives, enabling them to integrate critical thinking, active participation, and careful reflection.
- Students in other majors may complete a Hutchins School integrative studies minor to help place their disciplines in a wider intellectual context.

Careers in Liberal Studies

Hutchins School graduates do especially well in teaching, counseling, social services, law, media, journalism, and many types of businesses. They have entered graduate programs in fields as diverse as American studies, anthropology, business, counseling, English, history, law, library science, management, medieval studies, physics, religion, sociology, and theatre arts.

Students seeking a teaching credential in elementary or early childhood education can enroll in the Track II: Subject Matter Preparation for the Multiple Subject Teaching Credential. If they prefer an accelerated track, they can enroll in the Track III: Blended Program, which allows them to complete their B.A. degree and complete all requirements for the Multiple Subject Teaching Credential in four years. Students may transfer to another program at the end of any semester without loss of credit successfully completed in the Hutchins program.

Whatever their particular interests, all Hutchins students are challenged to read perceptively; to think both critically and imaginatively; to express their thoughts and feelings in writing, speech, and other media; and to make productive use of dialogue and discussion. By developing these skills, students will be ready to take a position in a democratic society as thoughtful, active citizens conversant in a broad range of disciplinary perspectives. Through seminar discussions, essays, research, and other assignments, students will be prepared for a wide variety of careers in which creative, independent thinking and effective written and oral communication are the prime requisites.

Admission

In general, the Hutchins School accepts students at the freshman or junior level for fall admission only, although exceptions are made depending on space availability. When applying to the University, all students seeking admission to the Hutchins School should list Liberal Studies/Hutchins, Hutchins School as their major (select code 49015 on paper application).

Students applying as freshmen must have a grade point average of 3.00. Students seeking admission into the Hutchins Blended Program as freshmen must test into college level English and math (through passage of the ELM and EPT or their equivalent).

Students already at Sonoma State seeking admission into the Hutchins program must file a separate Hutchins application form by February 15 for the fall semester and by October 1 for the spring semester. Application forms are available in the Hutchins School Office or online: <http://www.sonoma.edu/hutchins/pages/academic/admissions/admissions.htm>

Students seeking admission to Track II as junior transfers must complete all lower-division general education requirements, with specific requirements in the following areas. Students may take these courses while enrolled in the major.

BIO 110: Biological Inquiry (or equivalent)

CHEM 107: Introduction to Physical Sciences (or equivalent chemistry, physics, or astronomy course)

GEOL 107: Introduction to Earth Science (or equivalent course)
Geology or physical geography

MATH 150: Geometry (General Education math fulfills this requirement for off-campus transfers)

A course in the history of the visual arts

A course in the performing arts: dance, music, or theatre

Whether transferring into the Track III Blended Program as freshmen or into track I or II as juniors, students must file a separate application available at: http://www.sonoma.edu/hutchins/pages/academic/forms/_applying.htm.

Degree Requirements	Units
General Education Lower-Division (May include 48 units in LIBS Integrative GE)	51
Major Requirements (up to 3 units may be applied to upper GE Area E)	40
General Education Upper-Division (Waived upon completion of Tracks II or III)	9
SSU Electives (Track I) or Subject Matter Preparation (Track II)	20
Total units needed for graduation	120

Interdisciplinary General Education Program Lower-Division

The lower-division program of the Hutchins School fulfills, with the exception of mathematics, all of the Sonoma State University lower-division general education requirements. Upon completion of the lower-division General Education program in Hutchins, students may elect to continue in the program as a liberal studies major, or they may transfer into another major at any point in the program. The program consists of four interdisciplinary seminars of 12 units each, taken successively as follows:

LIBS 101: The Human Enigma (Fall)

LIBS 102: In Search of Self (Spring)

LIBS 201: Exploring the Unknown (Fall)

LIBS 202: Challenge and Response (Spring)

Each of these seminars is made up of 10 to 15 students and a professor. Learning proceeds by a process of reading, writing, and discussion, in which all students are urged to take an active part. There are generally four to six sections of each seminar offered simultaneously, so that each seminar is part of a larger learning community that meets together once a week for lectures, field trips, labs, and other group projects. The curriculum for these seminars is developed collaboratively by the faculty facilitating each seminar section, thus drawing on a wide range of disciplinary expertise.

Strongly emphasizing excellence in written communication, the program includes extensive writing projects and regular tutorials. Several of the small seminar sections come together once a week for group activities, including field trips, labs, lectures, films, group presentations, and other hands-on learning experiences. The emphasis throughout is on the critical examination of contemporary problems in their historical contexts. Each student is expected to arrive at conclusions that result from personal reflection and exploration of the ideas of major thinkers in diverse fields.

At mid-semester, students meet individually with the professor to discuss their progress. At this point, they have an opportunity to reflect on and assess their own learning, a key ingredient in developing the skill of lifelong learning. At the end of every semester, the student receives an official grade of credit or no credit. The student also is given a copy of a detailed evaluation of his or her work, which is placed in the student's Hutchins file but not entered on the official University record or used to compute a grade point average. This evaluation assesses the student's cognitive skills, seminar participation, understanding of the course content, writing skills, independent project, and special course assignments. A written commentary addresses each student's particular strengths and indicates the way in which the student should improve in order to become an effective, lifelong learner. Thus, the evaluation conveys a great deal more information than does a single letter grade. Unofficial grades can, at the student's request, be made available to other schools, agencies, or prospective employers who need a quantitative measure of performance.

A student who does not work well within the Hutchins program may receive credit with a probationary or terminal qualification, or a terminal no credit. If the student's enrollment remains probationary for two semesters, or is terminated, he or she must transfer out of the Hutchins program.

Bachelor of Arts in Liberal Studies Upper-Division

Options for the bachelor's degree include: **Track I**, the General Liberal Studies Major plan; **Track II**, the Subject Matter Preparation (pre-credential) plan; and **Track III**, the Blended Program/B.A. plus Multiple Subject Credential.

The general pattern for the major in all three tracks is outlined in the table below. During their first semester in the upper-division, all transfer students are required to take LIBS 302. In this course, students work on the skills required in the major, develop their own learning plans, and begin the portfolio, a document the student expands throughout the upper-division and brings to a close in LIBS 402 Senior Synthesis. LIBS 302 is a prerequisite for all upper-division Hutchins courses. Students continuing from Hutchins lower-division, however, are exempt from LIBS 302. Any student earning a grade lower than a C in LIBS 302 will not be allowed to continue in the Hutchins program.

Also, in each of their first two semesters, students will take a key course designed to involve them in a discussion and critique of some of our most fundamental beliefs and values, viewed in a worldwide context. (Please see LIBS 304 and 308.)

Requirements for the Major

First Semester

	<i>Units</i>
LIBS 302 Introduction to Liberal Studies, and	3
LIBS 304 We Hold These Truths (Fall) or	3
LIBS 308 The Practice of Culture (Spring)	3

Subsequent Semesters

LIBS 304 and 308 (2 semester sequence)	6
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One course from each of 4 core areas:

LIBS 320A Society and Self	3
LIBS 320B Individual and the Material World	3
LIBS 320C The Arts and Human Experience	3
LIBS 320D Consciousness and Reality	3

<i>Additional requirements and electives (per track described below)</i>	<i>15</i>
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Final Semester

LIBS 402 Senior Synthesis	4
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Total units Hutchins Major **40**

Core Seminars

Building on the foundations laid in the key courses, the student chooses at least one seminar from each of the following four core areas:

Core A Society and Self

Core B The Individual and the Material World

Core C The Arts and Human Experience

Core D Consciousness and Reality

The core seminars are a key element of the curriculum in the Hutchins Major. Core areas are designed to ensure that the intensive learning experience provided in the small seminar format is spread across the disciplinary spectrum, although all core courses offer an interdisciplinary perspective on a particular theme.

Track I Interdisciplinary Studies

Those students wishing a broad interdisciplinary major as a foundation for their career choice (e.g. the arts, the law, public service, etc.), or who are motivated by intellectual curiosity and wish to pursue an individualized study plan, often choose interdisciplinary studies. Track I students may use up to 9 units from other majors or 12 units from approved study abroad program as part of their emphasis in the Hutchins major, and we strongly encourage these students to consider doing a minor in another field. Alternatively, students majoring in interdisciplinary studies will complete the 17 additional units by choosing from a wide variety of courses which include elective seminars, workshops, independent and directed studies, internships, and Study Away opportunities.

LIBS 310/315/410/415 Directed or Independent Study

LIBS 396 Field Study

LIBS 397 Study Away

LIBS 399 Student Instructed Course

LIBS 499 Internship

Students in Track I may organize an area of emphasis within the 40 units required for the major which reflects their career plans and/or intellectual interests. Track I students may use up to 9 units from other majors as part of their emphasis in the Hutchins major, and we strongly encourage these students to consider doing a minor in another field. Alternatively, students may engage in artistic and creative activities, research and scholarly investigations, Hutchins community projects, social and community action opportunities, or gather together a variety of experiences that they find intellectually satisfying. Many Track I students have found the internship or Study Away program (one of which is required for the major) valuable.

The Study Away/internship requirement, often preceded by a semester of independent study related to the placement, allows students to include, as part of their major, experiences as diverse as (1) a period of domestic or international study and travel; (2) an independent project in a nearby community; (3) an internship with a local arts organization, business, school, or social service agency; (4) substantial involvement in a program with another department on this or some other campus; or (5) other options and activities created by the student in consultation with an advisor. Whether close at hand or far away, the Study Away/internship experience can help students relate their education to specific career choices,

greater intellectual understanding, and their place in an ever-larger world.

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies, Track I

FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (A2) (3)	BIOL 110 (B2) (4)
Math GE (B4) (3)	Ethnic Studies (D1) (3)
Humanities GE (C1) (3)	PHIL 101 or 102 (A3) (3)
Physical Science GE (B1) (3)	World History GE (D2) (3)
Elective (3)	Elective (2)
SOPHOMORE YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Written and Oral GE (A1) (3)	Humanities GE (C3) (3)
Humanities GE (C2) (3)	Humanities GE (C4) (3)
POLS 200 (D4) (3)	Specific Emphasis Science (B3) (3)
Physical Science GE (B1) (3)	U.S. History GE (D3) (3)
Elective (3)	Elective (3)
JUNIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 302 (3)	LIBS 308 (3)
LIBS 304 (3)	LIBS 320 (3)
Upper-Division GE Course (D5) (3)	LIBS 310 (3)
Elective or Emphasis (6)	Electives or Emphasis (6)
SENIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 320 (3)	LIBS 320 (3)
LIBS 499 (3)	LIBS 320 (3)
Upper-Division GE Elective (3)	LIBS 402 (4)
Electives or Emphasis (6)	Electives (5)
TOTAL UNITS:: 120	

LIBS/M.B.A. Advising Pathway

The flexibility of the Track I program in liberal studies lends itself to a broad variety learning experiences and careers. For example, by following the pathway below, a liberal studies major may complete the requirements to enter a Master of Business Administration program upon graduation.

Sample Four-Year M.B.A. Prep Advising Path

FRESHMAN YEAR:: 31 Units	
<i>Fall Semester (15 units)</i>	<i>Spring Semester (16 units)</i>
LIBS 101 (12)	LIBS 102 (12)
Elective Units (3)	Math 165 (4)
SOPHOMORE YEAR:: 32 Units	
<i>Fall Semester (16 units)</i>	<i>Spring Semester (16 units)</i>
LIBS 201 (12)	LIBS 202 (12)
ECON 201A (4)	ECON 201B (4)
Declare Business Minor	
JUNIOR YEAR:: 31 Units	
<i>Fall Semester (16 units)</i>	<i>Spring Semester (15 units)</i>
LIBS 304 (3)	LIBS 308 (3)
LIBS 320 (3)	LIBS 320 (3)
LIBS 499 (3)	LIBS 410 (3)
BUS 231A (4)	BUS 230B (4)
Upper-Division GE (3)	BUS 295 (2)
Pass PCCR Exam	Take GMAT
Take WEPT	
SENIOR YEAR:: 28 Units	
<i>Fall Semester (14 units)</i>	<i>Spring Semester (14 units)</i>
LIBS 320 (3)	LIBS 402 (4)
BUS 360 (4)	LIBS Elective (3)
BUS 344 (4)	LIBS 320 (3)
Upper-Division GE (3)	BUS 370 (4)
TOTAL UNITS:: 122	

Track II Multiple Subject (Pre-Credential) Preparation

The Hutchins School offers a state-approved subject matter preparation program for students intending to earn a California Elementary Teaching Credential or an Early Childhood Emphasis Credential. While students are no longer allowed to waive the California Subject Exam for Teachers (CSET), the B.A. pre-credential option ensures interdisciplinary subject matter proficiency as well as possession of the high-level analytic, synthetic, creative, and expressive academic skills required of future educators. Coursework is carefully planned to meet state-mandated content standards for prospective elementary teachers and provides excellent preparation for the CSET exam, as well as for admission to a professional teacher training program. In addition to the courses described above, students will be required to take the following courses as part of their major. Upper-division GE requirements can be met through the completion of the Multiple Subject program, which includes concentration in a specific subject. (See Hutchins website for details):

LIBS 312: Schools and Society	3
LIBS 327: Literacy, Language, and Pedagogy or	
ENG 379: English Language	3-4
LIBS 330: The Child in Question	3
MATH 300A: Elementary Number Systems	3
MATH 300B: Probability and Statistics	3

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies, Track II

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (A2) (3)	CHEM, Physics, or Astronomy (B1) (3)
MATH 150 (B4) (3)	Ethnic Studies (D1) (3)
ARTH, THAR, or MUS (C1) (3)	PHIL 101 or 102 (A3) (3)
BIOL 110 (B2) (4)	World History GE (D2) (3)
Elective (2)	Elective (3)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Written and Oral Analysis GE (A1) (3)	Humanities GE (C3) (3)
Humanities GE (C2) (3)	Humanities GE (C4) (3)
POLS 200 (D4) (3)	GEOL or Physical GEOG (B1 or B3) (3)
Concentration Course (3)	U.S. History GE (D3) (3)
Elective (3)	Concentration Course (3)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 302 (3)	LIBS 308 (3)
LIBS 304 (3)	LIBS 320 (3)
MATH 300A (3)	LIBS 312 (3)
KIN 400 (3)	MATH 300B (3)
Concentration Course (3)	ARTH, THAR, or MUS (3)

SENIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 320 (3)	LIBS 320 (3)
LIBS 330 (3)	LIBS 320 (3)
LIBS 327 (3)	LIBS 402 (4)
EDMS 470 (3)	Electives (5)
Concentration Course (3)	

TOTAL UNITS:: 120

Track III Blended Program

The Blended Program incorporates the lower-division Hutchins General Education program and the basic course work for Track II with courses from the School of Education beginning in the junior year, allowing students to complete a B.A. in liberal studies and a Multiple Subject Teaching Credential as follows:

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies with Teaching Credential, Track III

FRESHMAN YEAR:: 34 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (17 Units)</i>
LIBS 101 (12)	LIBS 102 (12)
EDMS 100 (2)	EDMS 200 (2)
MATH 150 (3)	CHEM, Physics, or Astronomy (3)
Take CBEST or CSET: Writing Skills Exam spring/summer.	

SOPHOMORE YEAR:: 35-36 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (17-18 Units)</i>
LIBS 201 (12)	LIBS 202 (12)
LIBS 312 (3)	LIBS 330 (3)
GEOL or PHYSICAL GEOG (3)	Performing Arts Elective:
Certificate of clearance - Apply	Music, Theater
For Live Scan and Clear TB test.	or Dance survey or history (2-3)
Apply to Education Program	Interviews April
(Nov.- Jan).	

JUNIOR YEAR:: 36 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (18 Units)</i>
LIBS 304 (3)	LIBS 308 (3)
LIBS 320 (3)	LIBS 320 (3)
LIBS 320 (3)	KIN 400 (3)
LIBS 327 (3)	MATH 300A (3)
EDMS 470 (3)	EDMS 463 (3)
EDMS 411 (3)	EDMS 475 (3)
Take the WEPT during academic year.	Re-apply to SSU as post-
Apply for fall graduation by audit deadline.	baccalaureate student
	Aug 1 – Aug 31.

SENIOR YEAR:: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
LIBS 320 (3)	EDMS 482F: Student Teaching (10)*
LIBS 402 (4)	EDMS 464 (2)
MATH 300B (3)	EDMS 471 (2)
EDMS 474 F(3)	EDMS 476F (3)
EDMS 464S (2)*	

*Enrollment in EDMS 476S is optional.

* Students will attend EDMS 482S on-site, but are not required to enroll in course, and will complete CWS-2 E-Portfolio.

TOTAL UNITS:: 135-136

Some courses may be taken during the summer.

In order to continue in the program after the first year, students must have the recommendation of their professors in LIBS 101, LIBS 102, EDMS 100, and EDMS 200.

INTERDISCIPLINARY STUDIES

DEPARTMENT OFFICE

Physical Education 25
(707) 664-3918
www.sonoma.edu/itds

COORDINATOR

Ellen Carlton
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Programs Offered

- Bachelor of Arts in the Special Major
- Bachelor of Science in the Special Major
- Special Minor in Interdisciplinary Studies
- Master of Arts in Interdisciplinary Studies
- Master of Science in Interdisciplinary Studies

Students interested in designing an interdisciplinary program can pursue a bachelor's degree in the special major and a master's degree in interdisciplinary studies. The undergraduate special major and the graduate major in interdisciplinary studies are designed for students whose particular interests, backgrounds, or professional objectives are not served by a traditional degree program. The purpose of these majors is to provide a carefully controlled opportunity for qualified students to design, with faculty approval, a flexible interdisciplinary course of study that leads to a bachelor's or master's degree. Admission is limited to those whose individualized programs can be organized around a special topic or a cross-disciplinary inquiry that is original and involves work in more than one department. Interested students should contact the coordinator of interdisciplinary studies (ITDS), who initiates the application and screening process.

The special and interdisciplinary studies majors are not intended to bypass normal graduation requirements and may not be used to duplicate formally structured programs at Sonoma State University or other service-area institutions. The reason for this restriction is that these programs should be reserved for students whose special interests cross disciplinary lines and who find appropriate faculty expertise here.

Application requirements for all programs

1. All students must apply for admission to the special major or the major in interdisciplinary studies. Before developing a program proposal, the student must consult with the interdisciplinary studies coordinator, who will initiate the application and screening process and will help identify faculty advisors to serve as an academic advisory committee.
2. There must be at least two faculty members for the special major and three faculty members for the major in interdisciplinary studies who agree to constitute the advisory committee

and act as advisors for each student's program of study. It is the student's responsibility to contact these advisors to plan with them a coherent, original, and feasible course of study. One committee member must agree to be the committee's chair and to be the student's principal advisor on matters related to the major course of study and all other graduation requirements.

3. In consultation with the ITDS coordinator and the academic advisory committee, each student must complete a program proposal and submit it in duplicate to the ITDS coordinator by an application deadline. There are three proposal deadlines each semester.
4. Filing a proposal application with the ITDS coordinator does not ensure acceptance in the special major or interdisciplinary studies program. Each proposal must be evaluated by the ITDS committee. The committee may recommend approval or conditional approval of the application, may request that the application be reworked and resubmitted, or may reject the application. Approved programs must then be approved by the Associate Vice Provost of Academic Programs. If the application is approved at both levels of review, the student may register as a special major or as a major in interdisciplinary studies.

Bachelor of Arts or Science in the Special Major

Degree Requirements	Units
General education	51
Major requirements (core and supporting)	45
General electives	24
Total units needed for graduation	120

Requirements for the Special Major

A 3.00 grade point average is a prerequisite to application. The special major is a unique major that suits individual goals and is personally valuable, but may pose professional obstacles. Career goals and prerequisites for higher degrees should be reviewed before proceeding with this major.

The special major consists of 45 units of course work in two or more disciplines; 24-26 upper-division units constitute the core courses, while the remaining units may include lower-division courses.

To be considered for the special major, the student must have more than one full year (31 units or more) of course work in the major still to be completed after approval by the ITDS committee and the filing of the Change of Major form. Work in progress during the semester of the proposal's approval will count toward the 31 units.

Contact the ITDS coordinator for the detailed guidelines and the application form for the special major. At the time you apply for a special major, you should have completed at least half of your GE requirements and should be in your junior year.

Special Minor in Interdisciplinary Studies

The special minor has the following features and requirements:

1. The minor consists of 21-24 units of coursework from two or more departments;
2. Two-thirds of these units must be in upper-division course work;
3. Two-thirds of the minor must remain to be completed at the time the minor is approved. Work in progress during the semester of the minor's approval counts toward the two-thirds requirement;
4. The student must have a minimum GPA of 3.00 in order to apply;
5. A student will not be considered for a special minor before the student's junior year; and
6. A special minor must have the same coherence and academic integrity as are demanded of a special major and is subject to the same application process.

Contact the ITDS coordinator for the detailed guidelines and the application form for the special minor.

Master of Arts or Science in Interdisciplinary Studies

Degree Requirements	Units
Major requirements	30-32
Total units needed for graduation	30-32

Requirements for the M.A. or M.S. in Interdisciplinary Studies

Prerequisites to Application

- Admission to the University in conditionally classified graduate status; and
- A grade point average of at least 3.00 for the last 60 units of college work attempted.

Prerequisite to Acceptance

- Passage of the Written English Proficiency Test (WEPT). Graduate Record Examination (GRE) Aptitude Test scores are not required, but may be submitted in support of the application; and
- The candidate for this degree must comply with the normal regulations governing graduate study at Sonoma State as described in this catalog.

Course Requirements

General course and unit requirements:

- The master's in interdisciplinary studies consists of a minimum of 30 units to a maximum of 32 units in two or more disciplines.
- At least 20 units must be graded (A-F); the remainder (up to one-third of the total number of units of the major) may be taken in a nontraditional grading mode. (In order to receive a

Credit (Cr) grade in a graduate level class, the student must earn the equivalent of B- or better.)

- The student must have at least 15 units of the major still to be completed after approval of the proposal by the Associate Vice Provost of Academic Programs. Units completed during the semester of the proposal's approval count toward these 15 units.
- At least 21 semester units shall be completed in residence.
- At least 15 of the 21 in-residence units shall be in graduate (500-level) courses. The remaining units may be in 300- or 400-level courses.

Contact the ITDS coordinator for the detailed guidelines and the application form for the master's degree in interdisciplinary studies.

JEWISH STUDIES

PROGRAM COORDINATOR

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Minor in Jewish Studies

The Minor in Jewish Studies offers students from any major on the SSU campus a cross-disciplinary concentration in the study of Jewish religion, culture, and people. Jewish Studies is by its very nature an interdisciplinary field of study, blending courses from a wide range of academic disciplines and perspectives. For a minor in Jewish studies, students must take two core courses and fourteen additional elective units of courses from at least two different areas of study.

Minor Core Requirements	Units
JWST 200 Introduction to Jewish Studies	3
JWST 350 Jewish Religion and Biblical Values	3
Total units in the minor core	6
Elective units in the minor	14
Total units in the minor	20

Minor Electives

In addition to the core, choose 14 units of electives from other Jewish Studies courses in at least two of the following areas of study:

1) religion, philosophy, values; 2) language; 3) history; 4) culture and society. All SSU majors may select the minor in Jewish Studies. Additional courses may be counted toward the minor with approval of the Jewish Studies program coordinator. Courses not designated for a particular area of study will be assigned an area of study by the program coordinator based on the course content. Cross-listed courses listed below without the JWST designation will count for the Jewish Studies minor pending approval of the Jewish Studies program coordinator.

Course Offerings and Areas of Study

1) Religion, Philosophy, and Values

	Units
AMCS 481 Religion and Spirituality	4
JWST 250 Introduction to Judaism	4
JWST 251 Topics in Jewish Biblical Studies	3-4
JWST 351 Topics in Jewish Religion	4
JWST 352 Topics in Jewish Thought	4
JWST 391 Topics in Comparative Religion	4
PHIL 295 Studies in Modern Philosophy	3
PHIL 335 Religion, Spirituality, and Social Justice	3
PHIL 350 Topics in Moral Philosophy	3
PHIL 390 Advanced Topics in Philosophy	3
SOCI 431 Sociology of Religion	4

2) Language

JWST 101 Elementary Modern Hebrew I	3-4
JWST 102 Elementary Modern Hebrew II	4
JWST 201 Intermediate Hebrew I	4
JWST 202 Intermediate Hebrew II	4
JWST 301 Topics in Advanced Hebrew	4
HIST 487 Introduction to Egyptian Language and Culture	4
LING 432 Language in Sociopolitical Context	4

3) History

JWST 241 Jewish History I	4
JWST 242 Jewish History II	4
JWST 341 Topics in Jewish History	4
JWST 342 The Jewish Diaspora	4
AMCS 370 Topics in Ethnic/Multicultural Studies	4
HIST 303 The Ancient Near Eastern Texts	4
HIST 304 History of the Arabs to 1453	4
HIST 349 Historical Themes	2-4
HIST 371 Tolerance and Intolerance in Europe	2-4
HIST 375 Special Topics and Themes in American History	1-4
HIST 469 Religion in America	4
HIST 482 Judaism and Christianity in the Formative Period	4

4) Culture and Society

JWST 330 American Jewish Experience	4
JWST 360 Jewish Literature	3
JWST 361 Topics in Jewish Literature	4
JWST 381 Topics in Jewish Art, Film, Music, Culture, and Society	3-4
JWST 421 Topics in Israeli Art, Film, Music, Culture, and Society	3-4
AMCS 330 Multicultural History of the United States	4
AMCS 470 Advanced Studies in Ethnic Culture	4
ANTH 358 Topics in Sociocultural Anthropology	4
ARTH 461 Selected Topics in Film	3
ARTH 474 Islamic Art	3-4
ARTH 480 Selected Topics in Art History	1-4
ENGL 472 Studies in the Novel	4
ENGL 482 Studies in American Literature: Jewish Literature-Home and Exile	4
ENGL 483 Individual Authors: American	4
GEOG 396 Special Topics in Area Studies: Middle East	4
MUS 343 Studies in Musical Genres: Yiddish Musical Theater	3
MUS 370 Music and Dance in the World's Religions	3
POLS 446 International Relations of the Middle East: Israel, Palestine, United States	4
POLS 486 Selected Issues in International Politics	3
SOCI 305 Perspectives on the Holocaust and Genocide	
THAR 430 Special Topics	1-3
WGS 311 Special Topics in Women and Gender Studies	1-4

Other courses with area to be designated based on course content

	Units
JWST 331 Topics in Jewish American Studies	3-4
JWST 371 Topics in Jewish Studies	3-4
JWST 431 Advanced Topics in Jewish American Studies	4
ITDS 297 Selected Topics	1-4
ITDS 397 Selected Topics	1-4

KINESIOLOGY

DEPARTMENT OFFICE

PE14

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www.sonoma.edu/kinesiology

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Programs Offered

Bachelor of Science in Kinesiology

Master of Arts in Kinesiology

Minor in Kinesiology

Single Subject Teaching Credential Preparation

Adapted Physical Education Specialist Credential Preparation

Integrated Degree and Credential Program

Kinesiology, as the study of human movement, utilizes a comprehensive and integrative approach to examine phenomena related to all aspects of physical activity. The curriculum offered by the Department of Kinesiology prepares graduates who can apply kinesiological principles to the acquisition, performance, and refinement of motor skills and to the use of physical activity as an educative tool and a medium for health promotion, personal well-being, and participation in an active lifestyle. The curriculum addresses human movement across the life span from biological/physical, behavioral, sociocultural, and humanistic perspectives, with attention given to the unique and common needs of all people in a wide variety of contexts and conditions.

In conjunction with the broader educational mission of the University, the kinesiology major program prepares students to lead and participate in a modern complex society and to assume multiple roles throughout their lifetimes. Graduates have acquired knowledge and experiences that prepare them to pursue lifelong learning, advanced study, and/or careers in such areas as teaching, coaching,

adapted physical education, allied health fields, health and fitness industries, sport industries, or exercise and movement science. To achieve this mission the kinesiology major provides students with a well-structured set of curricular and cocurricular experiences and the mentorship to derive a sound education from the University experience.

The Department of Kinesiology programs lead to the B.S. or M.A. degrees. In both programs a core of courses is required. Beyond this core, the kinesiology student chooses a concentration of courses with a specific focus. The undergraduate may select physical education, adapted physical education, exercise science, lifetime fitness, or interdisciplinary studies in kinesiology. Theoretical and practical learning experiences are an important part of all concentrations. Students are required to participate in a variety of field experiences, working as coaching assistants, teacher's aides, exercise/recreation leaders, and instructors for disabled students.

Prior to beginning upper-division studies in Kinesiology, students should have acquired the knowledge and skills necessary for success. Courses with specific application to the kinesiology degree are included as support courses for the major. All students entering the upper-division kinesiology degree should

- Be able to utilize computing technology in support of inquiry;
- Demonstrate knowledge of a broad range of concepts, issues, facts, and theories derived from the biological, physical, behavioral, social sciences, and from the humanities;
- Demonstrate critical thinking, writing, reading, oral communication, quantitative and qualitative analysis, and information management skills; and
- Document experience in a variety of movement forms and fitness activities.

At the completion of the undergraduate degree all graduates should

- Demonstrate knowledge and skill in a broad variety of movement and fitness activities;
- Understand the biological/physical and behavioral bases of movement and the changes that occur across the life span, within diverse populations, and under a variety of environmental conditions;
- Understand the sociocultural and humanistic bases of movement with diverse cultures, historical periods, and social settings;
- Understand how motor skills are acquired and fitness achieved and maintained across the life span and within diverse populations;
- Understand the relationship among movement, conditioning and training, well-being, and skill across the life span and under a variety of environmental and personally unique conditions;

- Know how to apply kinesiological knowledge to enhance motor skill and fitness with a variety of populations and conditions;
- Apply critical thinking, writing, reading, oral communication, quantitative and qualitative analysis, and information management skills to movement-related questions;
- Demonstrate knowledge of the conditions of safe practice in movement-related contexts across the life span and within diverse populations, and respond appropriately to common injuries occurring during physical activity;
- Be able to use and apply kinesiological data collection techniques and measurement theory to assess, analyze, and evaluate human performance;
- Understand the scientific method and other systematic ways of knowing relative to research and scholarship in human movement;
- Demonstrate ability to integrate multidisciplinary knowledge bases of kinesiology in an applied, problem-solving context;
- Be familiar with standards, ethics, and expectations of professional communities related to human movement;
- Be prepared to engage in professionally related community activities;
- Be prepared to engage in informed dialogue with diverse professional and lay communities regarding kinesiological principles and practices; and
- Demonstrate additional in-depth knowledge and skills associated with study in any one of the concentrations, specializations, or emphases that are associated with kinesiology degrees.

Bachelor of Science in Kinesiology

All majors in the Department of Kinesiology must complete the support courses and the major core courses. Each major selects a concentration in which to complete the major.

Degree Requirements	Units
General education	51
Major requirements	50-52
Support courses (maximum outside GE)	18
General electives	3-5
Total units needed for graduation	124

All courses fulfilling either major or minor requirements in kinesiology must be graded A-F, except for courses not available in the A-F mode or courses that are challenged.

Support Courses for the Bachelor of Science

These courses may be taken at a community college, and some may be used to fulfill general education requirements. Some of these courses are prerequisites to courses in the major. The SSU equivalent is listed in parentheses.

Human Anatomy (BIOL 220)*	4
Human Physiology (BIOL 224)*	4
Nutrition	3
Introduction to Computing (CS 101)*+	3
Foundations of Kinesiology (KIN 201)	3

Total supporting units 17

* GE courses

+ Students in physical education concentration may take KIN 307 instead.

Major Core Requirements (all concentrations)

KIN 301 Philosophy/History of Human Movement	4
KIN 305 Psychological Bases of Human Movement	4
KIN 315 Sociology of Sport	3
KIN 330A Measurement and Evaluation or MATH 165 (4)	1
KIN 350 Biomechanics	4
KIN 360 Physiology of Exercise	4
KIN 410 Life Span Motor Development	3
KIN 460 Conditioning for Health and Performance	3

Total units in the major core 26-29

Sample Four-year Program for Bachelor of Science in Kinesiology, Exercise Science Concentration

LOWER-DIVISION PREPARATION

FRESHMAN YEAR:: 32 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
GE (B2) BIOL 110 (4)	Chem 115A (B1) (5)
GE (C1) (3)	GE (A3) (3)
CS 101 (3)	GE (B4) (MATH 165/161) (4)
GE (A2) (3)	GE (D2) (3)
GE (D4) (3)	

SOPHOMORE YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (17 Units)
GE (A1) (3)	GE (D5) (3)
BIOL 220 (B3) (4)	GE (C4) (3)
CHEM 115B (5)	GE (D3) (3)
BIOL 307 (3)	BIO 224 (4)
	PHYS 209A/210A (4)

UPPER-DIVISION SPECIALIZATION

JUNIOR YEAR:: 30 Units

Fall Semester (17 Units)	Spring Semester (16 Units)
KIN 340/342 (3)	KIN 360 (4)
KIN 301 (4)	KIN 315 (3)
GE (C2) (3)	GE UD (C3) (3)
GE UD (D1) (3)	KIN 410 (3)
PHYS 209B/210B (4)	

SENIOR YEAR:: 33 Units**Fall Semester (17 Units)**

KIN 305 (4)
 KIN 350 (4)
 Elective (3)
 Elective (3)
 KIN 410 (3)

Spring Semester (16 Units)

GE UD (E) (3)
 KIN 460 (3)
 Nutrition (3)
 KIN 430D (3)
 PSY 425 (4)

Sample Four-year Program for Bachelor of Science in Kinesiology**Physical Education, Adapted Physical Education, Lifetime Fitness Concentrations****LOWER-DIVISION PREPARATION****FRESHMAN YEAR:: 32 Units****Fall Semester (17 Units)**

GE (A2) (3)
 GE (B2) BIOL 115 (3)
 GE (B4) (4)
 CS 101 (3)
 GE (B1) (4)

Spring Semester (15 Units)

CHEM 105/115 (3)
 GE (A3) (3)
 GE (C4) (3)
 GE (D2) (3)
 GE (C2) (3)

SOPHOMORE YEAR:: 31-32 Units**Fall Semester (16 Units)**

GE (A1) (3)
 GE (D3) (3)
 Biol 220 (B3) (4)
 GE (D4) (3)
 Elective (3)

Spring Semester (14-16 Units)

GE (D5) (3)
 Biol 224 (4)
 GE (C1) (3)
 KIN 201 (3)
 PE: KIN 300 Aquatics (1)
 APE: KIN 325 (3)
 LF: KIN 342 (3)

UPPER-DIVISION SPECIALIZATION**JUNIOR YEAR:: 33 Units****Fall Semester (17 Units)**

KIN 330A (1)
 KIN 301 (4)
 KIN 315 (3)
 GE UD (D1) (3)

Spring Semester (16 Units)

KIN 360 (4)
 KIN 410 (3)

SENIOR YEAR:: 29 Units**Fall Semester (15 Units)**

KIN 305 (4)

Spring Semester (14 Units)

GE UD (E) (3)

Physical Therapy Program Prerequisites

Courses	SSU Course	UCSF	Samuel Merritt	UOP	Chapman	West Univ. of H.S.
General Physics	PHYS 209AB/210AB	R-8	R-8	R-8	R-8	R-8
General Chemistry	CHEM 115AB/116AB	R-10	R-8	R-8	F-8	F-8
Organic Chemistry	CHEM 335A	r-3				
H. Anatomy w/lab	BIOL 220	R-3	R-4	R-4	R-4	R-4
H. Physiology	BIOL 224		R-4	R-4	R-4	R-4
Bio Elective	BIOL 307, 318		R-3	R-4	R-6	
Microbiology/Cell Biology	BIOL 218/344	R-4		R-4		
Neuro Anatomy	PSY 451	r-4				
Ab Psych/Psych Dis	PSY 425/438	R-3				
General Psych	PSY 250, 302		R-3			
Psych Elective			R-3	R-3	R-6	
Sociology Elective			R-3			
Biomechanics	KIN 350	R-3	R-3			
Exercise Physiology	KIN 360	r-3	R-3			
Motor Learning/ Motor Development	KIN 305/410	r-3				
Statistics	MATH 165	R-3	R-3		R-4	R-4
English Composition	ENGL 101	r-3		R-3		
Written/Oral Comm	HUM 200/ENGL 201		R-3			
Field Experience	KIN 430D	R-150	R			
GRE		R 1500/500R 1700/540				

R=REQUIRED, r=recommended

KIN 350 (4) KIN 460 (3)
 GE UD (C3) (3) Nutrition (3)
 BIOL 307 (3)

In addition to the upper-division specialization, choose one of the following options:

• **Physical Education** •

JUNIOR YEAR:: 33 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
KIN 400 (3)	KIN 325 (3)
KIN 300 (2)	KIN 300 (1)
KIN 307 (3)	KIN 342 (3)
KIN 320 (3)	

SENIOR YEAR:: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
KIN 300 (2)	KIN 300 (1)
KIN 404 (2)	KIN 430 (1) Combatives

SUMMER SESSION OPTIONS

KIN 307 (3)
 KIN 400 (3)
 KIN 410 (3)

• **Adapted Physical Education** •

JUNIOR YEAR:: 33 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
Elective (3)	KIN 340/342 (3)
KIN 426 (4)	KIN 300 Aquatics (1)
Elective (3)	KIN 427 (3)

SENIOR YEAR:: 29 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (14 Units)</i>
EDSP 433 (3)	KIN 430C (1)
KIN 425 (3)	Elective (3-4)
KIN 430C (1)	

• **Lifetime Fitness** •

JUNIOR YEAR:: 33 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
KIN 426 (4)	KIN 340 (3)
LTF Elective (3)	KIN 442 (4)

SENIOR YEAR:: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
NURS 473 (3)	KIN 430E (3)
LTF Elective (3)	KIN 446 (3)

Major Concentrations

Choose one of the required concentrations below to complete the major:

- I. Adapted Physical Education Concentration (25-26)
- II. Physical Education Concentration (26)
- III. Exercise Science Concentration (24-26)
- IV. Lifetime Fitness Concentration (25-28)
- V. Interdisciplinary Concentration (24)

Total units in a concentration 24-28

Total units in the major 50-52

Specific content of concentrations is detailed below.

Specific Content of Concentrations

Several options are available to a student advancing toward a specific goal in the degree program. A student may select a pattern of courses in any one of the following concentrations.

I. Adapted Physical Education Concentration

After completing the bachelor's degree, students may pursue career opportunities in private or public agencies. In combination with the physical education concentration (Single Subject Credential), a student may meet the requirements for the specialist credential in adapted physical education.

EDSP 433 Teaching Adolescents with Special Education Needs	3
KIN 340/342 Emergency Response/Principles of Musculoskeletal Injuries	3
KIN 300 Aquatics	1
KIN 325 Introduction to Adapted Physical Education	3
KIN 425 Seminar in Adapted PE	3
KIN 426 Individualized Assessment and Program Design	4
KIN 427 Individuals with Disabilities in Educational/Recreational Setting	3
KIN 430C Field Experience	2
Additional approved elective	3-4

Total units in the concentration 25-26

Total units in the B.S. 51-52

II. Physical Education Concentration

The Kinesiology Department offers a Subject Matter Program in Physical Education. Students who are interested in teaching physical education and coaching in the schools may select this option. Completion of the program certifies the subject matter competence required for entry into a teaching credential program in physical education and exempts the student from taking the Praxis II Subject Assessment Examination. Kinesiology majors interested in seeking a general elementary credential may demonstrate subject matter competence

by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact the department office.

KIN 300 Analysis of Motor Performance: Aquatics Skills and Fitness Performance	1
Dance and Rhythms	1
Educational Gymnastics	1
Racquet Sports	1
Team Sports	1
Contemporary Activities	1
KIN 101 Combatives	1
KIN 307 Computer Applications in Physical Education	3
KIN 320 Curriculum, Pedagogy, and Assessment	3
KIN 325 Introduction to Adapted Physical Education	3
KIN 342 Principles of Musculoskeletal Injuries	3
KIN 400 Elementary School Physical Education	3
KIN 404 Theory of Coaching	2
KIN 430 Field Experience	1
Total units in the concentration	26
Total units in the major	52

For information on credentials and professional education requirements, please see the Education section in this catalog, which describes programs in education, and also the University's special bulletin on Programs in Teacher Education.

Integrated Degree and Credential Program

Students in their freshmen year who are interested in becoming public school physical education teachers can enroll in a program of study that integrates a B.S. in kinesiology with a concentration in physical education, with the requirements necessary to obtain a teaching credential. This plan of study merges the degree and credential courses, subsequently exposing students to public school teaching experiences from their freshman through senior years. In addition, if students follow the designed advising plan, they have the potential of completing their course of study in less time than if the degree and credential programs were taken back to back. This program may necessitate students taking one or two summer school sessions.

FRESHMAN YEAR:: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
GE (B1) (3-4)	POLS 200 (D4) (3)
ENGL 101 (A2) (3)	GE (D2) (3)
Foreign Language (C4) (3) (if needed)	PHIL 101 or 102 (A3) (3)
MATH 165 (B2) (4)	BIOL 115 w/out lab (B2) (3)
KIN 120 (2)	KIN 101 (1)
	Combatives
	GE (C3) (3)

SOPHOMORE YEAR:: 32 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (15 Units)</i>
BIOL 220 (B3) (4)	KIN 300 (2)
KIN 300 (1)	KIN 315 (3)
KIN 320 (3)	KIN 342 (3)
GE (A1, C2, D3) (9)	BIOL 224 (B3) (4)
Have taken CBEST.	GE (C3, D5) (3)
Apply to Single-Subject Credential Program.	

SUMMER SESSION:: 9 Units

EDUC 417 (3)
Foreign Language (if needed) (3)
KIN 307 (3)

JUNIOR YEAR:: 34 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (16 Units)</i>
KIN 301 (4)	KIN 300 (2)
KIN 300 (1)	KIN 325 (3)
KIN 350 (4)	KIN 360 (4)
KIN 410 (3)	Nutrition (3)
GE (C1, E) (6)	EDSS 442 (4)

SUMMER SESSION:: 9 Units

KIN 400 (3)
EDSS 418 (3)
EDSP 433 (3)

SENIOR YEAR:: 35 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (17 Units)</i>
KIN 300 (1)	EDSS 458 (12)
KIN 305 (4)	EDSS 459 (3)
KIN 460 (3)	KIN 404 (2)
EDSS 443A (1)	
EDSS 443B (2)	
EDSS 444 (3)	
EDSS 446 (4)	

III. Exercise Science Concentration

Students who have an interest in biomechanics or pre-physical therapy may select this concentration. It contains lower-division and upper-division courses beyond the core required of all majors and a set of courses specific to the subspecialty within the concentration.

Lower-Division Exercise Science Core

CHEM 115AB/116AB General Chemistry*	8**
PHYS 209/210 General Physics*	4**

Upper-Division Exercise Science Core

KIN 340/342 Emergency Response or Principles of Musculoskeletal Injuries	3
KIN 430/495 Field Experience/Special Studies	3
PSY 425 Abnormal Behavior	4
BIOL Elective related to physical therapy	4

Total in the Exercise Science Concentration 26

Total units in the major 52

* GE courses.

** Students planning to enter a master's degree program in physical therapy may need to take additional units or courses to satisfy admission requirements to the programs. Check with the academic schools to which you plan to apply for specific requirements.

IV. Lifetime Fitness Concentration

Prepares individuals for careers in the allied fields of fitness, health, and wellness. Those who work with exercise must have an understanding of intra- and interpersonal aspects of exercise adherence, as well as knowledge of the structure and function of the human body. They must know exercise physiology and the mechanics of human motion; and they must possess skills in planning and carrying out appropriate exercise programs and treatment regimes for the healthy individual who desires lifetime fitness goals, as well as for the individual with unique needs due to a developmental concern or musculoskeletal injury. This concentration incorporates coursework in exercise history, philosophy, sociology, and psychology; exercise physiology and biomechanics of movement; adapted physical education and emergency / sports medicine; and health education, while providing opportunities for internships & field experiences.

KIN 340 Emergency Response	3
KIN 342 Principles of Musculoskeletal Injuries	3
KIN 426 Individualized Assessment and Program Design	4
KIN 430/495 Field Experience/Internship	3
KIN 442 Musculoskeletal Evaluation, Training, and Treatment	4
KIN 446 Exercise Instruction	3

*Electives * Choose a minimum of 2 courses (below)*

KIN 404 Theory of Coaching	2
KIN 427 Individuals with Disabilities in Education and Recreation	3
BIO 318 Biology of Aging	3*
BUS 150 Business and Society	3
GERN 300 Basic Gerontology	3*
NURS 473 Health Education and Drug Abuse	3
PSY 201 Human Potential	3
PSY 408 Transitions in Adult Development	4
PSY 421 Psychology of Aging	4
SOC 317 Emotions and Adult Life	3*

Total units in the concentration 25-28

Total units in the major 51-54

* GE courses

V. Interdisciplinary Concentration

In consultation with their advisors, students design a concentrated course of study or special emphasis track in preparation for a career goal. The concentration must be distinctly different from Kinesiology concentrations already offered. Areas of emphasis may include pre-Occupational Therapy and others.

Students, in consultation with their Kinesiology Interdisciplinary advisor, shall define and describe in writing the specific theme they would like their Interdisciplinary Concentration to be in and select a minimum

of 24 units of coursework to fulfill program requirements. Courses in kinesiology and those offered by other departments are appropriate and may be applied to this track. A minimum of 3 units, and not more than 6 units, in Field Experience (KIN 430) and/or Special Studies (KIN 495) must be taken. The proposed study list must be signed by the student and advisor and submitted to the department chair for approval. A copy of the signed, approved study list is placed in the student's advising folder.

Total units in the concentration 25-28

Total units in the major 51-54

Careers

Lifetime Fitness

The Lifetime Fitness concentration prepares students for admittance into professional degree programs

- Athletic Trainer
- Others

Careers or certifications that require a baccalaureate degree

- Strength and Conditioning Specialist
- Certified Personal Trainer
- Health Fitness Instructor
- Exercise Specialist

Physical Education

- Teaching middle school and high school (B.S. degree leads into the Single Subject Credential Program which certifies graduates to teach in public schools).
- Coaching in public schools and at the collegiate level.
- Graduate Programs in
 - Physical Education (M.A., M.Sc.)
 - Adapted Physical Education
 - Curriculum and Instruction
 - Education Administration
- Teach/coach at a community college (M.A. required).

Adapted Physical Education – Physical Education For Individuals With Disabilities

- Work in public schools, community recreation centers, hospitals and other clinical settings, junior colleges, colleges, and universities;
- Work with infants, children, and adults with all kinds of disabilities;
- Teach adapted physical education to students and also mentor classroom and general physical education teachers (requires Single Subject Credential); and
- Graduate Programs in

- Adapted physical education
- Special education

Students planning to apply to a graduate program in physical therapy

Completing the Kinesiology degree with the Exercise Science concentration, pre-physical therapy option, will satisfy many of the course requirements (or recommendations) which are prerequisites for admission to a physical therapy program. While there are similarities across physical therapy programs, there are also differences from one graduate program to another. Students are urged to contact personally any graduate school they may wish to consider and request admission requirements. Information can be obtained from the American Physical Therapy Associate website: <http://www.apta.org>.

No single list of prerequisites can be totally complete and accurate. The list on the previous page summarizes current requirements for some programs in California, and the requirements are similar to other programs. It is suggested that you use the attached list as general guidelines until a specific school or schools are selected.

Additional Considerations

- Plan on a minimum of two years beyond the bachelor's degree to complete a physical therapy program. Actual time varies by program.
- Find out if the Graduate Record Examination (GRE) is required and what minimum score is accepted.
- Strengthen your oral and written communication skills.
- Apply to several programs.
- Usually a 3.0 GPA is required; however, many schools actually use a 3.3 or higher GPA.
- Get extensive field experience, have excellent letters of recommendation, prepare a strong portfolio, and be prepared for a good interview.
- Some programs may not take less than a "B" in a prerequisite course; some will not accept a repeat grade if the original grade was a "C" or better.
- Many programs require that prerequisites be taken in the last 5-10 years; this varies from school to school.
- DO NOT take prerequisite courses for Cr/NC.
- Take elective courses in related fields, especially the biological sciences.
- Talk to physical therapists and other pre-pt students, and be active in the pre-health professions clubs on campus.

Minor in Kinesiology

Students majoring in other disciplines may complete a minor in kinesiology to further their career goals. The minor requires a minimum of 22 units and includes a core of 12 to 13 units (required of all students) and a minimum of 9 to 10 units of electives. The minor in kinesiology may be desirable for credential candidates pursuing

a second teaching area or a career in coaching; for management students entering sport/fitness businesses; for those involved in outdoor recreation programs; for students in performing arts desiring a physical education/dance background. Students pursuing a kinesiology minor must consult with a departmental advisor for program requirements. A copy of a signed approved study list is placed in the student's advising folder.

Minor Core Requirements

KIN 201 Foundations of Kinesiology	1
<i>Choose one course from the following:</i>	
KIN 301 History and Philosophy of Human Movement (4) or KIN 315 Sociology of Sport or KIN 410 Lifespan Motor Development	3-4
<i>Choose two courses from the following:</i>	
KIN 305 Psychological Bases of Human Movement	4
KIN 350 Biomechanics	4
[Prerequisite BIOL 220, Human Anatomy (4)]	
KIN 360 Physiology of Exercise	4
[Prerequisites CHEM 115A, General Chemistry (5) or CHEM 105 and BIOL 224, Human Physiology (4)]	8
Total units in the minor core	12-13

Minor Options

These courses are to be determined with and approved by a departmental advisor. They must be in kinesiology and may include a maximum of 3 units of field work and/or special studies.

Total units in the minor option	9-10
Total units in the minor	22

Master of Arts in Kinesiology

The Master of Arts degree program is oriented toward professional training for those interested in obtaining terminal degrees in areas such as teaching, coaching, adult fitness, and rehabilitation. The program emphasizes a common core/knowledge base, the interdisciplinary nature of kinesiology, a focus on applied professionals, and a culminating experience that is individualized to meet each student's professional needs and interests.

At the completion of the program all graduates will

- Demonstrate knowledge of basic principles and an understanding of the current research in the field of kinesiology;
- Apply critical thinking, writing, reading, oral communication, quantitative and qualitative analysis, and information management skills to movement-related questions;
- Understand the scientific method and other systematic ways of knowing relative to research and scholarship in human movement;

- Develop a sense of responsibility to and for the profession and be professionally involved at the local, state, and/or regional levels; and
- Be prepared to engage in informed dialogue with diverse professional and lay communities regarding kinesiological principles and practices.

M.A. Core Requirements

KIN 500 Introduction to Scholarly Inquiry in Kinesiology	2
KIN 505 Seminar in Psycho-Social Bases of Human Movement	3
KIN 520 Pedagogical Methods	3
KIN 525 Individualized Movement Programs for Rehabilitation & Education	3
KIN 550 Seminar in Biomechanics	2
KIN 560 Advanced Physiology of Exercise	2
KIN 590 Graduate Internship	3
KIN 599 Culminating Project	3
Total units in the M.A. core	21

M.A. Electives

In consultation with and receiving approval from an advisor, select an additional 9-unit study plan. For example, a student who wishes to pursue an emphasis in sport pedagogy will select from the following list of electives:

KIN 521 Curriculum Design & Analysis in Physical Education (3)	
KIN 522 Research and Issues in Physical Education Teacher Education (3)	
EDSS 444 Teaching in the Content Area (Physical Education) (3)	
EDCT 558 Educational Technology and Classroom (3)	
EDCT 560 Instructional Design and Technology (3)	
Total units in M.A. electives	9
Total units in the M.A. degree	30

The Department of Kinesiology offers the M.A. in Kinesiology via the culminating project in which graduate students choose from the following options: project, thesis, scholarly article, business/curriculum plan, clinical project, and a research component of a larger sponsored project. In so doing, graduate students are offered an array of options that are individualized to their specific professional needs. Students selecting the thesis option must complete an approved statistics course as a prerequisite.

Admissions Procedures

Students must apply to the University through the Office of Admissions and Records and must complete a separate application to the Kinesiology Department. Applicants must:

1. Apply to the Office of Admissions to be admitted to graduate status in the University. The application must include the following:
 - a. Two sets of transcripts of all college work; and

- b. Certification of a B.S. degree or the equivalent with a 3.0 GPA in the last 60 units of college work.
2. Apply to the Department of Kinesiology for admission to the Master's Degree Program in Kinesiology. This application should be sent directly to the Department of Kinesiology, Attn: Graduate Studies Coordinator. The Kinesiology Department Application requires:
 - a. Kinesiology Department Graduate Application (available at http://www.sonoma.edu/kinesiology/ma_program/Applicant_Info.htm);
 - b. Personal statement articulating the applicant's academic and professional goals;
 - c. Official transcripts from **all** undergraduate and graduate institutions; and
 - d. Two letters of recommendation.

Electronic submission of application is preferred, e.g. of application, letters of recommendation, personal statement and unofficial copy/scan of transcripts (pending arrival of official transcripts).

Students may be admitted as conditionally classified or classified graduate students. The procedures for each are as follows:

Conditionally Classified Graduate

Application for students interested in pursuing a master's degree in kinesiology will be forwarded to the department for consideration. Students who have degrees in other areas of study must make up deficiencies in undergraduate areas: descriptive statistics, biomechanics, psychological basis of human movement, and physiology of exercise. Only one (up to 4 units) of these courses may be counted toward the M.A. degree. Completion of WEPT required.

Classified Graduate

Classified graduate students are those who have completed all admissions requirements and undergraduate course work and have been admitted to the University and the master's degree program in the Department of Kinesiology.

Please see the Degree Requirements section in this catalog for postbaccalaureate degree requirements. The graduate coordinator serves as advisor to all conditionally classified graduate students until the students select a major advisor and advance to classified graduate status.

Advancement to Candidacy for the M.A. Degree

The Advancements to Candidacy form (GSO1) describes the culminating project and verifies that the student has met the Writing Proficiency Requirement. This form must be approved by all members of the student's project committee and the department graduate coordinator before being forwarded to the Associate Vice President for final review and approval prior to granting of the M.A. degree.

LIBERAL STUDIES UKIAH

UKIAH RESIDENT PROGRAM DEPARTMENT OFFICE

Nichols Hall 220
(707) 664-2029
www.sonoma.edu/ukiah

PROGRAM COORDINATOR

Sandra Harrison Feldman
Stevenson Hall 3004
(707) 664-2437

Program Offered

Bachelor of Arts in Liberal Studies
School of Social Sciences

Ukiah Resident Program

Sonoma State University offers an upper-division program in Ukiah leading to a bachelor of arts in liberal studies. The Liberal Studies Ukiah program offers a wide variety of courses from the social sciences, humanities, and natural sciences, while providing a flexible major through which students may also take courses in other areas of interest.

Courses are offered in Ukiah for resident credit to students who have completed or almost completed general education requirements, and who have been admitted to Sonoma State University.

Like more traditional liberal arts majors, the Liberal Studies Ukiah major is excellent preparation for students interested in a career in teaching, the legal profession, social services, nonprofit organizations, or business, as well as graduate work in the social sciences and the humanities.

Bachelor of Arts in Liberal Studies

Requirements for the major (all upper-division)

Humanities (American multicultural studies, theater arts, art history, anthropology, English, philosophy)	16
Behavioral sciences (economics, geography, political science, psychology, sociology, women's and gender studies, history)	16
Natural sciences (astronomy, biology, chemistry, environmental studies, geology, physics)	6
Electives (drawn from above disciplines or in consultation with advisor)	16
Total units in the major	54

* Includes 9-unit upper-division GE requirement.

Liberal Studies Ukiah Admission Criteria

Courses are offered in Ukiah for resident credit to students who meet the following criteria:

1. Students must be residents of Mendocino County or Lake County.

2. Students must have completed 60 or more transferable units. (Sonoma State University accepts up to 70 transferable college semester units of course credit.)
3. Students must have completed all 9 units required in General Education, Category A – Communication, Critical Thinking, and Freshman Composition.
4. Students must have completed both the science laboratory requirement and the mathematics requirement in General Education, Category B – Natural Sciences and Mathematics.
5. Students must have been admitted to Sonoma State University and declared a major in Liberal Studies Ukiah.

Application to the Program

Students should follow the application procedures described in the application section of this catalog, being sure to list the major as Liberal Studies Ukiah, and the major code as 49016. More information about the program may be obtained by calling the Liberal Studies Ukiah program office, (707) 664-2029.

Sample Four-Semester Plan for Bachelor of Arts in Liberal Studies Ukiah Program

This plan assumes the student:

1. Has completed 66 transferable units, including all lower-division GE courses; and
2. Is attending full time. Since fields, rather than courses, are required for the major, the plan shows the way that the student would complete course work in each of the required fields, as well as the elective units within the major.

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Natural Science (3)	Natural Science (3)
Humanities (3)	Humanities (3)
Behavioral Science (3)	Behavioral Science (3)
Humanities (3)	Humanities (3)
Behavioral Science (3)	Behavioral Science (3)

SENIOR YEAR:: 24 Units

<i>Fall Semester (12 Units)</i>	<i>Spring Semester (12 Units)</i>
Behavioral Science (3)	Major Elective (3)
Humanities (3)	Major Elective (3)
Behavioral Science (3)	Major Elective (3)
Humanities (3)	Major Elective (3)

TOTAL UNITS:: 120

LINGUISTICS

PROGRAM OFFICE

Nichols 332
(707) 664-2504

LINGUISTICS PROGRAM COORDINATOR

Contact Department of English, (707) 664-2140, or
Greta Vollmer, Assoc. Professor, English

LINGUISTICS PROGRAM ADVISORS

Richard J. Senghas, Professor, Anthropology
Mira Katz, Asst. Professor, English
Jeffrey Reeder, Professor, Modern Languages (Spanish)
Robert Train, Asst. Professor English
Hee-won Kang, Professor, Education
Karen Grady, Assoc. Professor, Education
Kelly Estrada, Asst. Professor, Education

Programs Offered

Minor in Linguistics

Supplementary English Language Development (SELD)

The fundamental concern of linguistics is with description and explanation of the interrelatedness of thinking and using language. This concern takes many forms: among others, inquiry into the nature of language as speech or signing, as knowledge, and as communication; inquiry into the history of languages and how languages change; inquiry into how language is acquired, and into the nature of language learning and teaching.

The linguistics minor offers grounding in general linguistic principles, together with the widest possible selection of elective courses. Through this study plan, students are able to develop interests in particular areas of linguistics as strong complements to majors in related disciplines.

As of spring 2008, the Teaching English as a Second Language (TESL) certificate within the linguistics program has been discontinued in order to facilitate the implementation of a more comprehensive program to be offered by the SSU School of Education. Students interested in TESL training should contact Prof. Karen Grady in the School of Education about the M.A. in TESOL.

It is possible to develop an interdisciplinary major with a strong emphasis in linguistics (please see the Interdisciplinary Studies section in this catalog). Interested persons should contact both the interdisciplinary studies program coordinator and the linguistics program coordinator.

Also, through the special emphasis in the anthropology major (please see the Anthropology section in this catalog), a student may create a course of study in linguistic anthropology that incorporates a number of the linguistics program courses.

Minor in Linguistics

For a minor in linguistics, students must complete 20 units as follows:

Minor Core Requirements

<i>One of the following introductory courses:</i>	<i>3-4</i>
ANTH 200 Introduction to Linguistic Anthropology	3
ENGL 203 Introduction to Linguistic Studies	4
ENGL 341 Exploration in Language	4
SPAN 304 Introduction to Spanish Linguistics	4
<i>One of the following courses in linguistic methods:</i>	<i>4</i>
ANTH 480 Methods in the Study of Language Use	4
ENGL 489 Topics in Linguistics	4*
ENGL 588 Seminar: Study of Language	4*
SPAN 400 Special Topics in Linguistics	4*
SPAN 490 Seminar in Linguistics	4*

* Course counts toward linguistics methodology requirement if course topic is methodological.

Total Units in the Minor Core (11-12)

Minor Electives

Students pursuing a linguistics minor need to take an additional 8-9 elective units in courses with linguistic components selected in consultation with a program advisor, for a total of 20 units. These elective course include (but are not limited to):

- All courses offered by the linguistics program;
- All courses mentioned above as satisfying linguistics minor requirements; and
- Pre-approved elective courses:

AMCS 355 Language & Ethnicity	4
ANTH 380 Language, Culture & Society	4
ANTH 382 Language Change	4
ANTH 383 Language in Sociopolitical Context	4
ANTH 386 Sign Languages and Signing Communities	4
ENGL 379 Pedagogical Grammar	4
PHIL 383 Philosophy of Language	3

Total elective units in the minor (8-9)

Total units in the minor (20)

Supplementary English Language Courses (SELD)

Courses in Supplementary English Language are designed to enable Sonoma State University students for whom English is a second language to improve their proficiency in the English language, especially in the reading and writing skills required for success at the University. Admission to these courses is determined by ESL Placement Test scores. Courses in SELD prepare students for entrance into ENGL 101. Students will also be required to take the Written English Proficiency Test. Generally, these courses are coordinated through the Sonoma State American Language Institute.

MATHEMATICS

DEPARTMENT OF MATHEMATICS AND STATISTICS

Darwin Hall 114

phone: (707) 664-2368

fax: (707) 664-3535

www.sonoma.edu/math

DEPARTMENT CHAIR

Sam Brannen

ADMINISTRATIVE COORDINATOR

Marybeth Hull

Faculty

*William Barnier

Sam Brannen

*Sharon Cabaniss

Jean Bee Chan

Ben Ford

Susan Herring

Izabela Kanaana

Brigitte Lahme

*Rick Luttmann

Elaine McDonald-Newman

*Edith Prentice Mendez

Jerry Morris

Scott Nickleach

Sunil Tiwari

*Faculty Early Retirement Program

Programs Offered

Mathematics

Bachelor of Arts in Mathematics

Bachelor of Science in Mathematics

Cooperative Master of Arts in Mathematics (with San Francisco State University)

Minor in Mathematics

Minor in Math for Teachers

Preparation For Teaching

Statistics – See the Statistics portion of this Catalog

Bachelor of Arts in Applied Statistics

Bachelor of Science in Statistics

Minor in Applied Statistics

Preparation for Actuarial Exams

About Mathematics

Mathematics is a rapidly growing discipline whose concepts and applications play an ever-increasing part in modern life. Mathematics has always been an essential tool in the physical sciences, and has more recently been applied extensively in such diverse areas as medical and biological research, environmental studies, management science, behavioral and social sciences, statistics, and computer science.

Our basic curriculum is designed to give students the mathematical skills necessary for success in business, industry, government, and teaching, as well as to provide a sound background for continuation of study toward advanced degrees in mathematics, computer science, statistics, and related fields.

The B.A. in mathematics provides preparation for teaching, general application of mathematics, and graduate study in mathematics. The bi-disciplinary concentration allows a student to combine mathematics with another discipline.

The B.S. in mathematics offers concentrations in applied mathematics and computer science. These programs prepare students for graduate study in mathematics and for work in a variety of other fields: computer science, work in government and industry, biostatistics, actuarial work, and consultative problem-solving in modern industry.

Degree Requirements	Units
General education	51
Major	45-55
Electives	14-24
Total units needed for graduation	120

Core Curriculum

MATH 161 Differential and Integral Calculus I (3 units in GE)	4
MATH 211 Differential and Integral Calculus II	4
MATH 220 Higher Mathematics: An Introduction	3
MATH 261 Multivariable Calculus	4
MATH 340 Real Analysis I	4
Total units in core curriculum	19

B.A. Program (Pure Mathematics)

Core Curriculum	19 Plus
MATH 241 Differential Equations with Linear Algebra	4
MATH 306 Number Theory or	
MATH 308 Geometry	3
MATH 320 Modern Algebra I	4
MATH 322 Linear Algebra	3
MATH 360 Complex Variables	3
MATH 418 Topology or	
MATH 420 Modern Algebra II or	
MATH 440 Real Analysis II	3

Supporting Courses

MATH 180 Computing for Math/Science or	
CS115 Programming I (3 units in GE)	2-4
PHYS 114 Intro to Physics (3 units in GE)	4
Total units in B.A. program	45-47

B.A. Program (Secondary Teaching)

This B.A. program satisfies state requirements for subject matter preparation in mathematics for the Single Subject Teaching Credential.

Core Curriculum

19 Plus

MATH 222 Elementary Applied Linear Algebra or	
MATH 322 Linear Algebra	3
MATH 250 Probability and Statistics	3
MATH 306 Number Theory	3
MATH 308 College Geometry	3
MATH 310 History of Mathematics	3
MATH 316 Graph Theory and Combinatorics or	
MATH 416 Graph Theory and Combinatorics	3
MATH 320 Modern Algebra I	4
MATH 345 Probability Theory or	
MATH 470 Mathematical Modeling	3-4
MATH 390 Fieldwork and Seminar: Secondary Mathematics Teaching	2
MATH 490 Capstone Seminar: Secondary Mathematics Teaching	1

Supporting Courses

MATH 180 Computing for Math/Science or	
CS 115 Programming I (3 units in GE)	2-4
PHYS 114 Intro to Physics (3 units in GE)	4

Total units in secondary teaching program 53-56

Note: Students considering graduate school in mathematics are advised to choose MATH 322 instead of MATH 222. MATH 241 is highly recommended.

B.A. Program (Bi-disciplinary Mathematics)

This B.A. concentration allows a student to combine mathematics with another discipline.

Core Curriculum

19 Plus

MATH 161 Differential and Integral Calculus I (3 units in GE)	4
MATH 211 Differential and Integral Calculus II	4
22 additional units selected from the following list, including a minimum of 14 at the upper-division level:	
MATH 165 Elementary Applied Statistics	4
MATH 180 Computing for Mathematics and Science	2
MATH 220 Higher Mathematics: An Intro.	1
or MATH 210 Intro. to Proof	1
or MATH 142 Discrete Structures	3
MATH 222 Elementary Applied Linear Algebra	3

MATH 241 Differential Equations with Linear Algebra	4
MATH 261 Multivariable Calculus	4
MATH 265 Intermediate Applied Statistics with SPSS	4
MATH 306 Number Theory	3
MATH 308 College Geometry	3
MATH 310 History of Mathematics	3
MATH 316 Graph Theory and Combinatorics	3
or MATH 416 Graph Theory and Combinatorics	3
MATH 320 Modern Algebra I	4
MATH 322 Linear Algebra	3
MATH 330 Techniques of Problem Solving	2
MATH 331 Differential Equations II	3
MATH 340 Real Analysis I	4
MATH 345 Probability Theory	4
MATH 352 Numerical Analysis	3
MATH 360 Introduction to Complex Variables	3
MATH 375 M*A*T*H Colloquium	1
MATH 418 General Topology	3
MATH 420 Modern Algebra II	3
MATH 430 Linear Systems Theory	3
MATH 431 Partial Differential Equations and Integral Transformations	3
MATH 440 Real Analysis II	3
MATH 441 Operations Research	3
MATH 470 Mathematical Models	3
MATH 485 Selected Topics	1-3

A minimum of 22 additional units in another program (outside of the Department of Mathematics and Statistics), at least 12 upper-division level, chosen in consultation with and approved by the Mathematics and Statistics Department Chair.

Total units in Bi-disciplinary Mathematics program 52

B.S. Program (Applied Mathematics)

This B.S. concentration prepares students for employment in industry and graduate schools in scientific fields.

Core Curriculum

19 Plus

MATH 241 Differential Equations with Linear Algebra	4
MATH 316 Graph Theory and Combinatorics or	
MATH 416 Graph Theory and Combinatorics	3
MATH 322 Linear Algebra	3
MATH 331 Differential Equations II	3
MATH 345 Probability Theory	4
MATH 352 Numerical Analysis	3
MATH 360 Complex Variables or	
MATH 431 Partial Differential Equations	3
MATH 441 Operations Research	3
MATH 470 Mathematical Modeling	3

Supporting Courses

MATH 180 Computing for Math/Science	2
PHYS 114 Intro to Physics (3 units in GE)	4

Total units in applied mathematics program 54

B.S. Program (Computer Science Option)

This B.S. concentration prepares students for computer industry employment and graduate schools in computer-science-related fields. Students who are interested in the mathematical foundations of computer science generally opt for this major.

<i>Core Curriculum</i>	<i>19 Plus</i>
MATH 241 Differential Equations with Linear Algebra	4
MATH 316 Graph Theory and Combinatorics or	
MATH 416 Graph Theory and Combinatorics	3
MATH 322 Linear Algebra	3
MATH 345 Probability Theory	4
MATH 352 Numerical Analysis	3
CS 110 UNIX	1
CS 115 Programming I	4
CS 215 Programming II	4
CS 315 Data Structures	4
CS 415 Algorithm Analysis (4) or	
CS 355 Database Management Systems Design (4)* or	
CS 375 Computer Graphics (4)* or	
CS 454 Theory of Computation*	3-4
<i>* Course may be substituted by arrangement with the math advisor.</i>	
Supporting Course	
PHYS 114 Intro to Physics (3 units in GE)	4
Total units in computer science program	55-57

Sample Four-Year Program for Bachelor of Arts in Mathematics

FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
MATH 161 (GE) (4)	MATH 211 (4)
GE (3)	PHYS 114 (GE) (4)
ENGL 101 (3)	MATH 180 (2)
GE (3)	GE (3)
Freshman Seminar (3)	MATH 175 (elective) (1)
SOPHOMORE YEAR:: 29 Units	
<i>Fall Semester (13 Units)</i>	<i>Spring Semester (16 Units)</i>
MATH 241 (4)	MATH 261 (4)
MATH 220 (3)	MATH 322 (3)
GE (3)	GE (3)
GE (3)	GE (3)
	GE (3)
JUNIOR YEAR:: 32 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
MATH 308 or Elective (3)	MATH 340 (4)
MATH 320 (4)	Elective or MATH 306 (3)

GE (3)	GE (3)
GE (3)	UD GE (3)
UD GE (3)	GE (3)
SENIOR YEAR:: 29 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (13 Units)</i>
MATH 418 or 440 or Elective (3)	MATH 360 (3)
UD GE (3)	MATH 420 or Elective (3)
Elective (3)	Elective (4)
Elective (3)	Elective (3)
Elective (4)	
TOTAL UNITS:: 120	

Statistics

For the Department's Statistics offerings (majors, minor, and actuarial science preparation), see the Statistics section of this Catalog.

Cooperative Master of Arts in Mathematics

The Department of Mathematics participates in a cooperative Master of Arts in mathematics with San Francisco State University. Through this program, students who have been accepted into the Master's degree program at San Francisco State may complete up to 12 units of course work in residence at Sonoma State University. Students interested in this cooperative program should contact the chair of the mathematics department for further information.

Minor in Mathematics

Twenty units of mathematics are required. These must include MATH 161 (or its equivalent) and at least 6 units of upper-division mathematics courses, not including MATH 300A, MATH 300B, MATH 390, MATH 395, MATH 399, or MATH 490. Approval of the mathematics department should be obtained by the junior year in order to plan the minor properly.

Minor in Math for Teachers

This program provides the mathematical background to teach effectively at the elementary, middle school, and early high school levels. Twenty-two units are required. These must include MATH 300A, MATH 103 or 150, MATH 142 or 200 or 220, MATH 107 or 161, MATH 250 or 300B, and two courses chosen from MATH 306, MATH 310, MATH 316, and MATH 470. Additional recommendations for students pursuing this minor are MATH 390, and MATH 222 for those who intend to take the mathematics CSET exam.

Preparation for Teaching

Secondary

The B.A. program for secondary teaching is designed for students planning to teach mathematics in middle, junior high, and high

schools. This program is fully accredited by the *California Commission on Teacher Credentialing* and satisfies the subject matter competency requirement for a Single Subject Teaching Credential. (An alternative route for demonstrating subject matter competence is passing a battery of commercial exams.) Most students complete the B.A. program, then a one-year teaching credential program to earn the Single Subject Credential. Any student interested in teaching mathematics at the secondary level should consult a mathematics department education advisor as early as possible in his or her college career. The advisor can provide information about Sonoma State's Single Subject Credential Program and can help the student design a plan for taking the required mathematics and education courses to complete both degree and credentialing requirements efficiently.

Elementary

The Department of Mathematics also offers coursework for students planning to teach in elementary schools or preschools. The minimal college-level mathematics preparation recommended for elementary teachers is three courses: MATH 150, MATH 300A, and MATH 300B. Particular subject matter preparation programs for elementary teachers may have additional requirements or may offer the option of a mathematics concentration; consult advisors in the program for additional details.

Middle School or Elementary Mathematics Specialist

Students interested in teaching mathematics in middle school, or in specializing in mathematics at the elementary level, should consider the math minor for teachers. This minor also helps students who wish to prepare for the CSET (California Subject Examination for Teachers) exam in mathematics, especially at the Foundational level. The Foundational level credential in mathematics is appropriate for elementary, middle, and early high school teaching.

Entry-Level Mathematics (ELM) Requirement

Unless exempted, the Entry-Level Mathematics Examination must be taken within the past five years before enrollment in any general education course or developmental mathematics course (MATH 35 or 45). The ELM results will place the student in the appropriate level of mathematics courses. Note that if placement in the developmental mathematics sequence is necessary, satisfactory completion of MATH 45 is required for placement in MATH 103, 104, 105, 107, 111, 131, 141, 150, and 165. Please consult the Schedule of Classes or telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

Grading Policy in the Department of Mathematics and Statistics

Nonmajors

All mathematics courses except MATH 35, 45, 103, 104, 105, 107, 111, 131, 141, 150, 161, and 165 are available in the Cr/NC grading mode to nonmathematics majors.

All Students

MATH 175, 210, 295, 330, 390, 395, and 499 are available only as Cr/NC.

Mathematics and Statistics Majors

A mathematics major must take all mathematics courses used to meet major requirements in the traditional grading mode, with the exceptions of courses offered only in the Cr/NC modes: MATH 107W, 161W, 175, 210, 211W, 295, 330, 390, 395, and 499, and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog).

Majors are advised to take PHIL 102 for the GE category A3 (Critical Thinking).

MODERN LANGUAGES AND LITERATURES

DEPARTMENT OFFICE

Stevenson Hall 3016
(707) 664-2351

DEPARTMENT CHAIR

Christine B. Renaudin

ADMINISTRATIVE COORDINATOR

Kate Sims

Faculty

Michaela Grobbel / German, Literature and Culture of the German-Speaking World, Ethnic Minority Studies, Feminist Studies, World Literature

Jorge Porras / Spanish, Theoretical Linguistics

Jeffrey Reeder / Spanish, Applied Linguistics, Portuguese

Christine Renaudin / French, French Literature, Culture, Francophone Studies

Suzanne Toczyski / French, French Literature, Culture, Francophone Studies

Robert Train/ Spanish, Sociolinguistics, Language & Culture Learning Center Director

Programs Offered

Bachelor of Arts in French

Bachelor of Arts in Spanish

Master of Arts in Spanish

Minor in French

Minor in German

Minor in Spanish

Courses in World Literatures in English

Students can also take advantage of programs offered by International Programs.

The programs and courses of the Department of Modern Languages and Literatures make accessible to students the languages, literatures, and cultures of France and the Francophone world, Germany and Europe, and Spain and Latin America. We recognize students' need for linguistic competency and cultural sensitivity in the multilingual, multicultural world in which they will live and work. Thus, language is taught as an integral part of its cultural context. Programs and courses are designed to complement academic work in many other fields. For further information please consult the department's website at <http://www.sonoma.edu/modlang/>.

The Department of Modern Languages and Literatures offers major and minor programs in French and Spanish, and a minor program in German. (Students interested in German should also

consider a B.A. in Global Studies, Europe concentration.) Modern language courses are taught in the target language; functional control of all language skills (reading, writing, listening comprehension, and speaking) is a primary goal.

It is highly advisable that students combine a major or minor in modern languages with a major or minor in another discipline. Coursework, minors, and majors in modern languages complement specialized knowledge and expertise in other academic areas. The structure of the modern languages major programs facilitates the planning of double majors and minors. In addition to majors and minors offered by other departments, interdisciplinary and career minor programs of special interest to modern languages students include the international studies minor and the minor in linguistics.

Careers in Modern Languages and Literatures

Through careful academic planning, the study of modern languages and literatures can open a wide range of career options in such fields as international business, government service, domestic and international human services, travel, librarianship, translating and interpreting, and journalism. Many department alumni have pursued work in the Peace Corps and various other nonprofit entities; others have earned teaching credentials or advanced degrees in their discipline and teach at the elementary, secondary, or post-secondary levels. A degree in a second language is also an excellent preparation for a career teaching English as a second language (TESL). The Department of Modern Languages and Literatures successfully prepares students for graduate study in a wide variety of fields, particularly in combination with a second major or a minor. The importance of early and frequent consultation with departmental advisors cannot be overstressed. It is the key to meaningful access to academic and career opportunities, including internships both at home and abroad.

International Programs

Through the International Programs of the California State University, Sonoma State University students may spend an academic year in residence at a university abroad. Courses taken abroad through the International Programs count as residence units in all University programs and can be integrated into an overall academic plan. For further information, contact International Services, (707) 664-2582, located in Salazar 1060.

Language and Culture Learning Center

The Language and Culture Learning Center is dedicated to enhancing the educational experience of students at Sonoma State University through the use of technology in learning modern languages and exploring world cultures. In keeping with Sonoma State's focus on liberal arts education, the Center strives to integrate learning

technologies into students' educational experiences in meaningful, personal, and individual ways.

The facility in 1028 Stevenson provides students with weekday access to language and culture learning materials representative of the courses taught in the Department of Modern Languages and Literatures. The Center's multimedia computer facility in 1040 Stevenson offers students the chance to participate in whole-class activities and to independently supplement their classroom work through access to digital language learning materials available on CDs and the Internet. The Center's language mentoring program provides individual instruction and assistance to students enrolled in lower-division courses within the Department of Modern Languages and Literatures. For further information on the Language and Culture Learning Center at Sonoma State, please consult our website at www.sonoma.edu/modlang/learning_center/index.html.

Placement in Modern Language Courses

The faculty of the Department of Modern Languages and Literatures will assist students in selecting the appropriate course level. In particular, recommendations for placement in French classes differ slightly from the more general schedule described below; students interested in studying French should contact one of the instructors.

Students with this many years in high school language courses should enroll in courses in this level:

Less than two years	101
Two years	102
Three years	201 or any other 200 course except 202
Four years	202 or any other 200 course except 201

Students who have taken an Advanced Placement (AP) exam and scored 3, 4, or 5 should contact an advisor in that language for specific information regarding placement and credit.

Please note that placement can be very individual, particularly for heritage speakers of a language. Any students who have reason to believe that their language skills are more advanced than this table would imply, should consult with the instructor of the course in which they think they would benefit most.

Transfer students with college credit in a modern language may not receive credit for SSU courses in the same language that duplicates previous work. Exceptions may be made by the chair of the department when the following conditions are met:

1. The courses involved are lower-division; and
2. The original study was accomplished three or more years prior to enrollment in the equivalent course at Sonoma State University.

In addition to the four-year graduation plans detailed below, students pursuing the bachelor of arts in French or Spanish may also elect a five- or six-year plan. Please see an advisor for details.

Course Challenges

Students may challenge courses, as provided in University procedures (please see more information in the Admissions section of this catalog). It is essential that students interested in this possibility consult instructors of the courses they wish to challenge at the start of the semester.

Grade Requirements

Undergraduate Progression and Retention in French and Spanish Majors: Students must maintain a minimum grade of C- in each course required for the major in French or Spanish; otherwise, the student will not be permitted to graduate in the major. The student may repeat the course if s/he does not earn the minimum grade. The student must receive a grade of C- or better when the course is repeated. This policy also applies to courses taken at other institutions, abroad or in the United States.

Bachelor of Arts in French

The purpose of the French major is to enable students to attain an advanced level of competency in speaking, listening, reading, and writing, and to provide them with a comprehensive knowledge of the historic and contemporary culture and institutions of France and the Francophone world. The French language is studied not as an end in itself, but as a vehicle for students' broader and more informed participation in their chosen fields. Students who study French at SSU also have the option of completing a portion of the course work in France (Paris or Aix-en-Provence) or in Canada, and should visit the International Programs Office for details.

Degree Requirements	Units
General education	51
Major requirements	32
General electives	37
Total units needed for graduation	120

Note: Students should note the prerequisites for upper-division courses.

Requirements for the Major

Complete the following 32 Units:

FR 202 Oral French	4
FR 300 Introduction to Literary Analysis & Critical Writing	4
FR 320 France Yesterday	4
FR 321 France Today	4
FR 410 French Literature	4
FR 411 French Literature	4
FR 415 Special Topics in French Culture	4
FR 475 Senior Seminar	4

Total units in the major 32

Sample Four-Year Program for Bachelor of Arts in French

Variations are easily accommodated in the sequencing of GE requirements, but should be made in consultation with an advisor. Note that courses designated as "elective or minor" total 37 units and could easily accommodate a second major (depending on the selected double major, which might require one or two additional courses). Careful planning and early identification of a second major make this feasible. A variation would be to complete the junior or senior year in the CSU International Program, meeting some upper-division French requirements in a single year, and completing the second major in the other upper-division year at SSU.

FRESHMAN YEAR:: 30 Units

Fall Semester (14 Units)	Spring Semester (16 Units)
FR 101 (4)	FR 102 (4)
FR 101L (1)	FR 102L (1)
GE A2 (3)	GE C1 (3)
GE A3 (3)	GE B1 (*1) (3)
GE B4 (3)	GE A1 (3)
	Elective or Minor (2)

SOPHOMORE YEAR:: 30 Units

Fall Semester (14 Units)	Spring Semester (16 Units)
FR 201(*2) (4)	FR 202(*2) (4)
FR 201L (1)	GE D3(*5) (3)
GE B3(*1) (3)	GE D4(*5) (3)
GE D2(*3) (3)	GE B2 (3)
GE C2 (3)	GE D5(*4) (3)

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
FR 300 (C4)(UD)(4)	FR 411 (C4)(UD)(4)
FR 321 (C4)(UD)(4)	FR 415 (C4)(UD)(4)
GE D1 (UD) (3)	GE E1 (UD) (3)
Elective or Minor (4)	Elective or Minor (4)

SENIOR YEAR:: 30 Units

Fall Semester (16 Units)	Spring Semester (14 Units)
FR 320 (C4) (UD) (4)	FR 410 (C4)(UD) (4)
Elective or Minor (3)	FR 475 (C4)(UD) (4)
Elective or Minor (3)	Elective or Minor (3)
Elective or Minor (3)	Elective or Minor (3)
Elective or Minor (3)	

TOTAL UNITS:: 120

(*1) Either B1 or B3 must have a lab.

(*2) Counts as C4.

(*3) Important to take World History before upper-division French.

(*4) Can be an early prerequisite for business majors or minors, and might be taken earlier, or later, for those who decide at a later date on an internationally-oriented career other than business.

(*5) Advantage of taking D3 and D4 together: understanding the U.S. Constitution in connection with U.S. history.

Minor in French

Requirements for the Minor

The French minor presupposes 15 units or the equivalent of FR 101, 102, 201, and lab courses 101L, 102L, and 201L. All or part of these may have been completed elsewhere. Also, the student who wishes to minor in French is required to take:

FR 202 Oral French	4
FR 300 Introduction to Literary Analysis & Critical Writing	4
<i>and one of the following pair of courses:</i>	<i>8</i>
FR 320 France Yesterday	4
and FR 410 French Literature	4
or	
FR 320 France Yesterday	4
and FR 321 France Today	4
or	
FR 321 France Today	4
and FR 411 French Literature	4
and either FR 415 Special Topics in French Culture	4
or FR 475 Senior Seminar	4

Total units in the minor 20

Minor in German

The German minor program enriches students' academic and career opportunities by providing them with skills that complement many majors at SSU. German helps students understand themselves as participants in their own culture. It also helps them understand U.S. history and culture, since German-Americans represent the largest single heritage population. Moreover, German is the most widely spoken language in Europe. Knowing German also opens up opportunities to connect with more than 120 million native speakers worldwide. Additionally, the study of German prepares students to be competitive for graduate school, since many graduate programs require or recommend German. German minors may also have a distinct advantage entering a professional career, in fields such as international business, economics, science, history, global studies, music, or teaching. The SSU German program offers a variety of courses that provide students with linguistic skills and cultural knowledge of the German-speaking world. Students are encouraged to participate in the CSU International Programs and take courses in Germany, which may be counted toward the minor. Students wishing to study abroad are strongly encouraged to consult with their German advisor to ensure that courses taken abroad can be applied to the German minor. A minimum of 8 of the 20 required units must be taken at SSU.

Requirements for the Minor

The German minor program consists of a minimum of 20 units of college coursework in German, of which 8 units must be taken at SSU: 4 units at the 200 level (GER 200 or GER 210) and 4 units consisting of GER 300. Additionally, German minor students must attain

the “Goethe-Zertifikat B1” (Zertifikat Deutsch), the internationally recognized proficiency certificate offered annually at SSU under the auspices of the Goethe Institute. Students who have successfully completed the SSU German Program may be confident of passing the certification examination, offered at Sonoma State University at the end of every spring semester.

All German courses, except for GER 101, count toward the German minor. Note that GER 300 must be taken in residence at SSU. Students must earn a minimum grade of C- in each course that counts for the German minor. They may repeat the course once if they do not earn the minimum grade. Students must receive a grade of C- or better when the course is repeated. This policy also applies to courses taken at other institutions, abroad or in the United States.

The German minor presupposes 5 units or the equivalent of GER 101 (4 units) and GER 101L (1 unit). Students who wish to minor in German are required to take the following 5 courses:

GER 102 (4 units)—Fall, Spring

Second Semester: Contemporary Germany

Prerequisite: GER 101 or consent of instructor.

Requires concurrent enrollment in GER 102L (1 Unit)

GER 200 (4 units)—Fall

Intermediate German: The German-Speaking World Today

Prerequisite: GER 102 or consent of instructor.

Requires concurrent enrollment in GER 200L (1 Unit)

GER 210 (4 units)—Spring

Intermediate German through Film

Prerequisite: GER 102 or consent of instructor.

Requires concurrent enrollment in GER 210L

GER 314 (3 units)—Fall

Literature and Culture of the German-Speaking World

Note: Taught in English. Requires concurrent enrollment for German minor students in GER 399L.

Prerequisite for German minor students: GER 102 or consent of instructor.

Course may be repeated for credit if topic changes.

GER 300 (4 units)—Spring

Advanced German Studies

Prerequisites: GER 200 and GER 210, or consent of instructor. Course may be repeated for credit if topic changes.

Total units in the minor **20**

Bachelor of Arts in Spanish

The culture and literary traditions of Spain, the growing interest in the politics, culture, and commerce of Latin America, the proximity of Mexico, and the presence of a large Spanish-speaking population in California and the University’s service area all contribute to the shaping of the curriculum of the Spanish program and provide excellent reasons for the study of Spanish. The Spanish program offers a full range of courses in language, literature, and culture, as well as interdisciplinary concentrations. Courses taken abroad in the CSU International Programs, with the exception of Span 490 and 491 (at least one of which must be taken in residence at SSU), may be counted toward the major or minor.

Degree Requirements	Units
General education	51
Major requirements	36-56
Electives/Other	13-33
Total units needed for graduation	120

Spanish Placement Test

A free placement test is offered by the department. Students who have a background in Spanish, whether through study in high school or informal exposure, and have not previously taken a college Spanish course are strongly advised to take the placement test. The test takes approximately one hour. Information is available in the departmental office.

Lower-Division Spanish Courses

These courses are prerequisites for the upper-division courses in the major and minor. Some or all of these courses or their equivalents may be waived by virtue of prior language study, courses in transfer, or placement in higher level courses.

SPAN 101 Basic Spanish, 1st Semester	4
SPAN 101L Language Laboratory	1
SPAN 102 Basic Spanish, 2nd Semester	4
SPAN 102L Language Laboratory	1
SPAN 201 Intermediate Spanish, 1st Semester	4
SPAN 201L Language Laboratory	1
SPAN 202 Intermediate Spanish, 2nd Semester	4
SPAN 202L Language Laboratory	1

Electives

SPAN 150 Elementary Conversation	2
SPAN 250 Intermediate Conversation	2

Total units **20-24**

Spanish Minor

For a minor, students must complete SPAN 300, 301, 304, and 305, and either 306 or 307.

SPAN 300 Advanced Spanish Language	4
SPAN 301 Advanced Composition and Conversation	4
SPAN 304 Introduction to Spanish Linguistics	4
SPAN 305 Introduction to Literature and Research	4

Plus, either:

SPAN 306 Cultures of Spain or	
SPAN 307 Cultures of Latin America	4

Total minor units **20**

Spanish Major

For the major, students must complete SPAN 300, 301, 304, 305, 306, 307, and three classes at the 400 level, at least one of which must be SPAN 490 or SPAN 491 (490 or 491 must be taken in residence at SSU):

SPAN 300 Advanced Spanish Language	4
SPAN 301 Advanced Composition and Conversation	4

SPAN 304 Introduction to Spanish Linguistics	4
SPAN 305 Introduction to Literature and Research	4
SPAN 306 Cultures of Spain	4
SPAN 307 Cultures of Latin America	4
plus, any two of:	
SPAN 400 Topics in Linguistics	4
SPAN 401 Peninsular Literature	4
SPAN 402 Latin American Literature	4
SPAN 410 Spanish Translation or	4
SPAN 427 Spanish Teaching Methodologies	4
Plus, either:	
SPAN 490 Seminar in Linguistics or	4
SPAN 491 Seminar in Literature	4
Total units in the major	36

Sample Four-Year Program for Bachelor of Arts in Spanish

Note: If students have already completed lower-division classes (or equivalents) before arriving at SSU, they can begin taking advanced-level courses as soon as desired and could take fewer classes per semester than indicated in this plan. In addition to the four-year graduation plan specified, students pursuing the bachelor of arts in Spanish may also elect a five- or six-year plan. Please consult with a Spanish program advisor.

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
SPAN 101 (4)	SPAN 102 (4)
SPAN 101L (1)	SPAN 102L (1)
GE Electives (A2, A3, B4) (9)	SPAN 150 (2)
	GE Electives (C1, B1, A1) (9)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
SPAN 201 (4)	SPAN 202 (4)
SPAN 201L (1)	SPAN 202L (1)
GE Electives (B3, D2, C2, D5) (9)	SPAN 250 (2)
	GE Electives (D3, D4, B2) (9)

JUNIOR YEAR:: 36 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (18 Units)</i>
SPAN 300 (4)	SPAN 301 (4)
SPAN 305 (4)	SPAN 304 (4)
SPAN 306 (4)	SPAN 307 (4)
GE UD (E1 and other) (6)	GE UD (C3, D1) (6)

SENIOR YEAR:: 19 - 28 Units

<i>Fall Semester (11-16 Units)</i>	<i>Spring Semester (8-12 Units)</i>
Two SPAN classes at the 400 level Electives/Minor (4-8)	One SPAN class at the 400 level Electives/Minor (4-8)

TOTAL UNITS:: 120

MUSIC

DIRECTOR, SCHOOL OF PERFORMING ARTS

Jeff Langley

DEPARTMENT OFFICE

Green Music Center 2040
(707) 664-2324

DEPARTMENT CHAIR

Brian S. Wilson

ADMINISTRATIVE COORDINATOR

Dolores Bainter

Faculty

Brass and Percussion

Pete Estabrook, Trumpet

Ruth Wilson, Horn

Anthony Collins, Trombone and Low Bass

Jennifer Wilsey, Timpani, Percussion

Jazz

Doug Leibinger, Program Director

Myles Ellis, Vibes

Pete Estabrook, Improv, History, Trumpet

Jim Rothermel, Saxophone

Cliff Hugo, Bass

George Marsh, Drum Set

John Simon, Vocal Combos

Randy Vincent, Guitar

Keyboard

Marilyn Thompson, Piano, Chamber Music, Classical Instrumental Repertoire

John Simon, Jazz Piano

Yvonne Wormer, Staff Accompanist

Richard Riccardi, Staff Accompanist

Music Education

Andy Collinsworth, Program Director, Instrumental Conducting and Methods

Bob Worth, Choral Conducting

John Stanley, Elementary Methods

Lynne Morrow, Vocal Pedagogy

Roy Zajac, Woodwind Pedagogy

Ruth Wilson, Brass Pedagogy

Richard Loheyde, String Pedagogy

Jennifer Wilsey, Percussion Pedagogy

Eric Cabalo, Guitar Pedagogy

Musicology And Ethnomusicology

John Palmer, Musicology

Jeff Langley, American Music History

Laxmi G. Tewari, Ethnomusicology

Performing Ensembles - Vocal

Bob Worth, Chamber Singers, Bach Choir

Laxmi G. Tewari, Indian Singing Ensemble

Lynne Morrow, Opera and Music Theatre

Jenny Bent, University Chorus

Performing Ensembles - Instrumental

Andy Collinsworth, Symphonic and Chamber Wind Ensembles

Doug Leibinger, Jazz Orchestra (Big Band) and Jazz Ensembles

Marilyn Thompson, Chamber Music and String Orchestra

Bob Affifi, Latin Jazz Band

Ruth Wilson, Brass Ensemble

Jennifer Wilsey, Percussion Ensemble

Eric Cabalo, Guitar Ensemble

Strings

Richard Loheyde, Violin, Viola

Judiyaba, Cello

Eric Cabalo, Classical Guitar

Theory/Composition and Musicianship

Brian Wilson, Theory, Analysis and Composition

William Johnson (Emeritus), Composition

Jeff Langley, Composition

John Palmer, Ear Training

Doug Leibinger, Jazz Theory

Jesus Contreras, Music Technology and Composition

Voice

Lynne Morrow, Mezzo Soprano, Diction

Susan Witt-Butler, Soprano

David Burnakus, Baritone

Jenny Bent, Soprano

Bonnie Brooks, Mezzo Soprano

Woodwinds

Kathleen Reynolds, Flute

Daniel Celidore, Oboe

Roy Zajac, Clarinet

Rufus Olivier, Bassoon

Ensemble in Residence

Trio Navarro

Roy Malan, Violin

Jill Rachuy Brindel, Cello

Marilyn Thompson, Piano

Programs Offered

Bachelor of Arts in Music

Applied Music Concentration

Jazz Studies Concentration

Liberal Arts Music Concentration

Music Education Concentration

Minor in Music

Liberal Arts Concentration

Jazz Studies Concentration

World Music (Ethnomusicology) Concentration

Teaching Credential Preparation in Music

A commitment to active involvement stands at the heart of the music curriculum. Students are involved in many ways—as listeners, performers, composers, critics, or historians. Intelligent and lively participation informs every facet of the department's various degree programs.

The core curriculum for music majors provides a thorough foundation in such essential skills as keyboard facility, theoretical understanding, aural perception, and analysis of a wide range of music literature. All majors gain experience with both the intuitive and the intellectual processes of the art. The curriculum is designed to place the specialized study of music in the setting of a liberal arts education and to serve as a firm basis for careers in a wide variety of professions in music and those related to music.

Three concentrations exist within the bachelor of arts in music. The liberal arts music concentration provides a broad basis from which a student may pursue graduate studies or a variety of careers. The jazz studies concentration trains the student in the techniques and practices of contemporary jazz styles. The applied music concentration is intended for those having a special interest and promise in the following areas:

- Vocal/Choral Performance
- Instrumental Performance
- Opera/Music Theatre
- Composition and Music Technology
- World Music Studies

The bachelor of arts in music education prepares students to enter the teaching credential program in the School of Education.

All students are expected to consult with a music advisor prior to registering each semester; students in the Applied Music concentration should consult an advisor to plan appropriate electives for the specific area of study selected. Any student planning to do graduate work in music should consult a music advisor in time to plan a program that will support the intended graduate specialty. Students planning careers in business or media should consider minors in communications studies or business administration. The Music Department is a fully accredited member of the National Association of Schools of Music.

Audition and Proficiency Expectations for Entering and Transfer Students

In order to be accepted as a music major, one must be admitted to the University AND must also successfully complete a Music Department audition.

Auditions

The Department of Music requires all prospective music majors to complete an audition on their major instrument/voice. Students living more than 250 miles from campus may send recorded auditions (CD or DVD). To schedule an audition, use the Audition Request Form found on the department website (also available in the department office).

All auditions, live or recorded, shall include two pieces in contrasting styles that can be performed within the 10-minute limit that demonstrate accurate rhythms, pitch control, and interpretive awareness. Accompaniment is not necessary.

Additional Requirements

Instrumentalists shall prepare two major scales and one minor scale in all three forms - natural, harmonic, and melodic.

Jazz students shall prepare two contrasting tunes; Aebersold-type play-along accompaniments are acceptable. Jazz drummers must demonstrate various styles, including medium and up tempo swing, jazz, waltz and 3-4 different Latin and/or contemporary rhythms. They may submit a tape of a band in which they are featured. Music education students shall write a one-paragraph statement on why they wish to teach.

Music theatre students are encouraged to submit a DVD of themselves performing (singing and acting) in a musical.

Students may include more than one instrument/voice or musical style on their audition.

Please use the Audition Request Form to schedule auditions.

Send recorded auditions along with a cover letter to:

Music Department (Audition Materials)
Sonoma State University
1801 E. Cotati Ave.
Rohnert Park, CA 94928

Scholarships

All music majors may also audition for a variety of scholarships. Scholarship audition information and application can be found on the department website. The scholarship audition can also serve as the program audition. Students living more than 250 miles from campus may send recorded auditions (CD or DVD).

Fill out the scholarship application and send all required materials to:

Music Department Scholarship Committee
Sonoma State University
1801 E. Cotati Avenue
Rohnert Park, CA 94928

Proficiency Expectations

Basic keyboard skills and the ability to read standard musical notation are prerequisites to the music major curriculum. All entering and transfer students will be given placement examinations in piano, music theory, and aural skills (sight-singing and dictation) during

orientation. Students with inadequate preparation in keyboard will be expected to take MUS 109 Intensive Keyboard Lab I. Students without background in any of these areas will also be expected to take MUS 106 Fundamentals.

Jazz studies majors, whether continuing or transfer students, must complete MUS 320, Ear Training IV; MUS 312, Jazz Harmony and Arranging II; MUS 389, Jazz Improvisation III; MUS 489, Jazz Improvisation IV; MUS 392, Jazz Piano II; and MUS 412, Jazz Composition in residence.

Basic keyboard proficiency is a prerequisite to enrollment in MUS 110 Theory I Diatonicism. MUS 320 and 309A/B (or 392) are prerequisite to enrollment in certain upper-division music courses.

Lower-Division Program

The core of the lower-division program for music majors is a sequence of courses in musicianship, theory, and music literature. This sequence is a comprehensive approach to ear training in its broadest sense. It includes sight-singing, dictation, counterpoint, harmony, and historic and stylistic considerations as they relate to the development of aural and written skills. Materials and solfège techniques from a variety of musical styles are used. Lower-division students are encouraged to enroll in 300-level music ensembles.

Upper-Division Program

The upper-division program is designed to integrate studies of theory, musicianship, keyboard and aural skills, music history and analysis. Students who wish to specialize in jazz, music education, or applied music will be required to take classes that develop skills specific to these areas. MUS 310, Theory III and MUS 410, Theory IV must be taken in residence.

Capstone Experience

Liberal arts music majors and students in jazz studies are required to complete a senior project. The senior project, MUS 490, may take the form of directed research leading to a lecture-demonstration, a recital, an extended composition, a student instructed course, the preparation of a performing edition, or another project of substantial effort. Students enrolled in the applied music concentration and in music education must present a senior recital, MUS 491.

Performance Ensemble Requirement

Ensemble/Performance requirements for all students in applied, liberal arts, jazz studies and music education

The Music Department regards continuous experience in active music-making to be an essential part of college music study. To provide this experience, the department offers a wide range of ensembles both vocal and instrumental.

All music majors (applied, jazz studies, liberal arts, and music education) must declare a *major performance medium* (instrument or voice) upon entering their program of study.

Every music major is required to be in at least one *major performing ensemble* during each semester of residence in which he or she

plays his or her declared performance medium (instrument or voice).

In addition, all instrumentalists are required to participate in a major choral ensemble for one semester. Also, vocalists in the applied and music education concentrations must participate in a major instrumental ensemble for one semester. Students may substitute a minor ensemble for a major ensemble no more than twice.

Specific ensemble requirements for students in applied and liberal arts

The following are the major ensembles for vocalists in applied and liberal arts (at least half of these must be in a choral ensemble):

- SSU Chorus
- Chamber Singers
- Musical Theatre Production
- Musical Theatre Scenes Workshop

The major ensemble for woodwind, brass, and percussion in applied and liberal arts are the following:

- Symphonic Wind Ensemble
- Jazz Orchestra

The major ensemble for string, guitar, and piano players will be determined in consultation with the department chair and the area coordinator.

Students are highly encouraged to also include minor ensembles in their course of study. Minor ensembles for vocalists are Chamber Singers, Chamber Music, Bach Choir, and Indian Singing Ensemble. Minor ensembles for instrumentalists in applied, liberal arts, and music education are Chamber Music, Chamber Wind Ensemble, Brass Ensemble, Percussion Ensemble, Guitar Ensemble, and the Jazz Ensembles.

Specific ensemble requirements for students with concentration in jazz studies

The following are the major ensembles for students in the jazz studies concentration:

- Concert Jazz Ensembles
- Latin Jazz Ensemble
- Jazz Orchestra (at least one semester)
- Symphonic Wind Ensemble (at least one semester)

Students in the jazz studies concentration enrolled in Symphonic Wind Ensemble and/or SSU Chorus must also participate in a major or minor jazz ensemble during that semester.

Specific ensemble requirements for students majoring in music education

The following are the major ensembles for vocal students in music education: (At least half of these must be in a choral ensemble.)

- SSU Chorus
- Chamber Singers
- Musical Theatre Production
- Musical Theatre Scenes Workshop

The following is the major ensemble for woodwind, brass and percussion students majoring in music education:

Symphonic Wind Ensemble

The major ensemble for string, guitar and piano players will be determined in consultation with the department chair and director of music education:

Chamber Music Ensembles

Guitar Ensemble

String Orchestra

In addition, instrumentalists majoring in music education must participate at least one semester in a vocal ensemble and a jazz ensemble, and vocalists majoring in music education must participate at least one semester in Symphonic Wind and a jazz ensemble.

Music Use Fee and Instrument Checkout

A nonrefundable fee of \$25 per semester is charged for use of Music Department facilities and equipment. In addition, a \$20 deposit is charged for checking out a departmental instrument.

Private Instruction

The department funds 30-minute lessons for music students. Additional lesson time must be paid for by the student. Rates for private lessons are competitive.

All music majors will take *studio instruction* in their performing medium. It is department policy that music majors are required to study their major performance medium (instrument or voice) with an SSU faculty member or an approved instructor.

Repertoire Classes and Forums

All music majors must be enrolled in a music repertoire or forum class each semester in residence.

Classical Instrumental Repertoire Class (for classical instrumentalists)

Vocal Repertoire Class (for vocalists)

Jazz Forum (for jazz students)

Composers Forum (for student composers)

Guitar Ensemble (for guitarists)

Jury

Before the end of the sophomore year, students in applied music and music education must successfully complete a Junior Qualifying Jury in order to officially continue as a major. Incoming transfer students entering as juniors, will be required to pass a Junior Qualifying Jury prior to the end of their first semester in residence.

Bachelor of Arts in Music

Applied Music Concentration

Degree Requirements	Units
General education	45
Major requirements	68
Preparatory and/or general electives	7
Total units needed for graduation	120

Requirements For the Major

The applied music concentration is intended for students who show special aptitude for careers as performers. It is expected that a student graduating in applied music will have reached a level of at least semiprofessional competence.

Lower-division students are admitted to the applied music concentration on the basis of faculty recommendation. Admission to the upper-division is by a juried audition for performers and a portfolio review for composers. These take place at the end of the sophomore year (or, for transfer students, prior to entering the junior year).

Students interested in world music, composition and/or music technology studies should consult a music advisor for information on an advisory plan. Complete all the following:

Preparatory

(Credit not applicable toward major; students may challenge by exam)

MUS 106 Fundamentals	3
MUS 109 Intensive Keyboard Lab I	2
MUS 209 Intensive Keyboard Lab II	2

Theory/Musicianship (20)

MUS 110 Theory I: Diatonicism	3
MUS 210 Theory II: Chromaticism	3
MUS 310 Theory III: Form and Analysis	3
MUS 410 Theory IV: 20th Century Techniques	3
MUS 120 Ear Training I	2
MUS 220 Ear Training II	2
MUS 320 Ear Training III	2
MUS 420 Ear Training IV	2

History/Literature (16)

MUS 150 Survey of U.S. Music (satisfies GE, C1)	3
MUS 251 History of Western Music - Ancient World to 1750	3
MUS 252 History of Western Music - 1750 to the Present	3
MUS 300 Seminar (various topics)	3
MUS 350 Survey of World Music (satisfies GE, C3)	4

Applied Skills (5)

Two of the following four courses: (2 units)	2
MUS 292 Jazz Piano I	
MUS 392 Jazz Piano II	
MUS 309A Keyboard Proficiency Lab	
MUS 309B Keyboard Proficiency Lab	
MUS 491 Senior Recital	3

Private instruction (each semester in residence)

8

Transfer students must take lessons for every semester in residence.

Sample Four-Year Program for Bachelor of Arts in Music — Applied Music Concentration

FRESHMAN YEAR:: 29 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
ENGL 101 (GE area A2) (3)	PHIL 101 (GE area A3) (3)
GE Mathematics (GE area B4) (3)	MUS 110 (3)
MUS 106 (3)	MUS 120 (2)
MUS 109 (2)	MUS 209 (2)
MUS Elective (1)	Private Instruction (1)
Major Performing Ensemble (1)	Music Elective (1)
Private Instruction (1)	Major Performing Ensemble (1)
Repertory Class (1)	Repertory Class (1)
SOPHOMORE YEAR:: 33 Units	
<i>Fall Semester (18 Units)</i>	<i>Spring Semester (15 Units)</i>
HUMS 200 (GE area A1) (3)	GE (area D2) (3)
GE (area D3) (3)	MUS 310 (3), MUS 320 (2)
MUS 210 (3), MUS 220 (2)	MUS 252 (3)
MUS 251 (3)	MUS 309B (1)
MUS 309A (1)	Major Performing Ensemble (1)
Major Performing Ensemble (1)	Private Instruction (1)
Private Instruction (1)	Repertory Class (1)
Repertory Class (1)	
JUNIOR YEAR:: 30 Units	
<i>Fall Semester (17 Units)</i>	<i>Spring Semester (13 Units)</i>
GE (area E) (3)	GE (area D1) (3)
GE (area D4) (3)	GE (area B1) (3)
MUS 150 (GE area C1) (3)	MUS 300 (3)
MUS 410 (3)	Major Performing Ensemble (1)
MUS 420 (2)	Private Instruction (1)
Major Performing Ensemble (1)	Repertory Class (1)
Private Instruction (1)	Music Elective (1)
Repertory Class (1)	
SENIOR YEAR:: 26 Units	
<i>Fall Semester (13 Units)</i>	<i>Spring Semester (13 Units)</i>
GE (area B2) (3)	GE (area B3) (3)
GE (area D5) (3)	GE (area C2) (3)
Major Performing Ensemble (1)	MUS 491 (3)
Private Instruction (1)	Major Performing Ensemble (1)
MUS 350 (area C3) (4)	Private Instruction (1)
Repertory Class (1)	Repertory Class (1)
	Music Elective (1)
TOTAL UNITS:: 120	

Music Electives (minimum of 3 units) 3

Courses will vary according to area(s) of interest - see department advisor.

Major Ensemble (each semester in residence) 8

(See section on performance ensemble requirement.

Credit applicable toward graduation, but not the major.)

Repertory Class or Forum 8

Total units in the major 68

Jazz Studies Concentration

Degree Requirements	Units
General education	45
Major requirements	68
Electives	7
Total units needed for graduation	120

Requirements For the Major

The jazz studies concentration is designed to furnish the training and background needed for students seeking to work as jazz performers, arrangers, composers, or teachers.

Students planning to pursue careers as jazz performers should take private instruction in their major instrument or in voice as a part of their program. These students normally enroll each semester in at least one music department ensemble appropriate to their area of interest. They should also seek opportunities for performance off campus in a wide variety of performing environments.

Complete all the following:

Preparatory (credit not applicable toward major; students may challenge by exam)

MUS 106 Fundamentals of Music Theory	3
MUS 109 Intensive Keyboard Lab I	2
MUS 120 Ear Training I	2
MUS 189 Jazz Improvisation I	1
MUS 209 Intensive Keyboard Lab II	2

Theory/Musicianship (15)

MUS 110 Theory I	3
MUS 212 Jazz Harmony and Arranging I	3
MUS 312 Jazz Harmony and Arranging II	3
MUS 220 Ear Training II	2
MUS 320 Ear Training III	2
MUS 420 Ear Training IV	2

History/Literature (12)

MUS 252 History of Western Music - 1750 to the Present	3
MUS 342 History of Jazz	3

And two of the following four courses: (6 units) 6

MUS 150 Survey of U.S. Music (satisfies GE, C1)
MUS 251 History of Western Music - Ancient World to 1750
MUS 300 Seminar (various topics)
MUS 350 Survey of World Music (satisfies GE, C4)

Sample Four-Year Program for Bachelor of Arts in Music — Jazz Studies Concentration

FRESHMAN YEAR:: 32 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (GE area A2) (3)	PHIL 101 (GE area A3) (3)
GE Math (GE area B4) (3)	Music Elective (1)
Major Performing Ensemble (1)	Private Instruction (1)
MUS 109 (2)	MUS 389 (3)
MUS 342 (3)	MUS 209 (2)
Elective (1)	Major Performing Ensemble (1)
Private Instruction (1)	Music 120 (2)
Music 106 (3)	Music 189 (1)
Jazz Forum (1)	Jazz Forum (1)

SOPHOMORE YEAR:: 31 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (16 Units)</i>
HUMS 200 (GE area A1) (3)	GE (area D3) (3)
MUS 212 (3)	GE (area C2) (3)
MUS 220 (2)	MUS 320 (2)
MUS 292 (1)	MUS 392 (1)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
MUS 489 (3)	Private Instruction (1)
Private Instruction (1)	Music Elective (1)
Jazz Forum (1)	Jazz Forum (1)
	Music 110 (3)

JUNIOR YEAR:: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (area E) (3)	GE (area D2) (3)
GE (area D4) (3)	GE (area D1) (3)
MUS 150 (GE area C1) (3)	GE (area B1) (3)
MUS 412 (3)	Major Performing Ensemble (1)
Major Performing Ensemble (1)	Private Instruction (1)
Private Instruction (1)	Music 420 (2)
Jazz Forum (1)	Jazz Forum (1)

SENIOR YEAR:: 29 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (12 Units)</i>
GE (area B2) (3)	GE (area B3) (3)
GE (area D5) (3)	GE (area C3) (3)
MUS 350 (GE area C3) (4)	MUS 490 (2)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
Private Instruction (1)	Private Instruction (1)
Jazz Forum (1)	Jazz Forum (1)
Music Elective (1)	
Music 312 (3)	

TOTAL UNITS:: 120

Applied Skills (16)

MUS 292 Jazz Piano I	1
MUS 289 Jazz Improvisation II	3
MUS 392 Jazz Piano II	1
MUS 412 Jazz Composition	3
MUS 389 Jazz Improvisation III	3
MUS 489 Jazz Improvisation IV	3
MUS 490 Senior Project	2

Music Electives (minimum of 3 units)

Courses will vary according to area(s) of interest—see department advisor.

Private Instruction (each semester in residence)

Transfer students must take lessons for every semester in residence.

Jazz Forum (each semester in residence)

Ensembles (each semester in residence)

(See section on performance ensemble requirement.)

Total units in the major 68

Music Education Concentration

Degree Requirements	Units
General education (including 6 units in music)	51
Major requirements (86 units minus 6 units)	80
Preparatory	0-7
Total units needed for graduation	131-137

Requirements for the major

The music education concentration is a B.A. program that provides the skills necessary for teaching music in public or private schools in California. It is recommended for anyone planning a teaching career in music.

The program consists of a core of basic music major requirements, plus specialized courses for prospective teachers of vocal, instrumental, and general music in elementary, junior high, and senior high schools.

Preparatory (credit not applicable toward major; students may challenge by exam)

MUS 106 Fundamentals of Music Theory	3
MUS 109 Intensive Keyboard Lab I	2
MUS 209 Intensive Keyboard Lab II	2

Theory/Musicianship (20)

MUS 110 Theory I: Diatonicism	3
MUS 210 Theory II: Chromaticism	3
MUS 310 Theory III: Form and Analysis	3
MUS 410 Theory IV: 20th Century Techniques	3
MUS 120 Ear Training I	2
MUS 220 Ear Training II	2
MUS 320 Ear Training III	2
MUS 420 Ear Training IV	2

History/Literature (13)

MUS 150 Survey of U.S. Music OR	
MUS 342 History of Jazz	3
MUS 251 History of Western Music: Ancient World to 1750	3
MUS 252 History of Western Music: 1750 to Present	3
MUS 350 Survey of World Music	4

Applied Skills (20)

MUS 259 Music Technology: Tools and Applications	2
MUS 289 Jazz Improvisation II	2
MUS 314 Orchestration	2
MUS 400 Music for the Classroom	2
MUS 401 Conducting Technique	2
MUS 402 Choral Conducting and Methods	3
MUS 403 Instrumental Conducting and Methods	3
MUS 491 Senior Recital	1

And two of the following four courses (2 units) 2

MUS 292 Jazz Piano I	
MUS 392 Jazz Piano II	
MUS 309A Keyboard Proficiency	
MUS 309B Keyboard Proficiency	

Methods Courses (7)

MUS 415 Vocal Methods	1
MUS 418 Guitar Methods	1
MUS 422 Strings Methods	1
MUS 423 Woodwinds Methods	1
MUS 424 Brass Methods	1
MUS 429 Percussion Methods	1
MUS 440 Vocal Instrumental Proficiency Jury	1

Private Instruction (each semester in residence) 8

Transfer students must take lessons for every semester in residence.

Major Ensembles (see specific ensemble for music education majors) 8

Each semester in residence

Additional ensembles 2

Repertory Class or Forum 8

Total units in the major (6 included in GE) 86

Sample Four-Year Program for Bachelor of Arts in Music — Music Education Concentration

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (GE area A2) (3)	PHIL 101 (GE area A3) (3)
GE Mathematics (GE area B4) (3)	GE (area D2) (3)
MUS 150 (GE area C1) (3)	MUS 118 (1)
MUS 289 (2)	MUS 110 (3)
MUS 115 (1)	MUS 120 (2)
Private Lessons (1)	Private Lessons (1)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
Repertory Class (1)	Repertory Class (1)

SOPHOMORE YEAR:: 36 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (17 Units)</i>
GE (area D3) (3)	HUMS 200 (GE area A1) (3)
MUS 210 (3)	MUS 310 (3)
MUS 220 (2)	MUS 320 (2)
MUS 251 (3)	MUS 423 (1)
MUS 259 (3)	MUS 252 (3)
MUS 424 (1)	MUS 309B (1)
Private Lessons (1)	Private Lessons (1)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
MUS 309A (1)	Repertory Class (1)
Repertory Class (1)	Additional Ensemble (1)

JUNIOR YEAR:: 33 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (15 Units)</i>
GE (area D4) (3)	*EDUC 417 (GE area D1) (3)
MUS 350 (GE area C3) (4)	GE (area B1) (3)
MUS 400 (2), MUS 422 (1)	MUS 314 (2), MUS 401 (2), MUS 429 (1)
Private Lessons (1)	Private Lessons (1)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
MUS 420 (2)	Repertory Class (1)
Music 410 (3)	Additional Ensemble (1)
Repertory Class (1)	

SENIOR YEAR:: 36 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (18 Units)</i>
GE (area B2) (3), GE (area D5) (3)	GE (area B3) (3), GE (area C2) (3)
GE (area E) (3)	MUS 403 (3), MUS 490 (1)
MUS 402 (3)	Private Lessons (1)
Private Lessons (1)	Major Performing Ensemble (1)
Major Performing Ensemble (1)	MUS 440 (1)
*EDSS 418 (3)	*EDSP 433 (3)
Repertory Class (1)	Repertory Class (1)

TOTAL UNITS:: 137

* 9 Units are prerequisites for admission to the Single Subject program, not counted in major.

Sample Four-Year Integrated Program for Bachelor of Arts in Music (Music Education Concentration) and Teaching Credential

FRESHMAN YEAR:: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (GE area A2) (3)	PHIL 101 (GE area A3) (3)
GE Mathematics (GE area B4) (3)	GE (area D2) (3)
MUS 150 (GE area C1) (3)	MUS 123 (1), MUS 129 (1)
MUS 289 (2), MUS 115 (1), MUS 118 (1)	MUS 110 (3), MUS 120 (2)
Private Lessons (1)	Private Lessons (1)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
Repertory Class (1)	Repertory Class (1)

SOPHOMORE YEAR:: 36 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (17 Units)</i>
GE (area D3) (3)	*EDUC 417 (GE area D1) (3)
MUS 210 (3), MUS 121 (2)	MUS 310 (3), MUS 220 (2)
MUS 251 (3)	MUS 401 (2), MUS 440 (1)
MUS 259 (3), MUS 424 (1), MUS 422 (1)	MUS 252 (3)
Private Lessons (1)	MUS 309B (1)
Major Performing Ensemble (1)	Private Lessons (1)
MUS 309A (1)	Major Performing Ensemble (1)

SUMMER SESSION:: 6 Units

HUMS 200 (GE area A1) (3)
EDSS 418 (3)

JUNIOR YEAR:: 34 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (16 Units)</i>
GE (area E) (3), GE (area D4) (3)	GE (area B1) (3), EDSP 433 (3)
MUS 350 (GE area C3) (4)	MUS 403 (3)
MUS 400 (2), MUS 402 (3)	MUS 300 (3)
Private Lessons (1)	MUS 314 (2)
Major Performing Ensemble (1)	Private Lessons (1)
MUS 420 (2)	Major Performing Ensemble (1)

SUMMER SESSION:: 6 Units

GE (area B3) (3)
GE (area C2) (3)

SENIOR YEAR:: 35 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (18 Units)</i>
GE (area B2) (3), GE (area D5) (3)	EDSS 458 (12), EDSS 459 (3)
GE (area C3) (3)	MUS 490 (1)
EDSS 444 (3)	Private Lessons (1)
EDSS 443A/B (3)	Major Performing Ensemble (1)
Private Lessons (1)	
Major Performing Ensemble (1)	

TOTAL UNITS:: 149

Teaching Credential Preparation In Music

The music education curriculum stated above is identical to the subject matter competency portion of the teaching credential.

In order to acquire the music teaching credential, the student must complete this concentration, a B.A., and a two-semester program in the School of Education. The music education advisor will guide the student through the program.

Nine units of prerequisites are needed to enter the credential program: EDSS 417, EDSS 418, EDSP 433.

The Integrated Program is available to freshmen. This program prepares students to teach music in the elementary schools, middle schools, junior high schools, and high schools in California. Students in this program take coursework in education along with music and general education throughout their undergraduate years, eventually graduating with a B.A. and a teaching credential simultaneously. The Integrated Program requires formal application to SSU's Single Subject program prior to the junior year.

Liberal Arts Music Concentration

Degree Requirements	Units
General education	45
Major requirements	68
Preparatory and/or Electives	7
Total units needed for graduation	120

Requirements for the Major

The courses listed below constitute the liberal arts concentration in music. A student satisfactorily completing these courses, along with other University requirements, will earn a B.A. with a major in music. All students are encouraged to consult an advisor about arranging individually tailored programs of study.

Complete all the following:

Preparatory (credit not applicable toward major; students may challenge by exam)

MUS 106 Fundamentals	3
MUS 109 Intensive Keyboard Lab I	2
MUS 209 Intensive Keyboard Lab II	2

Theory/Musicianship (20)

MUS 110 Theory I: Diatonicism	3
MUS 210 Theory II: Chromaticism	3
MUS 310 Theory III: Form and Analysis	3
MUS 410 Theory IV: 20th Century Techniques	3
MUS 120 Ear Training I	2
MUS 220 Ear Training II	2
MUS 320 Ear Training III	2
MUS 420 Ear Training IV	2

History/Literature (16)

MUS 150 Survey of U.S. Music (GE, Area C1)	3
MUS 251 History of Western Music - Ancient World to 1750	3
MUS 252 History of Western Music - 1750 to the Present	3
MUS 300 Seminar (various topics)	3
MUS 350 Survey of World Music (GE, Area C3)	4

Sample Four-Year Program for Bachelor of Arts in Music — Liberal Arts Music Concentration

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (GE area A2) (3)	PHIL 101 (GE area A3) (3)
GE MATH (GE area B4) (3)	HUMS 200 (GE area A1) (3)
MUS 106 (3)	MUS 110 (3)
MUS 109 (2)	MUS 120 (2)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
MUS 209 (2)	Private Instruction (1)
Private Instruction (1)	Music 209 (2)
Repertory Class (1)	Repertory Class (1)

SOPHOMORE YEAR:: 33 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (15 Units)</i>
GE (area D2) (3)	GE (area D3) (3)
MUS 150 (GE area C1) (3)	MUS 310 (3)
MUS 210 (3)	MUS 320 (2)
MUS 220 (2)	MUS 252 (GE area C1) (3)
MUS 309A (1)	Major Performing Ensemble (1)
Major Performing Ensemble (1)	MUS 309B (1)
MUS 251 (3)	Private Instruction (1)
Private Instruction (1)	Repertory Class (1)
Repertory Class (1)	

JUNIOR YEAR:: 31 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (area E) (3)	GE (area D1) (3)
GE (area D4) (3)	GE (area B1) (3)
MUS 350 (GE area C3) (4)	MUS 300 (3)
Major Performing Ensemble (1)	Music Elective (2)
Music 410 (3)	Major Performing Ensemble (1)
Private Instruction (1)	Private Instruction (1)
Music 420 (2)	Repertory Class (1)
Repertory Class (1)	

SENIOR YEAR:: 29 Units

Fall Semester (15 Units)

GE (area B2) (3)
GE (area D5) (3)
GE (area C3) (3)
Major Performing Ensemble (1)
Music Elective (3)
Private Instruction (1)
Repertory Class (1)

Spring Semester (14 Units)

GE (area B3) (3)
GE (area C2) (3)
MUS 490 (2)
Major Performing Ensemble (1)
Repertory Class (1)
Private Instruction (1)

TOTAL UNITS:: 123

Applied Skills (4)

Two of the following four courses: (2 units)	2
MUS 292 Jazz Piano I	
MUS 392 Jazz Piano II	
MUS 309A Keyboard Proficiency Lab	
MUS 309B Keyboard Proficiency Lab	
MUS 490 Senior Project	2

Private Instruction (each semester in residence)	8
Transfer students must take lessons for every semester in residence.	

Music Electives (minimum of 4 units)	4
Courses will vary according to area(s) of interest—see department advisor.	

Ensembles (each semester in residence)	8
See section on performance ensemble requirement.	

Repertory Class or Forum	8
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Total units in the major 68

Minors in Music

The Music Department offers three minors—the liberal arts music minor, jazz studies music minor, and world music (ethnomusicology) minor. Students contemplating a minor in music should consult the Music Department for advising early in their academic careers. At least 6 units of the minor must be completed at Sonoma State University.

Liberal Arts Concentration

Complete all the following:

MUS 105 Music Theory for Non-Majors or MUS 106 Fundamentals of Music Theory	3
MUS 110 Theory I: Diatonicism	3
MUS 120 Ear Training I	2
Ensemble courses	4
Elective in music	2
Upper-division lecture course	3

And one of the following courses: (3 units)	3
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MUS 150 Survey of U.S. Music	
MUS 250 Survey of European Music (3) Ancient World to 1750	

Total units in the minor 20

Jazz Studies Concentration

Complete all the following:

MUS 110 Theory I: Diatonicism	3
MUS 120 Ear Training I	2
MUS 212 Jazz Harmony and Arranging I	3
MUS 289 Jazz Improvisation II	3
MUS 292 Jazz Piano I	1
MUS 342 History of Jazz	3
MUS 389 Jazz Improvisation III	3
Performing Ensemble	2

Total units in the minor 20

World Music (Ethnomusicology) Concentration

Two of the following courses: 6

MUS 150 Survey of U.S. Music
MUS 250 Survey of European Music
MUS 343 Studies in Musical Genres
MUS 344 Studies in Musical Composers
CALS 368 Chicano Latino Music

All of the following:

MUS 105 Music Theory for Non-Majors	3
MUS 350 Survey of World Music	4
MUS 120 Ear Training I	2
THAR 373 Dances of the World	3
MUS 353 Indian Singing Ensemble (1,1)	2

Recommended but not required:

MUS 300 Seminar	3
MUS 480 Special Topics	1

Total units in the minor 20

NATIVE AMERICAN STUDIES

PROGRAM OFFICE

Nichols Hall 214
(707) 664-2458

COORDINATOR

Elenita Strobel

ADMINISTRATIVE COORDINATOR

Perce Smith

Faculty

Edward D. Castillo / California Indian Culture and History, American Indian Religion & Philosophy, Native American Education and North American History
Gregory Sarris / Native American Literature

Program Offered

Minor in Native American Studies

The Native American Studies program is designed to provide a minor with a multidisciplinary approach to Native Americans through ethnography, history, sociology, and the humanities. By approaching the multiplicity of Indian cultures from a variety of academic perspectives, a deeper understanding of native societies, past and present, will emerge. The program is designed to present a variety of American Indian experiences and issues within the wider context of human history and evolution. The program is especially interested in providing teachers, community service personnel, tribal administrators, and other interested persons with useful skills in dealing with indigenous/native communities. Special emphasis will be placed on assisting educators with practical and theoretical approaches to Indian education. Students in Native American studies are encouraged to apply toward the NAMS minor selected courses from history, anthropology, art, Chicano and Latino studies, American multicultural studies, and education.

Students may develop a special major in Native American studies; those interested should review the guidelines for special majors and consult the program coordinator.

Minor in Native American Studies

The suggested pattern for completing the minor is:

Minor Core Requirements

NAMS 200 Introduction to Native Americans or	
NAMS 205 Introduction to Native American Arts	3
NAMS 305 North American Indian History	4
NAMS 346 Philosophic Systems and Sacred Movements in Native North Americans	3

Total units in minor core **10**

Minor Electives

Select 10 units from the following courses:

NAMS 300 Experimental	1-5
NAMS 354 Native American Literature	3
NAMS 338 Native Americans and the Cinema	3
NAMS 400 Special Topics in Native American Studies	1-4
NAMS 410 Seminar in an Individual Native American Culture	4
NAMS 412 Native California History and Culture	4
NAMS 414 Native American Cultures of the Southwest	4
NAMS 418 Regional Historical Studies	4
NAMS 420 Fundamentals of Native American Education	1-4
NAMS 430 Advanced Native American Workshop	4
NAMS 442 Contemporary Affairs of Native Americans of California	4
NAMS 495 Special Studies	1-4

Total units in minor electives **10**

Total units in the minor **20**

NURSING

(707) 664-2465
Fax: (707) 664-2653
www.sonoma.edu/nursing

DEPARTMENT CHAIR

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ADMINISTRATIVE STAFF

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Liz Close
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Deborah A. Roberts
Wendy Smith
Melissa Vandever
Mary Ellen Wilkosz

Programs Offered

(Fully Accredited by the National League for Nursing Accreditation Commission)

- Bachelor of Science in Nursing
 - Prelicensure B.S.N.
 - R.N. to B.S.N.
- Master of Science in Nursing
 - Family Nurse Practitioner
 - Leadership and Management (concentration in Nursing Administration, Clinical Nurse Leader, or Nursing Education)
 - Direct Entry Master of Science in Nursing (Entry Level Master's Program)
- Post-Master's Certificate, Family Nurse Practitioner

Sonoma State University's mission is reflected in the Department of Nursing's commitment to provide a foundation for lifelong learning and graduate nurses who practice within a broad cultural perspective, affirm intellectual and aesthetic achievements as a part of the human experience, develop professional leadership, foster flexibility and resilience, and contribute to the health and well-being of the world at large. The Department of Nursing recognizes nursing as a nurturing response, based upon a blend of art and science, occurring within a subjective and objective environment with the aim of developing the well-being of both nurse and client (client as individuals, families, communities, and organizations). Consistent with the philosophy and

objectives is the consideration of students as unique individuals with varied ethnic and cultural backgrounds, learning styles, and goals.

The Department of Nursing provides opportunities for learning using a variety of traditional and technology-mediated strategies. Courses may be taught using televideo conferencing technology, interactive and real-time electronic communications via computer for lecture, small group and seminar discussions, self-paced and self-directed independent study, and Internet tools that support lifelong intellectual and professional development.

The Department of Nursing enjoys a collaborative relationship with the health care delivery community within its service area and beyond. Consequently there are many clinical opportunities available. Students are placed in a variety of community-based hospitals and health care agencies. Graduates of both the baccalaureate and master's programs are well prepared for careers in a variety of health care settings and roles in the community.

Sonoma State University's nursing programs are approved by the California State Board of Registered Nursing and accredited by the National League for Nursing Accrediting Commission, from which information about tuition, fees, and length of program may be obtained, either in writing or by telephone at National League for Nursing, 350 Hudson Street, New York, NY 10014, (212) 989-9393.

Bachelor of Science in Nursing

The undergraduate nursing program provides two entry options to obtain a baccalaureate degree in nursing:

1. A prelicensure program option that prepares the student to become a licensed Registered Nurse (R.N.); and
2. An R.N.-B.S.N. program option for the licensed R.N. with an associate degree or the equivalent.

All graduates of the baccalaureate program are prepared to plan and provide patient care; to teach patients, families, and staff; and to provide leadership in the delivery of health care services. The bachelor of science in nursing program offers students an opportunity to become a liberally educated professional, qualified for certification as a public health nurse, and completely prepared for graduate education in nursing. The prelicensure option also prepares the graduate for the R.N. licensure examination.

Eligible applicants should visit www.sonoma.edu/nursing for further information.

Prelicensure B.S.N. Option

The prelicensure option consists of two components: the pre-nursing curriculum in which the student enrolls in the prerequisite courses for the nursing program; and the prelicensure curriculum, in which the student is admitted on a competitive basis to take the courses required for R.N. licensure and complete requirements for the bachelor of science in nursing degree.

The prerequisite courses may be taken at either Sonoma State University or another university or community college. For admission to the prelicensure option of the B.S.N. program, SSU students must submit a supplemental application to the Nursing Department between November 1 and February 28. Transfer students must submit an application to SSU **and** a supplemental application to the Nursing Department. Applications are available on the department's website at www.sonoma.edu/nursing.

Admission to Pre-Nursing Status (for the prelicensure option)

Students applying directly from high school must meet the following criteria:

1. Standard SSU admission criteria.
2. High school chemistry and biology with a GPA of 3.00 (B) or better.
3. Overall high school GPA of 3.00 or better.
4. Eligibility Index of 3700 or higher

Community college transfer students must meet the following criteria:

1. Standard SSU transfer criteria.
2. B average in nursing prerequisite science courses.
3. Overall college GPA of 3.00 or higher.

Admission to the Prelicensure Option (final three years of degree program)

Nursing is an impacted program and therefore requires a supplemental application to the Nursing Department in addition to the application to Sonoma State University. Students applying for admission to the prelicensure option in the B.S.N. program must submit:

1. Transcript verification of completion of GE categories A (Written and Oral Analysis, Fundamentals of Communication, and Critical Thinking) and B (Natural Sciences and Mathematics [Statistics required for Nursing]);
2. Overall GPA of 3.00 or higher;
3. GPA of 3.00 or higher in prerequisite science courses: BIOL 220, 218, 224, and CHEM 105 or equivalent;
4. Results of the Test of Essential Academic Skills (TEAS);
5. Health care experience (written verification of at least 50 hours of volunteer or paid work in a setting where the role of registered nurses can be readily observed); and
6. Essay (criteria are included in the application packet).

Requirements for the Prelicensure B.S.N. Option	Units
General education	*48
Major requirements	58
Support courses	14
General electives	4
Total units needed for graduation	124

*3 units of area E will be satisfied upon completion of the nursing major to meet the 51-unit GE requirement.

Required Courses for the Prelicensure Option, Bachelor of Science in Nursing

YEAR 1 (Pre-Nursing)

Fall Semester	Spring Semester
BIO 115 (3)	BIO 218 (4)
CHEM 105 (5)	BIO 224 (4)
BIO 220 (4)	Written & Oral Analysis (Speech) GE (3)
ENGL 101 (3)	MATH GE (MATH 165 Statistics required) (4)
GE, A3 Critical Thinking GE (3)	

YEAR 2

(Admission to the prelicensure option of the B.S.N. program is required from this point forward)

Fall Semester	Spring Semester
NURS 200 (3)	NURS 206 (3)
NURS 203 (2)	NURS 208 (3)
NURS 205 (3)	NURS 210B (4)
NURS 210A (4)	NURS 300 (3)

YEAR 3

Fall Semester	Spring Semester
NURS 340 (3)	NURS 380 (3)
NURS 342 (3)	NURS 385 (3)
NURS 345 (4)	GE and other degree requirements
PSY 302 (3)	
GE and other degree requirements	

YEAR 4

Fall Semester	Spring Semester
NURS 404 (3)	NURS 425 (4)
NURS 405 (3)	NURS 450 (3)
NURS 415 (1)	Elective (3)
NURS 440 (3)	GE and other degree requirements
GE and other degree requirements	

R.N. to B.S.N. Option

Sonoma State University's baccalaureate program also offers an upper-division option designed to articulate with community college Associate Degree Nursing (ADN) programs. The SSU program provides upper-division education for registered nurses fostering expanded practice and function with increased independence in a variety of settings.

R.N.s who have attended a hospital (diploma) program should contact a community college with a R.N. program to obtain equivalent credit for their diploma program (30 ungraded lower-division nursing units) and to complete the community college's general education requirements for an A.A. degree.

Admission to the R.N. to B.S.N. Option

Applicants must meet the following criteria:

1. Current California licensure as a registered nurse. (Recent ADN graduates who have not yet received California R.N. licensure but who otherwise meet admission requirements will be accepted on a conditional basis pending National Council Licensing Examination (NCLEX) results. Failure to pass NCLEX disqualifies the student from the nursing major – but not from the University – until such time as a passing score is obtained.);
2. Sixty semester units of college-transferable credit: 30 units should meet California State University general education requirements, including areas A (English Composition, Speech, and Critical Thinking) and B4 (Statistics required); 30 units must be credit for lower-division nursing coursework. Applicants may be admitted to SSU and the nursing program without having yet completed Critical Thinking and/or Statistics, but must complete these requirements in their first semester at SSU;
3. Minimum of 3 semester units of college-transferable credit in general chemistry with a grade of C or better; and
4. Human anatomy and physiology within the past 10 years or direct clinical nursing experience within the past two years.

Requirements for the R.N. to B.S.N. Option

General Education (39 units may be transferred* from a community college or university)	39
Upper-Division GE at SSU	6

Major Requirements

Lower-division nursing at community college or university (13 of the 44 units of upper-division nursing coursework below may also be awarded for community college nursing coursework)	30
Upper-division at SSU	44
General electives and prerequisite sciences	5

Total units needed for graduation 124

*3 units of area E will be satisfied upon completion of the nursing major to meet the 48-unit GE requirement (for transfer students).

Required Nursing Major Courses for the R.N.-B.S.N. Option and Sample Two-Year Program

The sequence below is for full-time students. A part-time sequence that can be completed in six semesters is available from the Nursing Department and on the website.

YEAR 1

<i>Fall Semester</i>	<i>Spring Semester</i>
NURS 305 (3)	NURS 300 (3)
NURS 312 (4)	NURS 313 (4)
NURS 404 (3)	NURS 348 (6)
PSY 302 (3)	NURS 405 (3)
	NURS 415 (1)
	NURS 440 (3)

YEAR 2

<i>Fall Semester</i>
NURS 425 (4)
NURS 450 (3)
NURS 388 (7)
Upper-Division GE in residence (3)

L.V.N. 30-Unit Option

L.V.N.s interested in an L.V.N.-B.S.N. program are encouraged to contact the Indiana State University L.V.N.-B.S.N. program offered in California through a state approved partnership with SSU. Students will be graduates of Indiana State University.

Contact Millie Adkins, ISU-California L.V.N.-B.S.N. Program Coordinator, for more information, (800) 496-9613, madkins5@isugw.indstate.edu.

The L.V.N. 30-unit option includes only those nursing courses required for R.N. licensure and qualifies L.V.N.s to take the NCLEX-RN, but does not earn a B.S.N. To be admitted to the L.V.N. 30-unit option an L.V.N. must have completed 4 units of physiology and 4 units of microbiology with a grade of B or better. Admission to this option is ONLY on an “as space is available” basis. Contact the department for further details.

Undergraduate Nursing Progression and Retention

Should a student not attain a minimum grade of C (a C- is not acceptable) in a required nursing course, the student will not be permitted to continue in the nursing major. The student may petition the faculty to repeat the course. If approval is granted, the student must receive a grade of C or better in the course when repeated. If a minimum grade of C is not attained, the student will not be eligible to continue in, or graduate from, the B.S.N. program.

Master of Science in Nursing

The goal of the graduate curriculum is to provide advanced professional education to nurses with a B.S.N. or equivalent. The graduate degree in nursing is designed to respond to society's needs for professional nurses who influence the structure of emerging patterns of health care practice and delivery. Specialization in an area of nursing practice or function enables graduates to effectively address current and future societal health needs. Graduates support the development and refinement of nursing science by assuming advanced clinical and leadership roles within the profession and by participating in research and other scholarly activities.

The curriculum includes a core of instruction with an emphasis on theoretical and conceptual foundations of nursing practice, research, professional issues, and leadership. One option offers specialization as a family nurse practitioner (F.N.P.), with emphasis on advanced clinical primary care practice. A second option, nursing leadership and management (L&M), prepares nurses for executive leadership functions and responsibilities in current and emerging health care systems and offers concentrations in nursing administration, clinical nurse leader, or education.

The Department of Nursing also offers a direct entry master of science in nursing program designed specifically for the student with a baccalaureate degree in a discipline other than nursing who wishes to become a registered nurse with a graduate focus in the clinical nurse leader concentration of the leadership and management option. The department website (www.sonoma.edu/nursing) contains in-depth information about this program.

Application Procedures

The standard CSU application form must be submitted (available from the SSU Office of Admissions and Records). In addition, applicants must:

1. Meet the minimum admissions requirements for the chosen option (FNP or L&M);
2. Submit a supplemental Nursing Department application form; and
3. Submit three letters of recommendation (on departmental forms).

Application packets are available on the Nursing Department website, www.sonoma.edu/nursing. Applicants who have received their B.S.N. from SSU also need to submit a standard CSU application and supplemental nursing application to apply for graduate standing at SSU.

M.S.N. Pathways Option (for registered nurses with a bachelor's degree in a discipline other than nursing)

Admission to the Department of Nursing's master of science program requires the foundation and skills equivalent to a bachelor of science degree in nursing. For those registered nurses who hold a baccalaureate degree in a field other than nursing, the department offers a Pathways option in preparation for admission to the master's program. This option provides an individualized plan of study considering the student's background and chosen master's option

(family nurse practitioner or leadership and management)

Pathways Program Admissions Procedure: In addition to the standard California State University application, a M.S.N. Pathways application must be submitted. Applications are available on the department website, www.sonoma.edu/nursing.

Admission Status: Initial status will be "conditionally classified" while the student is fulfilling requirements for B.S.N. equivalency and other graduate admissions criteria. Completion of the Pathways option permits the student to be considered in the applicant pool but does not guarantee admission to the graduate nursing program.

Culminating Experience

Degree requirements include completing a culminating experience during the final semester of study. The experience provides an opportunity for the student to synthesize the major learning outcomes of the graduate program and the nursing specialty option.

Family Nurse Practitioner Specialty Option

The purpose of the family nurse practitioner specialty option is to prepare registered nurses with a bachelor's degree in nursing for advanced clinical practice with an emphasis on promoting individual and family wellness. The F.N.P. specialty focuses upon the theoretical and scientific bases for the diagnosis and management of common illness as well as health teaching, counseling, and preventive services. Emphasis is placed upon advanced clinical skills that include history-taking, physical examination, health screening, management of common illnesses, and techniques of prevention and risk reduction. Graduates may work in clinics, health maintenance organizations, schools, and medical practices as primary health care providers.

Admission Requirements

1. B.S.N. degree (R.N.s with a bachelor's in an area other than nursing, please see previous section on M.S.N. Pathways option);
2. GPA of 3.00 in the last two years (60 units) of undergraduate or post-graduate study;
3. Current California licensure as a registered nurse;
4. Completion of a course in statistics; completion of a course in physiology/pathophysiology within the last seven years; completion of a physical assessment course in the summer prior to beginning the F.N.P. specialty courses (students may challenge the physiology requirement by taking the National League for Nursing test. See the department website at www.sonoma.edu/nursing for details.);
5. Completion of course(s) in community health nursing required for Public Health Nursing Certificate; and
6. Full-time experience as a R.N. preferred.

Curriculum Features

Students have a three-semester clinical preceptorship with a primary care provider. Students and faculty share responsibility for finding an acceptable preceptor. Content includes health needs and risks of all family members, family theories, and legal and profes-

sional issues pertinent to nurse practitioners. Content taken concurrently with the clinical sequences includes health risk assessment of individuals and families, pathophysiological concepts in diagnosis and treatment of common illness, pharmacology, and practice issues pertinent to nurse practitioners.

Students complete a comprehensive exam for the culminating experience that serves as evidence of successful integration of the diverse content areas in the curriculum.

The SSU family nurse practitioner specialty option meets criteria specified in Section 1484, Title 16, of the *California Administrative Code* and is approved by the California State Board of Registered Nursing.

Accelerated F.N.P. Option

Registered nurses with a B.S. who are nurse practitioners may progress more rapidly through the program using a series of challenge examinations. A maximum of 12 semester units from prior coursework and challenge examinations may be counted toward the M.S.N. degree. A total of 28 units must be taken in residence at SSU. Students are evaluated individually to determine which courses have been met by prior course work and which courses may be challenged. By using this option, it is possible for eligible students to receive credit for some of the didactic courses and for most of the clinical experience required for F.N.P. preparation.

Post-Master's Family Nurse Practitioner Certificate Option

The certificate option is a 31-unit course of study designed for registered nurses who hold a master's degree in nursing who wish to become family nurse practitioners. Application is through the Department of Nursing (no university application is required).

Curriculum for Full-Time Progression for Master of Science in Nursing – Family Nurse Practitioner

The sequence below is for full-time students. A part-time sequence that can be completed in six semesters is also available from the Nursing Department and on the website.

YEAR 1	
<i>Fall Semester (13 Units)</i>	<i>Spring Semester (12 Units)</i>
NURS 501 (3)	NURS 540B (4)
NURS 540 (2)	NURS 550B (5)
NURS 549 (3)	NURS 505 (3)
NURS 550A (2)	
NURS 552 (3)	
YEAR 2	
<i>Fall Semester (9 Units)</i>	<i>Spring Semester (6 Units)</i>
NURS 500A (3)	NURS 500B (3)
NURS 504 (2)	NURS 510 (3)
NURS 550C (4)	Culminating Experience
TOTAL UNITS:: 40	

Leadership and Management Specialty Option: Nursing Administration, Clinical Nurse Leader, and Nursing Education Concentrations

The Nursing Leadership and Management Specialty option includes the core graduate nursing curriculum and selection of one of three areas of concentration: nursing administration, nursing education, or clinical nurse leader. The core curriculum grounds the master's-prepared nurse in research and evidence-based practice, health policy, health care organization and financing, ethics, professional role development, and the theoretical foundations of nursing practice. The selected area of concentration builds on the core curriculum as follows:

- **Nursing Administration:** This concentration emphasizes systems analysis, organizational development, leadership, continuous quality improvement, economics and financial management, information systems, human resource/outcomes management, managed care and integrated delivery systems, marketing and sales strategies, and negotiation strategy. Graduates are prepared to assume nursing leadership positions in a variety of health care services delivery venues.
- **Nursing Education:** Competencies highlighted in this concentration include facilitating learner development and socialization, assessment and evaluation in didactic and clinical environments, curriculum development, instructional design and delivery in higher education, and educational program evaluation. Graduates are prepared to teach in community college or university nursing programs or provide professional education in health care organizations.
- **Clinical Nurse Leader:** The clinical nurse leader concentration prepares students with advanced clinical skills in physical assessment, pathophysiology and pharmacology, outcomes management, patient advocacy, education, information management, microsystems analysis, and team management. Graduates are prepared at an advanced generalist level in patient care delivery and the associated environment and improving patient care from a systems perspective.

Admission Requirements

1. B.S.N. degree (R.N.s with a baccalaureate degree in an area other than nursing, please see section on M.S.N. Pathways program);
2. GPA of 3.00 in the last two years (60 units) of undergraduate or post-graduate study;
3. Current California licensure as a registered nurse;
4. Completion of a course in statistics; and
5. Completion of courses(s) in community health nursing.

Curriculum

The nursing administration, nursing education, and clinical nurse leader concentrations are managed in class cohorts and admission may not be made to each concentration every year. Check with the

department on the status of admissions to your desired concentration. Students enroll in an average of 8 units per semester. Courses are taught in a variety of formats including the traditional classroom, teleconference, and Internet.

The first year of study focuses on the acquisition of a theoretical base in nursing, the health care delivery system, advanced practice issues, and ethics. The second year incorporates nursing administration, clinical nursing leadership, nursing education theories, financial management, quality management, and human resources. Students analyze and evaluate organizational and management theories in relation to the provision of health care and nursing care delivery systems. A final semester residency program provides for application of theoretical knowledge with a mentor in a health care agency selected by the student in consultation with faculty. Students tailor their plan of study and select the focus for their residency based on their professional background and career goals. Students complete a culminating experience that serves as evidence of successful integration of the diverse content areas in the curriculum.

M.S.N. - Leadership and Management Curriculum

Core courses required for all students.

	<i>Units</i>
NURS 500A Scholarly Inquiry I	3
NURS 500B Scholarly Inquiry II	3
NURS 504 Policy & Politics of Health Care	2
NURS 505 Ethics in Healthcare	3
NURS 506 Systems Management in Health Care	4
NURS 515A Financial Management in Health Care Organization	4
Total units	19

Concentrations

Students take 13 units in their concentration

Administration Concentration (13 units)

	<i>Units</i>
NURS 515B Financial Management II	4
NURS 530 Nursing Leadership Theory	4
NURS 535 Residency	5

Education Concentration (13 units)

NURS 522A Instructional Process in Higher Education I	4
NURS 522B Instructional Process in Higher Education II	4
NURS 535 Residency	5

Clinical Nurse Leader Concentration (13 units)

NURS 509 Adv. Assess. & Clinical Decision-Making	3
NURS 516 Pathophys & Pharm Issues in Nursing	3
NURS 535 Residency	5
NURS 536 CNL Professional Role Development	2

Total units in L&M concentration courses **13**

Total units for the degree **32**

Direct Entry Master of Science in Nursing Program

The Department of Nursing also offers an entry-level master of science in nursing program titled "Direct Entry Master of Science in Nursing" (DEMSN) designed specifically for the student with a baccalaureate degree in a discipline other than nursing who wishes to become a registered nurse with a graduate focus as a Clinical Nurse Leader. The Clinical Nurse Leader is a generalist clinician, systems analyst, outcomes manager, information manager, educator, advocate, and team manager. For additional information about the role see the American Association of Colleges of Nursing web site <http://www.aacn.nche.edu/CNL/>. The SSU program is an intensive five-semester program during which pre-licensure and graduate courses are taught concurrently each semester. Important features of the program are::

1. Eighteen continuous months of study;
2. Extensive use of online education strategies;
3. Simultaneous integration of undergraduate and graduate nursing curricula; and
4. Curriculum designed to prepare Clinical Nurse Leaders.

DEMSN graduates are awarded a master of science degree in nursing and are eligible for the R.N. licensing exam (NCLEX) at the end of the program. Graduates are immediately employable as staff nurses and have the opportunity to continue a variety of educational pursuits of individual interest as well as market opportunity.

Admission Requirements

Baccalaureate or higher degree in a discipline other than nursing. Minimum 3.00 GPA in the last 60 units of undergraduate or post-graduate study.

Minimum 3.00 GPA in college level, nursing major prerequisite courses:

- Integrated chemistry (5 units)
- Human Anatomy (4 units, lab)
- Human Physiology (4 units, lab)
- Microbiology (4 units, lab)
- Statistics (3 units)
- Human Growth and Development [across the lifespan] (3 units)

Students are also required to have completed a certified nursing assistant (CNA) course prior to beginning the program.

DEMSN Clinical Nurse Leader Curriculum

The DEMSN curriculum is presented in five continuous semesters/sessions. Each semester consists of coursework and clinical experience. The didactic portion of the curriculum is delivered primarily online through the Internet using up-to-date distributive education strategies and technology. Clinical experiences occur in a variety of local hospitals, clinics, and other health care delivery systems.

The highly motivated, flexible, self-directed learner is likely to be successful in this program.

Curriculum for Direct Entry Master of Science in Nursing - Clinical Nurse Leader

YEAR 1

<i>Spring Semester</i>	<i>Units</i>
NURS 200 Nursing in Health and Illness	3
NURS 203 Basic Pharmacology for Nurses	2
NURS 208 Nursing Applications of Pathophysiology	3
NURS 210A Clinical Practicum I	4
NURS 506 Systems Management in Health Care	4
Total	16

<i>Summer Session</i>	<i>Units</i>
NURS 206 Psychiatric/Mental Health Nursing	3
NURS 210B Clinical Practicum II	4
NURS 502 Pathophysiologic Basis of Nursing Care	3
NURS 509 Advanced Assessment	3
Total	13

<i>Fall Semester</i>	<i>Units</i>
NURS 380 Care of Individuals and Families with Complex Needs	3
NURS 385 Clinical Practicum Care of Individuals & Families with Complex Needs	3
NURS 507 Community Health Nursing Theory	3
NURS 515A Financial Management	3
NURS 500A Scholarly Inquiry I	3
Total	15

YEAR 2

<i>Spring Semester</i>	<i>Units</i>
NURS 340 Women's Health in the Expanding Family	2
NURS 342 Child Health in the Expanding Family	2
NURS 345 Clinical Practicum with Expanding Families	3
NURS 500B Scholarly Inquiry II	3
NURS 514 Community Health Nursing Practicum	3
Total	13

<i>Summer Session</i>	<i>Units</i>
NURS 504 Policy and Politics of Health Care	2
NURS 505 Ethics in Health Care	3
NURS 525 Clinical Residency	3
NURS 526 CNL Professional Role Development	2
Total	10

Total units required 67

Graduate Nursing Progression and Retention

Should a graduate nursing student not attain a minimum grade of B- (a C+ is not acceptable) in a required graduate nursing course, the student will not be permitted to continue in the program. The student may petition the faculty to repeat the course. If approval is granted, the student must receive a grade of B- or better in the course when repeated. If a minimum grade of B- is not attained, the student will not be eligible to continue in, or graduate from, the M.S.N. program.

PHILOSOPHY

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DEPARTMENT CHAIR

Gillian Parker

ADMINISTRATIVE COORDINATOR

Brenda Cloney

Faculty

Roger Bell
Gillian Parker
John Sullins
Andy Wallace

Programs Offered

Bachelor of Arts in Philosophy
Pre-Law/Applied Ethics (Optional) Concentration
Minor in Philosophy

The Philosophical Life

The value of a philosophy degree stems from the richness of the perennial themes that are addressed in philosophical texts and discussions. Majors in this department balance their studies of the great classical themes of philosophy with a focus on the particular philosophical issues that are of paramount importance to them. In designing the department major, care has been taken to emphasize both the historical and analytical dimensions of philosophy, as well as its theoretical and practical dimensions. In this regard, the Department of Philosophy believes that the Socratic dictum “know thyself!” requires the exercise of both theoretical and practical reason. The design of the major expresses this fundamental belief.

In its historical dimensions, an education in philosophy gives the student a nuanced appreciation of the wide array of conceptual systems that human beings have employed to deal with questions concerning reality, justice, truth, morality, and the meaning of life. In its analytical and critical dimensions, philosophy trains one to detect and avoid errors in thinking. Such training involves special emphasis on the logical use of language, the analysis of concepts, and the ability to critique and construct extended arguments.

Philosophy’s emphasis on both the imaginative and critical use of rationality helps prepare one for a wide variety of careers that require finely-honed reasoning and communication skills. Such fields include law, medicine, social and political advocacy, counseling, teaching, print and electronic media, and research and writing in both academic and nonacademic fields.

Faculty and Curriculum

At the heart of the philosophy program is the faculty: dedicated teachers and scholars who represent key approaches to philosophy, and who are actively engaged in ongoing research. We have designed the curriculum to provide the major with a balanced historical and contemporary understanding of philosophy.

Advising

Advising begins with an initial advising interview with the department chair. During the following semester the student will choose a regular faculty advisor.

Bachelor of Arts in Philosophy

A major in philosophy involves a core of courses required of all majors, one senior seminar, and 18 elective units in philosophy chosen by the student. Core courses provide overviews of the major areas of philosophy, whereas elective courses may be more specialized or experimental in content and method.

Degree Requirements	Units
General education	51
Major requirements: core (24), electives (18)	42
General electives	27
Total units needed for graduation	120

Major Core Requirements

PHIL 101 Critical Thinking	0
<i>(GE A3 units do not count for the major)</i>	
PHIL 120 Introduction to Philosophy	3
PHIL 202 Proseminar	3
PHIL 204 Applied Ethics	3
PHIL 207 Philosophical Movements	3
PHIL 301 Philosophy of Science and Technology	3
PHIL 302 Ethics and Value Theory	0
<i>(These GE C3 units do not count for the major)</i>	
PHIL 303 Social and Political Philosophy	3
PHIL 306 Contemporary Topics	3
<i>(Students may repeat course with different curriculum for elective credit)</i>	
PHIL 307 Philosophical Figures	3
<i>(Students may repeat course with different curriculum for elective credit)</i>	
PHIL 400 Senior Seminar	3
Total units in the major core	27

Teaching of senior seminars rotates among full-time department members, and at least one is offered each semester. PHIL 400 may be repeated twice for credit when the subject matter and instructor are not repeated.

In exceptional cases, the Philosophy Department permits the design of an individual major. A proposal for an individual major must

be approved by three members of the full-time faculty selected by the applicant. These three faculty members shall constitute the student's major committee.

The major requirement is thus 42 units: 27 core units and 15 units of electives. Students may petition for elective units to be transferred in from outside the department.

Sample Four-Year Program for Bachelor of Arts in Philosophy

FRESHMAN YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 101 (A3) or ENGL 101 (A2) (3)	ENGL 101 or PHIL 101 (3)
PHIL 120 (A3) (3)	GE (6)
GE (6)	Electives (6)
Electives (3)	
SOPHOMORE YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 202 (3)	PHIL 204 (3)
PHIL 207 (3)	Philosophy Electives (3)
PHIL 200 (3)	GE (6)
GE (3)	Electives (3)
Electives (3)	
JUNIOR YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 302 (3)	PHIL 307 (3)
PHIL 303 (C3) (3)	Philosophy Electives (3)
Philosophy Elective (3)	GE (6)
GE (6)	Electives (3)
SENIOR YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 301 (3)	PHIL 306 (3)
Philosophy Elective (3)	PHIL 400 (3)
GE (6)	Philosophy Electives (6)
Electives (3)	Electives (6)
TOTAL UNITS:: 120	

Pre-Law/Applied Ethics (optional) Concentration

The Philosophy Department offers majors the option of choosing a concentration in pre-law and applied ethics. This option does not increase the overall number of required units. However, it requires students to increase the number of required units from 27 to 30 and decrease the number of elective units from 15 to 12. For a list of the required courses in the pre-law and applied ethics concentration see the list below. For a sample four-year progression through the major with the concentration in pre-law and applied ethics see the sample worksheet.

Major Core Requirements

PHIL 101 Critical Thinking	0
PHIL 102 Introduction to Logic	3
PHIL 120 Introduction to Philosophy	3
PHIL 202 Proseminar	3
PHIL 204 Applied Ethics	3
PHIL 207 Philosophical Movements	3
PHIL 302 Ethics and Value Theory	0
PHIL 303 Social and Political Philosophy	3
PHIL 306 Contemporary Topics	3
<i>(Students may repeat course with different curriculum for elective credit)</i>	
PHIL 307 Philosophical Figures	3
<i>(Students may repeat course with different curriculum for elective credit)</i>	
PHIL 375 Philosophy of Law	3
PHIL 499 Law Internship	3
Total units in the (pre-law) core	30

Sample Four-Year Program for Bachelor of Arts in Philosophy Pre-Law/Applied Ethics Concentration

FRESHMAN YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 101 or ENGL 101 (3)	ENGL 101 or PHIL 101 (3)
PHIL 120 (3)	PHIL 102 (3)
GE (6)	GE (6)
University Electives (3)	University Electives (6)
SOPHOMORE YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 202 (3)	PHIL 204 (3)
PHIL 200 (3)	GE (6)
GE (6)	University Electives (6)
University Electives (3)	
JUNIOR YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 207 (3)	PHIL 307 (3)
PHIL 302 (3)	PHIL 375 (3)
Philosophy Electives (3)	Philosophy Electives (3)
GE (6)	GE (3)
	University Electives (3)
SENIOR YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
PHIL 303 (3)	PHIL 306 (3)
Philosophy Electives (3)	PHIL 499 (3)
GE (6)	Philosophy Electives (3)
University Electives (3)	University Electives (6)
TOTAL UNITS:: 120	

Courses may be interchanged fall and spring semester depending on course offering each semester.

Minor in Philosophy

The minor in philosophy consists of 18 units chosen by the student in consultation with a department advisor. At least 12 units must be taken in residence at SSU. These 18 units may be lower- or upper-division philosophy courses. Only two specific general education courses may be counted toward the 18 units: Philosophical Issues (PHIL 200) and Ethics and Value Theory (PHIL 302). Only two course substitutions must be approved by the department chair and all courses must be taken for a grade to count toward the minor. The minor track in philosophy may be designed to emphasize pre-law, pre-med, pre-business, critical thinking, and other applied areas and/or pre-professional programs. Consult the department chair for further information.

PHYSICAL SCIENCES FOR ELEMENTARY SCHOOL TEACHERS

Program Advisors and Offices

Jennifer Whiles-Lillig / Chemistry Department
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ASTR 350 Cosmology	3
GEOG 310 Meteorology	3-4
GEOL 306 Environmental Geology	3
GEOL 323 Hydrology	3
PHYS 342 Light and Color	3

Total units in the minor electives 6

Total units in the minor, including
6 units in general education 22-23

Program Offered

Minor in Physical Sciences

The minor in physical sciences for elementary teachers provides an introduction to the physical sciences at a nontechnical (nonmathematical) level. The minor is intended for liberal studies majors who also plan to enter a general elementary school teaching credential program. The minor will provide the background and skills to teach some physical sciences in the elementary and middle schools. This minor is not appropriate for students planning to teach science in the secondary schools; they should study physical science at a more technical level and may choose a minor in astronomy, chemistry, geology, or physics.

Minor in Physical Sciences

The minor consists of the following 22-23 units. Six of these will also be counted in general education. Students interested in the minor should consult an advisor.

Minor Core Requirements

Complete the following 16-17 units; of these, 6 may be applied to general education.

ASTR 100 Descriptive Astronomy	3
CHEM 102 Chemistry and Society	3
GEOL 102 Our Dynamic Earth	3
CS 101 Introduction to Computers and Computing	3
PHYS 100 Descriptive Physics	3
ASTR 231 Introductory Observational Astronomy	2
or PHYS 102 Descriptive Physics Laboratory	1

Total units in minor core 16-17

Minor Electives

Complete 6 units from the following:

ASTR 305 Frontiers in Astronomy	3
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PHYSICS

DEPARTMENT OFFICE

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DEPARTMENT CHAIR

Lynn R. Cominsky

ADMINISTRATIVE COORDINATOR

Cathi Cari-Shudde

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Lynn R. Cominsky
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Saeid Rahimi
Scott A. Severson
Hongtao Shi

Programs Offered

Bachelor of Science in Physics
Bachelor of Arts in Physics
Minor in Physics
Teaching Credential Preparation

Physics is the most fundamental of all the scientific disciplines. Ranging from the applied to the abstract, from the infinitesimal to the infinite, and from quarks to the cosmos, the study of physics seeks to explain all the complicated phenomena in the natural world by providing a description of these phenomena in terms of a few basic principles and laws.

Physicists also use their knowledge of fundamental principles to solve concrete problems. Problems in understanding and utilizing the properties of semiconductors and other materials; in designing and building lasers, photonics, and telecommunications devices; and in designing and using instrumentation such as adaptive optics for astrophysics, are typically solved using the techniques of physics. Such applied physics problems often have a significant overlap with topics and techniques in engineering and computational physics. Indeed, many of the department's graduates are currently employed in engineering or computationally oriented positions.

In their most abstract work, physicists seek a unified mathematical description of the four known forces of nature (gravitation, electrical magnetism, and the weak and strong nuclear forces). This quest for the "Theory of Everything" eluded Einstein and is continued today by many physicists, including those who study superstring theory. The ultimate goal is to correctly predict the fundamental forces and the masses and interactions of the elementary particles from which all matter is formed.

The department offers a traditional, mathematically rigorous program leading to a B.S. in physics; a more applied curriculum leading to a B.S. in physics with a concentration in applied physics; and a flexible B.A.

program with two advisory plans (algebra and trigonometry or calculus). All programs stress fundamental concepts and techniques, offer an unusually rich laboratory experience and intensive use of computers, and require a capstone course as a culminating experience. Capstone projects may include experimental design, instructional design, or undergraduate research—personalized and unique opportunities to demonstrate the skills and knowledge acquired in the major.

The department is housed in Darwin Hall, which is well-equipped with lower-division teaching laboratories and facilities for intermediate and advanced laboratory courses, undergraduate research, special studies and capstone projects. The Darwin facilities include thin film fabrication systems such as sputtering, thermal evaporation, electrodeposition, a Hall measurement system, a 17-Tesla superconducting magnet system, an adaptive optics and astronomical instrumentation development laboratory, and a nuclear low-level counting laboratory. Physics majors also use the multidisciplinary Keck Microanalysis Laboratory in Salazar Hall which includes a scanning electron microscope, atomic force microscopes, an x-ray diffractometer, and a confocal microscope.

A substantial program in undergraduate astronomy includes many courses, listed in this catalog under Astronomy, which may be included in the B.A. or B.S. degree programs in physics. The department operates a teaching observatory on the SSU campus and a NASA-funded remotely operated research observatory at a darker site in northern Sonoma County. The department is also developing a new observatory at the Galbreath Wildlands Preserve in southern Mendocino County. Students are strongly encouraged to use all of the above facilities for special studies, undergraduate research, and capstone projects.

Careers in Physics

For information on what you can do with a bachelor's degree in physics, follow links from: <http://phys-astro.sonoma.edu>

Bachelor of Science in Physics

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 astronomy, atmospheric science, biophysics, environmental science, geophysics, materials science, and physical oceanography.

Degree Requirements	Units
General education	51
Major requirements (may include 5 units in GE)	46
Supporting courses (may include 4 units in GE)	26
Electives	1-10
Total units needed for graduation	124

Major Core Requirements

PHYS 114 Introduction to Physics I
(may be applied to GE)

PHYS 116 Introductory Laboratory Experience (may be applied to GE)	1
PHYS 214 Introduction to Physics II	4
PHYS 216 Introductory Laboratory	1
PHYS 313 Electronics	3
PHYS 313L Electronics Laboratory	1
PHYS 314 Introduction to Physics III	4
PHYS 320 Analytical Mechanics	3
PHYS 325 Introduction to Mathematical Physics	3
PHYS 340 Light and Optics	3
PHYS 366 Intermediate Experimental Physics	3
PHYS 381 Computer Applications for Scientists	2
PHYS 430 Electricity and Magnetism	3
PHYS 450 Statistical Physics	2
PHYS 460 Quantum Physics	3

Total units in the major core 40

Major Electives

To complete the major, select 6 units from the list below. At least one of the courses chosen must be a capstone course.

*ASTR 380 Astrophysics: Stars	3
ASTR 482 Advanced Observational Astronomy	2
*ASTR 492 Instructional Design Project	2
ASTR 495 Special Studies	1-4
*ASTR 497 Undergraduate Research in Astronomy	2
PHYS 100 Descriptive Physics	3
PHYS 445 Photonics	3
PHYS 466 Advanced Experimental Physics	3
PHYS 475 Physics of Semiconductor Devices	3
*PHYS 492 Instructional Design Project	2
*PHYS 493 Senior Design Project	2
PHYS 494 Physics Seminar	1
PHYS 495 Special Studies	1-4
*PHYS 497 Undergraduate Research in Physics	2

Certain selected-topics courses, ASTR or PHYS 396, may be approved by the advisor.

Total units in the electives 6

Total units in the major 46

Required Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE)	4
MATH 211 Calculus II	4
MATH 241 Differential Equations with Linear Algebra	4
MATH 261 Multivariable Calculus	4
CHEM 115AB General Chemistry (1 unit may be applied in GE) or CHEM 125AB Honors General Chemistry	10

Total units in supporting courses 26

Total units in the major and supporting courses
(9 may be applied in GE) 72

Sample Four-Year Program for Bachelor of Science in Physics

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 115A (5)	CHEM 115B (5)
MATH 161 (4)	MATH 211 (4)
ENGL 101 (3) (GE A2)	PHYS 114 (4)
PHYS 100 (3) (Recommended)	PHYS 116 (1)
PHYS 494 (1) (Recommended)	Elective (2)

SOPHOMORE YEAR:: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
MATH 261 (4)	MATH 241 (4)
PHYS 214 (4)	PHYS 313 (3)
PHYS 216 (1)	PHYS 313L (1)
GE (3)	GE (3)
GE (3)	GE (3)
	Elective (2)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 325 (3)	PHYS 320 (3)
PHYS 314 (4)	PHYS 340 (3)
PHYS 381 (2)	PHYS 366 (3)
GE (3)	GE (3)
GE (3)	GE (3)

SENIOR YEAR:: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
PHYS 450 (2)	PHYS 430 (3)
PHYS 460 (3)	PHYS Elective (2)
GE (3)	GE (3)
GE (3)	GE (3)
Elective (4)	GE (3)
	Elective (2)

TOTAL UNITS:: 124

See your advisor to discuss acceptable physics electives and when they will be offered. Twelve of the 51 units of GE are met by required courses listed here (3 each in areas A2, B1, B3, and B4).

Applied Physics Concentration

Students may earn a B.S. in physics with a concentration in applied physics. This program is intended for those students who desire

an emphasis on laboratory work. It provides a rigorous, yet slightly less theoretical course of study, and a greater selection of hands-on electives. It is a good choice for students who wish to continue their studies in graduate engineering programs, or who wish to work in industry in engineering or computationally-oriented positions.

Degree Requirements	Units
General education	51
Major requirements (may include 5 in GE)	48
Supporting courses (may include 4 in GE)	17
Electives	8-17
Total units needed for graduation	124

Major Core Requirements

PHYS 114 Introduction to Physics I (may be applied to GE)	4
PHYS 116 Introductory Laboratory Experience (may be applied to GE)	1
PHYS 214 Introduction to Physics II	4
PHYS 216 Introductory Laboratory	1
PHYS 313 Electronics I	3
PHYS 313L Electronics I Laboratory	1
PHYS 314 Introduction to Physics III	4
PHYS 325 Introduction to Mathematical Physics	3
PHYS 340 Light and Optics	3
PHYS 366 Intermediate Experimental Physics	3
PHYS 381 Computer Applications for Scientists	2
PHYS 430 Electricity and Magnetism	3
PHYS 450 Statistical Physics	2
PHYS 460 Quantum Physics	3
PHYS 475 Physics of Semiconductor Devices	3
Total units in the major core	40

Major Electives

8 units selected from the following (must include at least one *capstone course):

ASTR 482 Advanced Observational Astronomy	2
*ASTR 492 Instructional Design Project	2
ASTR 495 Special Studies	1-4
*ASTR 497 Undergraduate Research in Astronomy	2
PHYS 100 Descriptive Physics	3
PHYS 320 Analytical Mechanics	3
PHYS 445 Photonics	3
PHYS 466 Advanced Experimental Physics	3
*PHYS 492 Instructional Design Project	2
*PHYS 493 Senior Design Project	2
PHYS 494 Physics Seminar	1
PHYS 495 Special Studies	1-4
*PHYS 497 Undergraduate Research in Physics	2

Certain selected topics courses, ASTR or PHYS 396, may be approved by the advisor.

Total units in the major electives 8

Total units in the major 48

Required Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE)	4
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MATH 211 Calculus II	4
MATH 261 Multivariable Calculus	4
CHEM 115A General Chemistry (1 unit may be applied in GE) or CHEM 125A Honors General Chemistry	5

Total units in supporting courses 17

**Total units in the major and supporting courses
(9 may be applied in GE)** 65

Sample Four-Year Program for Bachelor of Science in Physics with Concentration in Applied Physics

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 115A (5)	MATH 211 (4)
MATH 161 (4)	PHYS 114 (4)
ENGL 101 (3) (GE A2)	PHYS 116 (1)
PHYS 100 (3) (recommended)	GE (3)
PHYS 494 (1) (recommended)	GE (3)

SOPHOMORE YEAR:: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
MATH 261 (4)	PHYS 313 (3)
PHYS 214 (4)	PHYS 313L (1)
PHYS 216 (1)	GE (3)
GE (3)	GE (3)
GE (3)	GE (3)
	GE (3)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 325 (3)	PHYS 340 (3)
PHYS 314 (4)	PHYS 366 (3)
PHYS 381 (2)	GE (3)
GE (3)	Elective (6)
Elective (3)	

SENIOR YEAR:: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
PHYS 450 (2)	PHYS 430 (3)
PHYS 460 (3)	PHYS 475 (3)
PHYS Elective (2)	PHYS Elective (2)
GE (3)	GE (3)
Elective (3)	GE (3)
Elective (3)	Elective (2)

TOTAL UNITS:: 124

See your advisor to discuss acceptable physics electives and when they will be offered. Twelve of the 51 units of GE are met by required courses listed here (3 each in areas A2, B1, B3, and B4).

Bachelor of Arts in Physics

The B.A. program allows considerable flexibility for the student who wishes to study physics as part of a liberal arts education. Two advisory plans are offered:

Bachelor of Arts in Physics with Advisory Plan C

This plan uses calculus. Students who choose this, the more popular B.A. advisory plan, have the prerequisites to take nearly all of the courses in the department. They find employment in scientific and engineering fields. Some go on to graduate school in interdisciplinary sciences. This degree program is appropriate for those who wish to earn a California Science Teaching Credential with a concentration in Physics.

Degree Requirements	Units
Major requirements (may include 5-6 in GE)	34-38
Required area of concentration	12
Supporting courses (may include 3 in GE)	12
General education	51
General electives	7-19
Total units needed for graduation	120

Major Core Requirements

PHYS 114 Introduction to Physics I (may be applied to GE)	4
PHYS 116 Introductory Laboratory Experience (may be applied to GE)	1
PHYS 214 Introduction to Physics II	4
PHYS 216 Introductory Laboratory	1
PHYS 314 Introduction to Physics III	4
PHYS 340 Light and Optics	3

Choose one of the following two programming courses:

PHYS 381 Computer Applications for Scientists	2
CS 115 Programming I	4

Capstone course; One of the following:

ASTR 492 Instructional Design Project	2
ASTR 497 Undergraduate Research in Astronomy	2
PHYS 492 Instructional Design Project	2
PHYS 493 Senior Design Project	2
PHYS 497 Undergraduate Research in Physics	2

The major must include a minimum of 24 upper-division units in physics and astronomy; with an advisor, choose 13-15 units in additional upper-division physics and astronomy courses. Physics 100 may be used to substitute for an advanced Physics elective course.

Total units in the major core 34-38

Required Area Of Concentration

Courses in one other field, chosen in consultation with an advisor.

Total units in area of concentration 12

Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE)	4
MATH 211 Calculus II	4
MATH 261 Multivariable Calculus	4

Total units in supporting courses 12

Total units in the major and supporting courses (8-9 may be applied in GE) 58 - 62

Sample Four-Year Program for Bachelor of Arts in Physics with Advisory Plan C

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 31 Units

Fall Semester (16 Units)	Spring Semester (15 Units)
MATH 161 (4)	MATH 211 (4)
ENGL 101 (3) (GE A2)	PHYS 114 (4)
PHYS 100 (3) (recommended)	PHYS 116 (1)
GE (3)	GE (3)
GE (3)	GE (3)

SOPHOMORE YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
MATH 261 (4)	Elective (3)
PHYS 214 (4)	Elective (3)
PHYS 216 (1)	GE (3)
GE (3)	GE (3)
GE (3)	GE (3)

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
PHYS 314 (4)	PHYS 340 (3)
PHYS 381 (2)	PHYS Elective (3)
Area of Concentration* (3)	Area of Concentration* (3)
GE (3)	GE (3)
GE (3)	Elective (3)

SENIOR YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (14 Units)
PHYS Elective (3)	Capstone Course (2)
Area of Concentration* (3)	Area of Concentration* (3)
GE (4)	PHYS Elective (4)
Electives (5)	Electives (5)

TOTAL UNITS:: 120

*Area of Concentration = 12 units in one other subject. Eleven of the 51 units of GE are met by required courses listed here (in areas A2, B1, B3, and B4). (One more can be met with a physics elective.)

Bachelor of Arts in Physics with Advisory Plan T

This plan uses algebra and trigonometry. Students may select from upper-division courses, appropriate to careers as science or technical writers, scientific sales personnel, technicians, programmers, or other technical specialists. There is opportunity to take courses

that lead to careers in the health sciences or environmental fields. This degree program is appropriate for those who wish to earn a California Multiple Subject Teaching Credential. Advisory Plan T is often taken as part of a double major.

Degree Requirements	Units
Major requirements (may include 6 in GE)	32-36
Required area of concentration	12
Supporting course (may include 3 in GE)	4
General education	51
General electives	17-30
Total units needed for the degree	120

Major Core Requirements

PHYS 209AB General Physics Laboratory	8
PHYS 210AB General Physics	2
	6

Choose one of the following two courses in modern physics or astronomy:

ASTR 305 Frontiers in Astronomy	3-4
PHYS 314 Introduction to Physics III	3
	4

Choose one of the following two courses in optics:

PHYS 340 Light and Optics	3
PHYS 342 Light and Color	3

An approved course in computer applications, e.g., PHYS 381 (2):

2-4

Capstone course; One of the following:

ASTR 492 Instructional Design Project	2
ASTR 497 Undergraduate Research in Astronomy	2
PHYS 492 Instructional Design Project	2
PHYS 493 Senior Design Project	2
PHYS 497 Undergraduate Research in Physics	2

The major must include a minimum of 24 upper-division units in physics and astronomy, so, with an advisor, choose 13-16 units in additional upper-division physics and astronomy courses. Physics 100 may be substituted for an advanced physics elective course.

13-16

Total units in the major core 32-36

Required Area of Concentration

Courses in one other field chosen in consultation with an advisor.

Total units in area of concentration 12

Supporting Course

MATH 107 Pre-calculus Mathematics (3 units may be applied in GE):	4
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Total units in supporting course 4

Total units in the major 48-52

Sample Four-Year Program for Bachelor of Arts in Physics with Advisory Plan T

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
MATH 107 (4)	PHYS 209A (1)
ENGL 101 (3) (GE A2)	PHYS 210A (3)
PHYS 100 (3) (recommended)	GE (3)
GE (3)	GE (3)
Elective (2)	GE (3)
	Elective (2)

SOPHOMORE YEAR:: 31 Units

Fall Semester (15 Units)	Spring Semester (16 Units)
PHYS 209B (1)	PHYS Elective (4)
PHYS 210B (3)	Elective (3)
GE (3)	GE (3)
GE (3)	GE (3)
GE (3)	GE (3)
Elective (2)	

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
ASTR 305 (3)	PHYS 342 (3)
GE (3)	PHYS Elective (3)
Area of Concentration* (3)	Area of Concentration* (3)
GE (3)	GE (3)
Elective (3)	Elective (3)

SENIOR YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (14 Units)
PHYS Elective (3)	PHYS Elective (2)
PHYS Elective (3)	Area of Concentration* (3)
Area of Concentration* (3)	Elective (3)
Elective (3)	Elective (3)
Elective (3)	Elective (3)

TOTAL UNITS:: 120

*Area of concentration = 12 units in one other subject. Twelve of the 51 units of GE are met by required courses listed here (in areas A2, B1, B3, and B4).

Minor in Physics

Completion of a minimum of 20 units in physics courses, including not more than one first course or more than one second course, constitutes a minor in physics. (First courses are PHYS 100, 210A, and 114, and their equivalents taught elsewhere. Second courses are PHYS 210B, 214, and their equivalents.) Interested students should consult with the advisor in the Department of Physics and Astronomy.

Teaching Credential Preparation

See the Teaching Credential Preparation in the Science Courses section of this catalog or contact the department advisor.

POLITICAL SCIENCE

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Catherine Nelson
Diane Parness
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**Faculty Early Retirement Program*

Programs Offered

Bachelor of Arts in Political Science
Master's in Public Administration
Minor in Political Science
Teaching Credential Preparation
Certificate Program in the Administration of Nonprofit Agencies

The political science program at Sonoma State University offers excellent opportunities for the study of government and politics. More than 40 courses cover all the major aspects of the discipline. Students develop an understanding of human behavior as it relates to politics. They learn to discuss and analyze critically the many current public policy issues facing the United States and the world. They are taught how to analyze and understand world affairs and comparative politics. They are trained in appropriate research techniques for the study of political processes.

The political science major allows students to choose from a wide range of courses and subjects within a general framework. A common core of courses studies the relationship between values, ideology, and politics (POLS 201); fundamental issues in American politics (POLS 202); the logic of research in political science (POLS 302); comparative approaches and politics (POLS 303); analysis of international politics (POLS 304); and a senior research seminar

(POLS 498). Beyond this common core, as part of the additional 20 units required for the major, each student must complete at least one upper-division course in each of the four major fields of political science: political theory, international relations, comparative government, and American government and politics. Since politics and economics are so closely tied together, the department recommends each student complete a basic course in economics. In addition, the department encourages international study for political science students and will arrange for appropriate credits for courses of study at international universities.

A 20-unit minor in political science also is available. Although the minor most often is used in conjunction with such majors as communications, history, economics, and sociology, it can be paired with almost any major offered at the University.

Features

The political science faculty is an accomplished and diverse group of scholars. Most pursue their own research projects and regularly offer the opportunity for students to participate in these projects. Most of the faculty have traveled extensively, both in this country and abroad.

Political science majors run an active student club that sponsors talks by leading political figures, candidate debates, and social events throughout the year. In addition, those students enrolled in Model United Nations (POLS 345) travel each spring to the United Nations in New York City for the National Model United Nations Conference.

Internships

The department offers several programs through which students may gain practical experience while earning academic credit. A political science internship involves working in the office of a public official or, when possible, in an election campaign. Prior interns have served in responsible positions with state assembly members, state senators, and members of Congress, and in a number of campaigns for local, state, and national office. The comparable program in public administration places students in positions, often paid, with local government offices and agencies where they may be involved with city planning and zoning issues, public relations efforts, special research topics, or budget preparation, to mention several possibilities. In addition, the department regularly sends selected students to the state capitol to participate in the Sacramento Semester Program where they work with members of the Legislature, officers of the executive branch, or lobbyists to gain a fuller understanding of the political process firsthand. Finally, special arrangements also may be made for some students to serve as staff to members of Congress in Washington, D.C., for a semester.

Academic Advising

The department expects students to seek faculty advice every semester when planning their programs. Each student is assigned a faculty advisor.

Preparation

Students are encouraged to take English composition and social science courses, including civics, economics, and history. Experience in journalism and debating activities can also be helpful. A foreign language is highly recommended but not required for the degree. Students who plan further study at the graduate level are strongly encouraged to take courses in an appropriate foreign language, since proficiency in two foreign languages is often required in doctoral programs.

Community college transfer students should contact their counseling office or the Sonoma State University Political Science Office to identify appropriate lower-division major/minor preparatory courses. Typically, these would include a basic course in American political institutions, which would fulfill the state code requirements for U.S. Constitution and California state and local government. Other lower-division courses introducing students to the discipline of political science, the study of international relations, and the study of comparative politics also are highly recommended.

Teaching Credential Preparation

Political science majors interested in seeking a general elementary credential may demonstrate subject matter competency by passing the CSET Multiple Subject Assessment for Teachers.* For further information, contact the department office, or Miriam Hutchins, School of Social Sciences, (707) 664-2409.

** Or the CSET Single-Subject Assessment for Teachers*

Careers in Political Science

Law and Paralegal Careers

Many political science majors plan to study and practice law as a career. Although it is advisable for pre-law students to have as wide a background as possible, the department offers a number of specialized courses in the field of constitutional law and civil liberties. Generally, it is advisable for the pre-law student to seek advice on appropriate courses from a faculty member.

Public Administration Careers

Local, state, and federal governments employ one of every six American workers. A major in political science with a public administration or public policy emphasis can prepare students for civil service careers at national, state, and local levels. While many of these careers require specialized skills (e.g., budgeting and accounting), many require general skills and understanding, with on-the-job training providing the required specialized knowledge.

Political science is also an appropriate major for students seeking training for positions in the overseas agencies of the U.S. government or in international organizations.

Journalism Careers

A political science major, combined with an ability to analyze and understand current political events and the skills to put that analysis into lucid writing, can prepare the student for an attractive career in journalism. Practical experience offered by the University newspaper is highly recommended.

Business Careers

A large number of political science graduates have found employment in the world of business. Preparation for this career involves a broad liberal arts background, combined with knowledge of governmental organization, public administration, finance, decision-making, organizational behavior, and the process by which political decisions about economic policy are made. Many businesses that recruit liberal arts graduates expect to provide them with special training programs.

Other Careers

Other enterprising individuals develop unique and interesting careers for themselves in politics by developing skills in campaign management, speech writing, polling, public relations, lobbying, voting analysis, or fundraising. These opportunities result from the initiative of the individual combined with the practical experience gained largely through volunteer service with political campaigns.

Bachelor of Arts in Political Science

Degree Requirements	Units
General education	51
Major requirements	40
General electives	29
Total units needed for graduation	120

Major Core Requirements

These courses should be taken in this order. Passage of POLS 302 with a grade of 'C' or better is a prerequisite for POLS 498.

POLS 201 Ideas and Institutions	4
*POLS 202 Issues in Modern American Politics or POLS 200 (3)	4
POLS 302 Social Science Research Methods	4
POLS 303 Introduction to Comparative Government	4
POLS 304 Introduction to International Relations	4
POLS 498 Senior Seminar	4

One course must be taken from each of the following areas: Political Theory, International Relations, Comparative Politics, and American Government and Politics.

**POLS 202 is strongly recommended for POLS majors.*

Political Theory

<i>Choose one of the following six courses:</i>	4
POLS 310 Classical Political Thought	4
POLS 311 Development of Modern Political Thought since 1500	4
POLS 312 American Political Thought	4
POLS 313 Critical Theory: Race and Gender	4
POLS 315 Democracy, Capitalism, and Socialism	4
POLS 415 Explorations in Political Theory	4

International Relations

Choose one of the following seven courses:

POLS 345 Model United Nations (MUN)	4
POLS 444 United States Foreign Policy	4
POLS 445 International Organizations	4
POLS 446 International Relations of the Middle East, Israel, the Palestinians and the United States	4
POLS 447 Non-violent Strategies in International Relations	4
POLS 448 Political Violence, Terrorism, and Law	4
POLS 486 Selected Issues in International Politics	4

Comparative Politics

Choose one of the following nine courses:

POLS 350 European Parliamentary Democracies	4
POLS 351 Politics of Russia	4
POLS 352 Politics of Eastern Europe	4
POLS 354 Comparative Political Parties	4
POLS 450 Politics of Asia	4
POLS 452 Third World Political Systems	4
POLS 453 Politics of Latin America	4
POLS 458 Comparative Social Policy	4
POLS 487 Selected Topics in Comparative Politics	4

American Government And Politics

Choose one of the following twenty courses:

POLS 320 State, City, and County Government	4
POLS 330 Race, Ethnicity, and Politics	4
POLS 391 Gender and Politics	4
POLS 420 American Political Development	4
POLS 421 Federalism and Intergovernmental Relations	4
POLS 423 Intro to Constitutional Law	4
POLS 424 the Bill of Rights, Civil Liberties, and the Constitution	4
POLS 425 the American Party System	4
POLS 426 the Legislative Process	4
POLS 427 the American Presidency	4
POLS 428 Seminar in California Politics and Government	4
POLS 429 Interest Groups	4
POLS 430 Introduction to Public Administration	4
POLS 431 Politics and the Media	4
POLS 466 Political Psychology	4
POLS 475 Urban Politics and Policy	4
POLS 481 Politics of Regulation and Land Use	4
POLS 483 Politics of Wealth and Poverty	4
POLS 484 Elections and Voter Behavior	4
POLS 485 Political Power and Social Isolation	4

Total units in the major core 40

Sample Four-Year Program for Bachelor of Arts in Political Science

FRESHMAN YEAR:: 30 Units

GE (30)

SOPHOMORE YEAR:: 30 Units

POLS 201 (4)

POLS 202 (4)

POLS 303 (4)

POLS 304 (4)

GE (10)

Elective (4)

JUNIOR YEAR:: 29 Units

POLS 302 (4)

American Government (4)

Comparative Government (4)

International Relations (4)

GE (9)

Elective (4)

SENIOR YEAR:: 31 Units

Political Theory (4)

Senior Seminar (4)

Electives (23)

TOTAL UNITS:: 120

Note: It is recommended that majors consider taking history and economic courses as part of their elective options. Nine units of the GE requisite must be filled with upper-division courses, taken no sooner than the term in which upper-division standing (60 units) is achieved. POLS 315 (Democracy, Capitalism, & Socialism) counts as both an upper-division GE course (Area D5) as well as an upper-division political theory course for the major. POLS 201 is both a lower-division core course and a lower-division GE course (Area D5).

Minor in Political Science

POLS 200 American Political System (3) or

POLS 202 Issues in Modern American Politics (4) 3-4

POLS 201 Ideas and Institutions 4

Upper-division courses in political science 12-13

Total units in the minor 20

Code Requirements

POLS 200 The American Political System or POLS 202 Issues in Modern American Politics fulfills state code requirements in U.S. Constitution and California state and local government. Upper-division courses may also be used to satisfy certain of these code requirements upon approval by the department chair.

Master's in Public Administration (www.sonoma.edu/polisci/mpa-home)

Offered primarily as an evening program, the master's degree in public administration provides a rigorous 40-unit curriculum that emphasizes the education required to effectively analyze, formulate, and implement public policy in local, state, and national government, and to achieve similar goals in nonprofit agencies. The program recognizes the need for a strong combination of theoretical and practical learning. Students choose from two concentrations: public management or nonprofit agency management.

Each student is required to complete a 20-unit analytic core, a 16-unit concentration, and 4 units of graduate-level electives. Courses are based upon the professional curriculum established for public administration programs by the National Association of Schools of Public Affairs and Administration (NASPAA).

Concentrations include specialized courses oriented toward the operation and management of public and nonprofit agencies and typically include fiscal management, personnel administration, legal issues, public policy, labor relations, marketing and resource development for nonprofits, and grants and contract management. Electives cover a wide range of important topics, including ethics, leadership, organizational computer usage, internships, and special studies.

Up to 9 units of comparable graduate course work may be transferred into this program per CSU policy.

If at any time it is determined that the candidate has an English deficiency, extra courses in English will be required in addition to the regular course of study.

Admission Requirements

Students apply to **both** the University and to the M.P.A. program.

- A. A bachelor's degree with a major from an accredited college or university with a grade point average of at least 3.00 for the last 60 units of college-level work attempted;
- B. To ensure adequate background, a candidate for admission should have experience or course preparation in the following areas:
 1. State and local government,
 2. Federalism and intergovernmental relations,
 3. Influences on domestic policy making.
 - **Recommended:** One year experience working in a nonprofit organization or a course in introduction to nonprofit organizations (example: through Sonoma County Volunteer Center).

Candidates without such experience or course preparation can be admitted to the program but must make up deficiencies during the first three semesters of study.

Prerequisites do not count toward the 40-unit degree. Acceptability of experience or previous coursework as prerequisites

will be determined in consultation with the program's graduate coordinator;

- C. Completion of **both** University and departmental applications. Included in the departmental application are three letters of recommendation. Only three letters will be considered; and
- D. Recommendation of the program by the graduate coordinator for entrance to the program.

Graduation Requirements for the Master's Degree

- A. A grade point average of at least 3.00;
- B. Satisfactory completion of required coursework, including elective units. No courses for which a grade less than B is earned will be acceptable in meeting the 40-unit M.P.A. requirement. Students earning a B- or lower in a course will be required to repeat the course with a grade of B or better;
- C. Completion of a master's thesis and oral defense, or two comprehensive written examinations;
- D. Recommendation of the program graduate coordinator; and
- E. Successful completion of the WEPT (or its equivalent), or waiver by the University of this requirement. This waiver is granted by the program graduate coordinator.

Course Work

Common Core Requirements - 20 Units

POLS 502 Organizational Theory and Analysis	4
POLS 503 Budget and Fiscal Administration	2
POLS 505 Research Methods	4
POLS 539 Program Implementation	4
POLS 550 Planning and Evaluation	4
POLS 580 Nonprofit Dynamics: Politics and Community Environment	2

Public Management Concentration Requirements - 16 Units

POLS 501 The Administrative State	4
POLS 503A Public Finance	2
POLS 504A Human Resources for the Public Sector	2
POLS 506 Public Policy Process	4
POLS 511 Labor Relations	2
POLS 538 Administrative Law	2

Nonprofit Concentration Requirements - 16 Units

POLS 503B Fiscal Management NPs	2
POLS 504B Personnel for NPs	2
POLS 581 NP Governance and Legal Issues	2
POLS 582 Planning and NP Agencies	2
POLS 583 Resource Development	4
POLS 585 Marketing and PR for NPs	2
POLS 587 Grants/Contract Management	2

Electives - 4 Units Total, can include:

POLS 507 Ethics in Administration	4
POLS 508 Comparative Public Policy	4

POLS 509 Politics of Health Care and Aging	4
POLS 512 Organizational Development	4
POLS 513 Leadership and Supervision	4
POLS 537 Bargaining, Politics, and Administration	4
POLS 551 Organizational Computer Usage	4
POLS 560 Special Issues in Public Policy	4
POLS 564 Aging Services Administration	4
POLS 588 Issues in Nonprofit Administration	4
POLS 597 Internship (max. 4 units)	4
POLS 599 Thesis	4

Culminating Experience

All students in the M.P.A. program are required to complete either a thesis or a comprehensive examination prior to award of the degree. Those opting for a thesis as their culminating experience are required to complete 40 units of coursework, exclusive of prerequisites, and can include 4 units of 599 (Thesis Prep) as an elective. Students electing to take the comprehensive exam must complete 40 units of total coursework exclusive of prerequisites and POLS 596 (exam preparation).

Certificate Program in the Administration of Nonprofit Agencies

The Political Science Department also offers a graduate certificate program in the administration of nonprofit agencies. Oriented to the needs of staff and administrators, this integrated series of courses is grounded in the study of contemporary trends in nonprofit agency administration, development, and fiscal management, and offers intensive exposure to the practical managerial techniques necessary for successful agency operation.

Coursework for the Certificate Program in the Administration of NP Agencies

The certificate program requires 24 units of coursework from the nonprofit concentration and common core, all of which may be later applied to the master's degree in public administration. Students in the certificate program are encouraged to pursue the master's degree, though there is no requirement to do so. Students enroll in the 16 units in the nonprofit concentration, and 8 units of electives chosen from common core courses in consultation with the M.P.A. program graduate coordinator.

PSYCHOLOGY

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*Faculty Early Retirement Program

Programs Offered

Bachelor of Arts in Psychology
Minor in Psychology
Minor in Gerontology
Certificate in Gerontology
Master of Arts in Psychology through Special Sessions
Depth Psychology

What is Psychology?

Psychology is defined as the study of human behavior and experience. According to the American Psychological Association, psychology has three faces: it is a discipline, a science, and a profession. Psychology is a calling that requires one to apply special knowl-

edge, abilities, and skills in order to solve human problems. It is an extremely diverse field that attracts people with a wide variety of backgrounds, interests, and skills.

Mission of the Psychology Department

Our department is distinguished by its focus on the quality of human experience. Founded in 1960, the department has historically been allied with the humanistic and existential traditions in psychology. This emphasis has expanded to include a diverse array of approaches to studying human experience. We now offer learning experiences in areas ranging from the experiential to the experiential, from graduate school preparation to personal growth, from individual issues to community concerns. We actively encourage the integration of various perspectives, rigorous analysis, respectful debate, and engaged skills-based learning. Our goal is to help students to develop skills in 1) knowing and evaluating their own experience, 2) understanding human experience from a variety of theoretical frameworks, 3) learning and valuing diversity and multiculturalism, and 4) applying their knowledge in concrete ways that contribute to people's quality of life. We hope to empower students with psychological skills that will enable them to be effective agents of change in the world.

About the Psychology Department

The Psychology Department at Sonoma State University is distinguished by its focus on the quality of human experience. The key words here are *distinguished, quality, human, and experience*. For us, each of these words holds special significance.

Distinguished: This expresses both that the department is unique and that it has achieved recognition for this uniqueness over the years. This department offered the first graduate program in humanistic psychology and also helped to pioneer that field, with four of our members having served as president of the Association for Humanistic Psychology, an international organization. The department also has been distinctive for its pioneering work in such areas as somatics, expressive arts, biofeedback, health psychology, organization development, eco-psychology, Jungian and archetypal psychology, transpersonal psychology, interdisciplinary learning, student-directed learning, experiential learning, and learning-community approaches. This distinctiveness has led to widespread recognition. The department has stood out as a beacon for many students seeking an alternative to traditional psychology.

Quality: This word carries a number of important messages. First of all, we are interested in quality, as in *excellence*. At the same time, we are struck that the word *quality* is in ascendance in business, and elsewhere; even as we see ourselves surrounded by the deteriorating quality of our physical, social, and economic environments. We seek to develop a psychology that not only studies, but

also enhances the quality of life. The word *quality* also communicates that we value qualitative, as well as quantitative, research methods.

Human: While affirming our interdependence with all creatures, this word communicates our emphasis on studying uniquely human, rather than animal, phenomena.

Experience: We take the subjective realm seriously, rather than focusing exclusively on the objective. Our approach to investigation is often phenomenological, and, when possible, our approach to teaching emphasizes experiential approaches to learning, both inside and outside the classroom.

The origins of the department were closely associated with humanistic and existential psychology. Our current range of interests is reflected in the section on advising and interest areas below. Our teaching-learning model is person-centered. That is, we try to foster the unique intellectual, spiritual, and emotional growth of each student as an individual. Our approach to self-knowledge leads from a concern for a private and inner self to a wider concern for one's relationship with one's community and culture.

Psychology Department Learning Goals and Objectives

The Sonoma State Psychology Department is one of a handful of humanistically-oriented psychology undergraduate departments in the country. We are especially strong in several areas that are not the focus of most psychology departments but are the focus of our graduate and certificate programs: organization development, depth psychology, gerontology, somatics and body-mind approaches, and biofeedback. Our diverse curriculum offers a stimulating and timely liberal arts education that responds to current student needs and supports faculty development and renewal. The department's goals and objectives are designed to support a rich and diverse list of course offerings without compromising students' abilities to learn the skills they need. We also believe that successful teaching and learning extends beyond the classroom to individual advising.

The Psychology Department curriculum is arranged to develop the following skills in each student by graduation time. The courses are designed to enable each student to:

- Be familiar with the major concepts, theories, and perspectives in psychology;
- Be able to apply psychological theories, concepts, and principles to individual experience as well as to broader social issues and social systems;
- Be able to reflect on personal experience in light of psychological knowledge;
- Be able to recognize and understand the complexity of cultural diversity, in light of psychological knowledge;
- Be able to understand and apply basic research methods in psychology and the social sciences; and
- Be able to demonstrate skills that promote behavioral change at the individual, organizational, and community levels.

Careers in Psychology

A career in psychology opens opportunity – opportunity to break new ground in science, opportunity to better understand yourself and others, opportunity to help people live richer, more productive lives, and the opportunity for ongoing personal and intellectual growth in school and throughout your career.

Some psychologists find it rewarding to work directly with people – for example, helping them to overcome depression, to deal with the problems of aging, or to stop smoking. Others are excited by research questions on topics such as health and well being, decision-making, eating disorders, brain functioning, parenting skills, forensic work, and child development. Still others find statistics and quantitative studies to be the most fascinating areas.

Traditionally, psychologists have been employed in universities, schools, and clinics. Today, more than ever before, they can be found working in businesses, hospitals, private practice, courtrooms, sports competitions, police departments, government agencies, private laboratories, and the military, among other settings.

Psychologists fill many different roles. For example, they work as teachers, teaching the discipline of psychology in universities, four-year and two-year colleges, and high schools. Psychologists work as researchers employed by universities, government, the military, and business to do basic and applied studies of human behavior. Psychologists also work as psychotherapists, helping people to individuate and resolve conflicts. Psychologists work as counselors in school settings, working with students and their families to provide support for the students' social, cognitive, and emotional development. In addition, psychologists work as administrators, functioning as managers in hospitals, mental health clinics, nonprofit organizations, government agencies, schools, universities, and businesses. Psychologists also work as consultants hired for their special expertise by organizations to advise on the subject or problem in which the consultant is an expert, including such tasks as designing a marketing survey or organizing outpatient mental health services for adolescents.

Careers: Graduate Work And Further Training

For most professional work in psychology, a minimum of an M.A. degree is necessary. Most of our students who go on to graduate work in psychology enter the clinical/counseling/social work fields at both the master's and the doctoral level. Other popular choices are the fields of education, research psychology, business, organizational development, and criminal justice. A 2006 survey of SSU alumni who graduated as psychology majors found that nearly two-thirds of the respondents had gone on to do some sort of graduate work, most at the master's level.

Early in the major, students are encouraged to conduct Web searches on graduate training programs in their fields of interest in order to find out the specific prerequisites required in order to receive training in these areas. Students should consult the psychology department website which has extensive career information and web links to graduate schools and programs in specific areas. Some of the psychology courses and non-psychology electives should be chosen

with regard to career objectives. Students should consult with an advisor to ensure that they are taking appropriate courses.

Most master's and doctoral programs and employers prefer applicants who, in addition to their academic background, have some kind of applied internship or research assistantship that provides hands-on experience in their field.

Careers: Bachelor's Degree In Psychology

Many undergraduate psychology majors do not go on to do graduate study. A bachelor's degree in psychology means that you graduate with a strong liberal arts education and adequate preparation for entry-level employment in one of many career paths, including:

- Administration and management
- Aging human services and advocacy
- Behavior change consulting
- Biofeedback consulting
- Child development programs
- Counseling
- Editing
- Employment interviewing
- Environmental advocacy
- Executive coaching
- Health services
- Marketing and public relations
- Organizational consulting
- Personal coaching
- Personnel and human systems
- Probation and parole
- Psychiatric assisting
- Social service casework & advocacy
- Teaching
- Technical writing

Bachelor of Arts in Psychology Degree Requirements

For first-time freshmen	Units
General education	51
Major requirements	44
Electives	25
For transfer students	
General education	48
Major requirements	44
Electives	28
Total units needed for graduation:	120

Students who apply to transfer into the psychology major must have taken the following courses (or the equivalents):

- ENGL 101 Expository Writing and Analytical Reading
- PHIL 101 Critical Thinking
- PSY 250 Introduction to Psychology

ENGL 101 and PSY 250 must be completed with a grade of B or higher. Because psychology is a high-demand major, other prerequisites may be added between the release of one catalog and the next in order to control enrollment. Students considering transferring into the major should contact the department for current information.

Major Requirements

The major consists of at least 40 units in psychology plus a course in statistics, which may be taken in either a psychology or mathematics department. Of these units, at least 34 must be upper-division units (courses numbered 300 or higher at SSU; numbering at other institutions may differ). Most students take a statistics course that can also be used for the General Education area B requirement. All courses for the major must be passed with a grade of C or better. A maximum of 12 units of Special Studies and Internship may be taken credit/no credit in the major.

Required Courses for the Major Include:

- PSY 250 Introduction to Psychology (or the equivalent), taken within the past ten years. Students who believe they possess the requisite knowledge may substitute a passing score on the CLEP test in introductory psychology administered by the Educational Testing Service at (510) 653-5400.
- PSY 306 History of Modern Psychology
- PSY 307 Humanistic, Existential, and Transpersonal Psychology
- MATH 165 Elementary Statistics (or equivalent)

Recommended Courses:

- One research methods course
- One course focusing on psychological issues in diversity and multiculturalism

Each semester, research methods courses are listed at www.sonoma.edu/users/s/smithh/methods/methods. Psychology is an academic discipline that includes the systematic analysis of human behavior, experience, and consciousness through diverse research methodologies. Students enrolled in research methods courses acquire knowledge of how to critically evaluate information from the social sciences presented in popular publications and the media, and of research skills and experience required for most psychology graduate programs and research-related jobs.

The department strongly recommends that students take courses in psychology and other disciplines that educate them about issues of diversity and multiculturalism, such as culture, race and ethnicity, sexual orientation, disability, age, religion, and social class. Courses in American multicultural studies, California cultural studies, Chicano and Latino studies, foreign languages, global studies, Native American studies, cross-cultural psychology, and women's and gender studies contribute to students' development of multicultural competence.

Students are asked to consult with an academic advisor early in their major to design a course of study that fulfills major requirements and that is in line with their interest areas and career goals. When time and interest permit, students are encouraged to consider a minor in another field, or even a double major.

Advising and Interest Areas

The Psychology Department provides an individualized major that is tailored to meet your personal needs, interests, and directions. You should meet with an advisor no later than the second semester of your sophomore year, or if you are a transfer student, during your first semester at SSU. Your advisor will help you to design a major that will provide you with the background you need to pursue your career objectives. You are encouraged to come in for advising before the scheduled "advising for registration" period; faculty are more likely to be readily available earlier in the semester.

Students may choose an advisor or are assigned an advisor according to the interest areas they indicate on the advising questionnaire. Students may also change advisors at any time. The following interest areas can be used as a guide for designing the major program and for choosing an advisor:

- Adulthood and Later Life Development
- Clinical/Counseling Psychology
- Creative and Expressive Arts
- Cultural Psychology
- Developmental Psychology
- Depth and Jungian Psychology
- Ecopsychology
- Humanistic Psychology
- Personality Psychology
- Research Methods
- Social, Community, and Organizational Psychology
- Somatics/Biofeedback/Health/Performance Psychology
- Teaching Credential Preparation
- Transpersonal Psychology

Sample Four-Year Program for Bachelor of Arts in Psychology

FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
UNIV 102 (optional) (3)	HUM 200 (3)
ENGL 101 (3)	MATH 165 (4)
GE (3)	Elective (4)
BIOL 110 (4)	PHIL 101 (3)
PSY 250 (3)	
SOPHOMORE YEAR:: 32 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
PSY Lower-Division Elective (4)	PSY 306 (4)
GE (3)	GE (3)
GE (3)	GE (3)
GE (3)	GE (3)
GE (3)	Elective (3)

JUNIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PSY 307 (4)	Upper-Division GE (3)
PSY Elective (4)	PSY Elective (4)
PSY Elective (4)	PSY Elective (4)
Upper-Division GE (3)	PSY Elective (4)
SENIOR YEAR:: 28 Units	
<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
Upper-Division GE (3)	PSY Elective (4)
PSY Elective (4)	PSY Elective (4)
PSY 499, 481 (4)	Elective (3)
Elective (3)	Elective (3)
TOTAL UNITS:: 120	

Minor in Psychology

Students seeking a minor in psychology are encouraged to consult with a psychology faculty advisor for assistance in planning a series of courses tailored to their own personal and career goals. The requirements of the minor are:

1. Completion of PSY 250 Introduction to Psychology (or equivalent), with a grade of B or better.
2. Completion of 20 units of upper-division psychology courses, with a minimum grade of C. 16 units must be taken for a letter grade.

Minor in Gerontology

The minor in gerontology provides students with a focused multi-disciplinary program to study the aging process. The minor gives students a solid academic foundation in the field and offers practical applications through the internship. Students receive a strong theoretical orientation based in the liberal arts tradition and practical information about aging. The requirements include 22 units incorporating biology, psychology, and the social aspects of aging, and 6 elective units. Specific courses are listed under Gerontology in the catalog.

Internships

The Psychology Department strongly recommends community internship experience, particularly for the student going on to counseling or clinical psychology master's and doctoral degrees.

Each semester a number of advanced undergraduate and graduate students participate in field placements and internship work experiences in organizations and agencies throughout the University's six-county service area. These internships involve on-the-job training by the agency as well as academic work under the supervision of a faculty member. This forms an important base for academic credit and helps the student obtain a range of learning experiences

not otherwise found in the department. Applications for internship should be made near the end of the semester preceding the internship semester. A maximum of 8 units of PSY 499 Internship can be applied toward the major. Students planning on graduate work in clinical or counseling psychology are encouraged to gain internship experience well before applying to graduate school.

Research Assistantships

The Psychology Department strongly recommends research assistantships for those students going on to graduate work in psychology at the master's or doctoral levels. Many university graduate programs require students to have experience in designing and conducting psychological research, as well as in analyzing data and writing up the results. In order to find out more about these research opportunities, students should consult with individual faculty members who are mentoring students in their own research projects.

Special Studies

Students who wish to carry out independent study and research are encouraged to contact an individual faculty member of their choice.

Master of Arts in Psychology, Depth Psychology Concentration

The Psychology Department, working in conjunction with the School of Extended Education, offers a Master of Arts in Psychology with a depth psychology concentration. The M.A. program **is a self-support program administered through Special Sessions and funded entirely through student fees.**

University policy requires students in master's programs to maintain continuous enrollment until completion of the M.A. program, or pay a continuing enrollment fee of \$250.00 per semester.

University policy also requires students who take four semesters to complete their thesis/project to enroll in PSY 599, Master's Thesis.

For information about the program visit the website www.sonoma.edu/psychology/depth. Applications may be downloaded on the website, or contact the graduate administrative specialist, (707) 664-2130, psychma@sonoma.edu. You may also write to:

Psychology M.A.
Psychology Department
Sonoma State University
Rohnert Park, CA 94928-3609

Curriculum in Depth Psychology

The Depth Psychology curriculum offers a strong, supportive small-group learning environment within a structured 36-unit two-year curriculum. In the first year, the 12-15 member cohort group takes three year-long foundational courses. The theories course explores the basic concepts of Jungian psychology, which is a language for understanding in depth the movements of the psyche. The symbolic methods course involves training in symbolic work in artistic media; myth and storytelling; dreamwork; ritual; and sound, voice,

movement, and embodied depth techniques. The cross-cultural mythology course focuses on common archetypal motifs across cultures and incorporates earth-based healing techniques such as the medicine walk, council, initiation and rites of passage, and shamanistic practice.

In the second year, students explore depth inquiry with a research methods and master's thesis class, engage in interpersonal process, and choose seminars oriented around student interests. Students are encouraged to participate in internships or teaching assistantships in their second year in order to gain additional skills training. Students may choose to teach an undergraduate course in their field of expertise in the SSU psychology department; the program advisor assists students in developing curriculum and supervises the internship teaching experience. Students also have the option, at additional expense, of enrolling in University courses that meet their specific learning needs.

The master's thesis provides the opportunity for passionate inquiry into an area of deep interest. Students use symbolic depth-inquiry methods involving art, dreamwork, active imagination, sacred practices, and interviewing to explore their area of passionate concern. The thesis is often a study that symbolically explores psychological development. Master's projects may involve scholarly research, personal reflection, artistic inquiry, curriculum development and teaching, applications in the work world, and creative artistic productions. The thesis evening in May completes the thesis process.

The monthly Public Programs in Depth Psychology invites noted authors, analysts, therapists, and practitioners to a half-day lecture and lunch in the Depth community.

The program in Depth psychology is designed to move students to the next step in their personal and professional development. Graduates go on to teach, to work in community mental health services and non profits, to pursue clinical training in master's and doctoral programs, to facilitate personal growth, and to research and write in the field of depth psychology.

Program of Study

The program includes the following courses:

PSY 511A,B Theories of Depth Psychology	3,3
PSY 515 Psychological Writing	1
PSY 530A,B Seminar in Interpersonal Process	1,1
PSY 542A,B Methods and Applications of Depth Psychology	3,3
PSY 543A,B Cross-Cultural Mythology and Symbolism	3,3
PSY 570 Directed Field Experience	1-3
PSY 575 Research Methods	2
PSY 576 Seminar in Depth Psychology	1-5
PSY 582 Teaching College Psychology (optional)	3-4
PSY 584 Graduate Teaching Assistant (optional)	1-4
PSY 599A,B Master's Thesis: Project and Directed Reading	3,3

Prerequisites for Admission

Course prerequisites are required for admission and are designed to give students a foundation in the field of psychology and in symbolic expression. The Depth Psychology program has the following prerequisites:

1. B.A. or B.S. from an accredited institution;
2. Minimum GPA of 3.00 in the last 60 units of coursework;
3. An acceptable level of competence in oral and written communication, as demonstrated by the coherence of the personal statement and an oral interview;
4. Emotional maturity, as demonstrated in the applicant's personal written statement, life experiences, and oral interview;
5. Four area prerequisites (a maximum of 9 units may be lower-division courses completed at a community college): development, personality, abnormal psychology, and research methods in psychology; and
6. A minimum semester-long experience in symbolic forms (art, dream work, writing, and/or poetry) and reflection on that expression for personal growth.

Fees

Fees are set in consultation with the School of Extended Education.

Refer to the Depth Psychology website for additional information:
www.sonoma.edu/psychology/depth.

SOCIOLOGY

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Sheila Katz

Elaine Leeder

Melinda Milligan

Peter Phillips

Cindy Stearns

Programs Offered

Bachelor of Arts in Sociology

Minor in Sociology

Sociological research attempts to improve the human condition within the context of a strong tradition of social justice and human equality. Society shapes attitudes, goals, hopes and aspirations, and personal preferences. Society affects individuals, groups, and entire nations. Yet at the same time that society is shaping the individual, the individual is shaping society. In order to understand oneself and others, the world, and the future, one has to understand society. Sociology is the discipline that studies groups and societies—what they are, how they got that way, and what impact they have.

Sociology is a field with diverse areas of study. These range from the behavior of the individual as a social actor to the structure of entire societies. Key topics include social psychology, socialization, deviant behavior, group behavior, organizations and institutions, power, inequality, and social change. Major social institutions, including the family, education, religion, social welfare, medicine, work, politics, leisure, and the media, are also explored in detail. To develop skills for studying society, students are introduced to valuable techniques such as survey research, sampling, observational methods, content analysis, experimentation, interviewing, and computer applications in research.

Because sociology is a core subject for any liberal arts education, the department offers a variety of courses of interest to non-majors.

These concern such current social issues as the problems of aging, drugs and society, social inequities, media, education, globalization, and the information revolution.

The major has been designed to allow each student, in consultation with an advisor, to develop an individualized program of study. The required courses ensure a solid grounding in sociological concepts, theories, and research methods.

By the time students graduate, they will:

- Create clear, succinct analysis in writing and speaking;
- Understand the structure and logic of the full range of the discipline;
- Formulate critical and analytic questions about society and be able to investigate them through original research;
- Demonstrate competence in handling databases and in using appropriate technical tools; and
- Apply theory and methods in sustained independent inquiry.

Careers in Sociology

Sociology provides an excellent preparation for a wide range of careers. A bachelor's degree in sociology qualifies one for opportunities in national, state, and local government, including research, public administration, personnel, and planning. The major can lead to positions in human services and social advocacy, including alcohol and drug rehabilitation, health agency administration, counseling, recreation, senior services, social welfare, vocational, and rehabilitation counseling. Applications of sociology in business include organizational management, human relations, union organization, industrial relations, communication consulting, public relations, and marketing. Sociology constitutes valuable coursework in preparation for graduate study in law, business, and a variety of human services professions, as well as doctoral programs in sociology and related academic fields. Before graduation, sociology majors can establish internships that lead to valuable professional contacts and provide practical experience in pursuing these and additional career paths.

The department has a chapter of the national sociology honor society Alpha Kappa Delta, and it awards a C. Wright Mills Award for Sociological Imagination on an annual basis for the best original research paper produced by a student in the department.

Every year the Joseph J. Byrne Memorial Scholarship is awarded to an outstanding student majoring in sociology.

The department also awards the Robert Holzapfel Scholarship to a student majoring in sociology or counseling.

Bachelor of Arts in Sociology

Degree Requirements

General education

Sociology courses

Units

51

40

General electives	29
Total units needed for graduation	120

Major Requirements

This requirement list and advising guide is designed for students entering the sociology major beginning in fall 2010. Students who entered the major in earlier semesters may follow the requirements listed in this worksheet or they may complete their requirements using the earlier advising guide.

SOCI 201 Introduction to Sociology	3
SOCI 300 Sociological Research Methods	4
SOCI 375 Classical Sociological Theory	4
Methods Seminar (see below)	4
SOCI 498 Senior Seminar	4
Total units	19

A student must take SOCI 201 before proceeding to any other required sociology course and take SOCI 300 before taking a methods seminar. SOCI 300, a methods seminar, SOCI 375, and a total of 20 upper-division units of sociology are required before a student will be allowed to enroll in SOCI 498. (Note: SOCI 300, the methods seminar, and SOCI 375 are included as part of the 20 upper-division sociology units.)

Students must earn a minimum grade in each of the five required courses. See a faculty advisor in the department for details on these minimum grade requirements.

Methods Seminar

The Methods Seminar furthers students' methodological skills in a wide choice of substantive areas. Students must take one of the following seminars or another course designated as a methods seminar.

SOCI 414 Methods Seminar: Social Interaction
SOCI 418 Methods Seminar: Social Development of Self
SOCI 425 Methods Seminar: Urban Sociology
SOCI 441 Methods Seminar: U.S. by the Numbers
SOCI 443 Methods Seminar: Women and Social Policy
SOCI 452 Methods Seminar: Health Care and Illness
SOCI 463 Methods Seminar: Bureaucracies and Institutions
SOCI 470 Methods Seminar: Culture and Identity
SOCI 480 Methods Seminar: Sociology of Work
SOCI 484 Methods Seminar: Sociology of Genocide

Sociological Experience Requirement

The sociological experience requirement provides students with curricular opportunities to develop awareness of social issues, use sociological perspectives and methods to address social problems, engage with the community outside of the university, develop experiences that provide job skills, and enhance their knowledge about careers. Majors must take one of the following courses or another course designated as meeting the sociological experience requirement.

SOCI 306 Careers in Sociology
SOCI 336 Investigative Sociology
SOCI 432 Group Work with Other Adults
SOCI 482 Sociology of the Environment
SOCI 488 Selected Topics in Service Learning
SOCI 496 Internship Practicum (concurrent with SOCI 499)

Additional Major Requirements

Substantive areas courses	6-12
Upper-division sociology electives (chosen in consultation with a department advisor)	9-15
Total Units in the Major	40

Substantive Areas of Sociology

Majors must take a minimum of one upper-division course in three of the five substantive areas below. Additional area courses may be offered in a given semester. Consult with an advisor.

Microsociology

This area assumes human agency and social action as fundamental to social life and takes into account both thinking and feeling in defining situations and in constructing actions. Microsociology focuses on reciprocal relationships between self and society with emphasis on:

- The social shaping of self, identity, and role;
- The interaction between self and others; and
- The development, maintenance, and change of subjective and social meanings. Applying microsociological approaches to status variables such as gender and age reveals how they are constructed, given meaning, and played out in individual lives.

SOCI 314 Deviant Behavior (cross-listed with CCJS)
SOCI 315 Socialization
SOCI 317 Emotions and Adult Life (cross-listed with GERN)
SOCI 319 Aging and Society (cross-listed with GERN)
SOCI 326 Social Psychology (cross-listed with PSYCH)
SOCI 350 City and Community Life
SOCI 414 Methods Seminar: Social Interaction
SOCI 417 Sociology of Mental Illness
SOCI 418 Methods Seminar: Social Development of the Self

Organizations, Occupations, and Work

This area addresses both organizational dynamics and their relation to broader societal processes. These include organizational cultures, structures, processes, and outcomes. Knowledge of these matters is relevant to students interested in human services, business, non-profit agencies, education, and criminal justice administration.

SOCI 306 Careers in Sociology
SOCI 365 Human Services Administration
SOCI 366 Juvenile Justice (cross-listed with CCJS)

- SOCI 432 Group Work with Older Adults (cross-listed with GERN and PSYCH)
- SOCI 450 Punishments and Corrections (cross-listed with CCJS)
- SOCI 451 Sociology of Education
- SOCI 461 Social Work and Social Welfare
- SOCI 463 Methods Seminar: Bureaucracies and Institutions
- SOCI 480 Methods Seminar: Sociology of Work
- SOCI 485 Organizations and Everyday Life
- SOCI 496 Internship Practicum (concurrent with SOCI 499)

Macrosociology

Courses in this area investigate large social structures, institutions, networks, and processes that define and shape individual and organizational behavior, and that contribute to social and public policy. This area provides a conceptual overview of diverse social institutions. Macrosociology gives the student new insight into American society and its problems and possibilities from both the personal and professional perspectives.

- SOCI 301 Statistics for Sociologists
- SOCI 335 American Society
- SOCI 340 Drugs and Society (cross-listed with CCJS)
- SOCI 345 Sociology of Families
- SOCI 347 American Class Structure
- SOCI 363 Sociology of Race and Ethnicity
- SOCI 377 Contemporary Sociological Theory
- SOCI 383 Social Change
- SOCI 384 Sociology of Consumption
- SOCI 425 Methods Seminar: Urban Sociology
- SOCI 440 Sociology of Reproduction (cross-listed with WGS)
- SOCI 441 Methods Seminar: U.S. by the Numbers
- SOCI 443 Methods Seminar: Women and Social Policy
- SOCI 445 Sociology of Childhood and Adolescence
- SOCI 452 Methods Seminar: Health Care and Illness
- SOCI 488 Selected Topics in Service Learning

Culture

Courses in the sociology of culture introduce students to central social forms that generate, transmit, and/or critique values, ideas, ideologies, lifestyles, and popular culture. Topics include the ways in which culture can act as a socializing agent reaffirming the existing social order or providing impetus to change, helping integrate societies or contributing to dissension. Students considering careers in the media, education, human services, and recreation are among those who will find these classes of special value.

- SOCI 312 Sociology of Gender
- SOCI 330 Sociology of Media
- SOCI 331 Mass Communications Theory and Research (cross-listed with COMS)
- SOCI 332 Death and American Culture
- SOCI 336 Investigative Sociology
- SOCI 360 Sociology of Sexualities
- SOCI 385 Sociology of Culture
- SOCI 430 Sociology of Leisure
- SOCI 431 Sociology of Religion
- SOCI 434 Cinema and Society

- SOCI 435 Media Censorship
- SOCI 470 Methods Seminar: Culture and Identity

Transnational Sociology

Transnational sociology provides a comparative perspective on societies throughout the world. Economic, political, and social institutions and dynamics are examined and compared. Among specific topics are comparative ideologies, roles, world elites, and local communities. Courses in transnational sociology explore these consequences and their long-term implications. Students interested in a historical and comparative examination of international issues would be well served to take courses in this area.

- SOCI 305 Perspectives on the Holocaust and Genocide
- SOCI 380 Political Sociology
- SOCI 381 Population and Society
- SOCI 382 Social Movements and Collective Behavior
- SOCI 449 Sociology of Power
- SOCI 482 Sociology of the Environment
- SOCI 484 Methods Seminar: Sociology of Genocide

Sample Four-Year Program for Bachelor of Arts in Sociology

The following is a sample study plan only. The sequence and specific courses given are suggestive; please see an advisor each semester to plan your personal program.

FRESHMAN YEAR:: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (3)	PHIL 101 (3)
GE Mathematics (3)	GE Physical Science (3)
GE BIOL 115 (3)	GE World History (3)
UNIV 102 First Year Experience (3)	SOCI 201 (3)
Electives (4)	CIS 101 (3)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
HUM 200 (3)	GE Social Sciences (6)
GE History/Political Science (6)	History of the Fine Arts (3)
GE Comparative Perspectives & Foreign Languages (3)	GE World Literature (3)
Electives (3)	Electives (3)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
SOCI 300 (4)	SOCI 375 (4)
Sociology Organizations Area (4)	Sociology Microsociology Area (4)
Sociology UD Electives (4)	UD GE Integrated Person (3)
UD GE Philosophy and Values (3)	Electives (4)

SENIOR YEAR:: 29 Units***Fall Semester (16 Units)***

Sociology Methods Seminar (4)

Sociology Transnational Area (4)

UD GE Contemporary International Perspectives (3)

Electives (5)

Spring Semester (13 Units)

SOCI 498 (4)

SOCI 499 (4)

Electives (5)

TOTAL UNITS:: 120**Minor in Sociology**

SOCI 201 Introduction to Sociology

3

Upper-division courses in sociology chosen in consultation with an advisor

17

Total units in the minor**20**

STATISTICS

DEPARTMENT OF MATHEMATICS AND STATISTICS

Darwin Hall 114

phone: (707) 664-2368

fax: (707) 664-3535

www.sonoma.edu/math

DEPARTMENT CHAIR

Sam Brannen

STATISTICS PROGRAM ADVISORS

Susan Herring

Elaine McDonald-Newman

Scott Nickleach

ADMINISTRATIVE COORDINATOR

Marybeth Hull

Faculty

*William Barnier

Sam Brannen

*Sharon Cabaniss

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Ben Ford

Susan Herring

Izabela Kanaana

Brigitte Lahme

*Rick Luttmann

Elaine McDonald-Newman

*Edith Prentice Mendez

Jerry Morris

Scott Nickleach

Sunil Tiwari

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Science in Statistics

Bachelor of Arts in Applied Statistics

Minor in Applied Statistics

Preparation for Actuarial Examinations

Mathematics and statistics are rapidly growing disciplines whose concepts and applications play an ever-increasing part in modern life. Statistics has long been an essential tool in the physical sciences and has more recently been applied extensively in such diverse areas as medical and biological research, environmental studies, management science, behavioral and social sciences, and economics. Our basic curriculum is designed to give students the skills necessary for success in business, industry, government, and teaching. In addition, these degrees will provide a sound background for continuation of study toward advanced degrees in statistics, or a quantitative

foundation for graduate school in disciplines such as business, economics, biology, or other fields.

The B.A. in applied statistics is intended for students pursuing a degree in another discipline such as economics, psychology, biology, or others. These students may be interested in taking more statistics classes to prepare themselves for jobs in industry or success in graduate school in another field. The B.A. allows upper-division units from another major to count as part of the "area of concentration", and is focused on developing practical skills such as regression analysis and ANOVA, and on gaining proficiency with statistical software packages such as SAS and SPSS. Students are strongly encouraged to earn the B.A. as part of a double major in a complementary field.

The B.S. in statistics is a rigorous program for students who intend to pursue a career as a statistician or who wish to go to graduate school in statistics or mathematics. Students earning the B.S. will learn the same practical skills as those taking the B.A. Additionally, they will take theoretical courses in linear algebra, analysis, mathematical statistics, and stochastic processes. This program follows the guidelines proposed by the American Statistical Association in the Curriculum Guidelines for Undergraduate Programs in Statistical Science.

Both programs will prepare students for work in areas including government and industry, biostatistics, actuarial work, and consultative problem-solving in modern industry.

Careers in Statistics and Actuarial Sciences

According to the American Statistical Association the demand for statisticians in the workforce is dramatically increasing. Statisticians can find employment in a variety of fields. Biomedical, pharmaceutical, engineering and marketing companies, and government agencies seek employees with statistical skills to analyze large data sets. Many students find lucrative jobs as SAS programmers.

In addition, statistics students with an interest in finance or economics will be interested in pursuing a career as an actuary. The courses in both the BA and BS provide a solid preparation for the first actuarial exam and the Applied Statistical Methods educational experience credit. Actuaries have been ranked in the top 5 careers in the US for salary and job satisfaction since 1988.

Learning Objectives for the B.A. and B.S.

- Describe data sets using appropriate numerical and graphical techniques;
- Develop mathematical tools necessary to perform statistical calculations and to understand distributions and statistical theory;
- Design experiments and survey sampling methods that allow results to be statistically analyzed to test hypotheses of interest;

- Determine which statistical analyses are suitable, perform the analyses using technology, and assess the validity of necessary assumptions and interpret the results;
- Construct and apply probability models for both discrete and continuous random variables; and
- Communicate with non-statisticians in written and oral formats to learn what a client is interested in ascertaining and to present the results from a statistical analysis.

Additionally, for the B.S. in statistics:

- Construct and verify mathematical proofs;
- Discuss properties of estimators and explain the rationale and assumptions behind statistical procedures; and
- Apply stochastic models to solve real-world problems.

B.S. in Statistics

Degree Requirements	Units
General education (51 units, 3 units covered by major requirements)	48
Major (includes 3 units in GE)	52
Electives	20
Total units needed for graduation	120
MATH 161 Differential and Integral Calculus I	4
MATH 165 Elementary Applied Statistics	4
MATH 211 Differential and Integral Calculus II	4
MATH 220 Higher Mathematics: an Introduction	3
MATH 241 Differential Equations with Linear Algebra	4
MATH 261 Multivariable Calculus	4
MATH 265 Intermediate Applied Statistics with SPSS	4
MATH 322 Linear Algebra	3
MATH 340 Real Analysis I	4
MATH 345 Probability Theory	4
MATH 367 Statistical Consulting and Communication	2
MATH 381 Computing for Statistics: SAS Programming Language	2
MATH 445 Mathematical Statistics and Operations Research	4
MATH 465 Experimental Design and Regression Analysis	4
MATH 467 Statistical Consulting, Communication, and Project Management	2
Total units in B.S. program	52

Sample Four-Year Program for Bachelor of Science in Statistics

FRESHMAN YEAR:: 28 Units	
Fall Semester (14 Units)	Spring Semester (14 Units)
MATH 161 (GE) (4)	MATH 211 (4)
MATH 165 (4)	MATH 265 (4)
GE (3)	GE (3)
GE (3)	GE (3)

SOPHOMORE YEAR:: 31 Units	
Fall Semester (15 Units)	Spring Semester (16 Units)
MATH 241 (4)	MATH 261 (4)
MATH 367 (2)	MATH 322 (3)
MATH 220 (3)	GE (3)
GE (3)	GE (3)
GE (3)	GE (3)
JUNIOR YEAR:: 31 Units	
Fall Semester (16 Units)	Spring Semester (15 Units)
MATH 345 (4)	MATH 381 (2)
GE (3)	MATH 445 (4)
Elective (2)	GE (3)
Elective (3)	GE (3)
Elective (4)	Elective (3)
SENIOR YEAR:: 30 Units	
Fall Semester (15 Units)	Spring Semester (15 Units)
MATH 467 (2)	MATH 340 (4)
Elective (3)	GE (3)
GE (3)	GE (3)
GE (3)	Elective (3)
MATH 465 (4)	Elective (2)
TOTAL UNITS:: 120	

B.A. in Applied Statistics

Degree Requirements	Units
General education (51 units, 3 units covered by major requirements)	48
Major (includes 3 units in GE)	38
Required Area of Concentration	12
Electives	22
Total units needed for graduation	120
MATH 161 Differential and Integral Calculus I	4
MATH 165 Elementary Applied Statistics	4
MATH 211 Differential and Integral Calculus II	4
MATH 241 Differential Equations with Linear Algebra	4
MATH 261 Multivariable Calculus	4
MATH 265 Intermediate Applied Statistics with SPSS	4
MATH 345 Probability Theory	4
MATH 367 Statistical Consulting and Communication	2
MATH 381 Computing for Statistics: SAS Programming Language	2
MATH 465 Experimental Design and Regression Analysis	4
MATH 467 Statistical Consulting, Communication, and Project Management	2
Total units in applied statistics program	38

Required Area of Concentration:

Upper-division courses in one other field chosen in consultation with and approved by an advisor in the Department of Mathematics and Statistics

12

Total units in B.A. program 50

Sample Four-Year Program for Bachelor of Arts in Applied Statistics

FRESHMAN YEAR:: 28 Units

Fall Semester (14 Units)

MATH 161 (GE) (4)
MATH 165 (4)
GE (3)
GE (3)

Spring Semester (14 Units)

MATH 211 (4)
MATH 265 (4)
GE (3)
GE (3)

SOPHOMORE YEAR:: 31 Units

Fall Semester (15 Units)

MATH 241 (4)
MATH 367 (2)
GE (3)
GE (3)
Elective (3)

Spring Semester (16 Units)

MATH 261 (4)
GE (3)
GE (3)
GE (3)
Elective (3)

JUNIOR YEAR:: 31 Units

Fall Semester (16 Units)

MATH 345 (4)
Area of Concentration (3)
GE (3)
Elective (2)
Elective (4)

Spring Semester (15 Units)

MATH 381 (2)
Area of Concentration (3)
GE (3)
GE (3)
Elective (4)

SENIOR YEAR:: 30 Units

Fall Semester (15 Units)

MATH 465 (4)
MATH 467 (2)
Area of Concentration (3)
GE (3)
GE (3)

Spring Semester (15 Units)

Area of Concentration (3)
GE (3)
GE (3)
Elective (3)
Elective (3)

TOTAL UNITS:: 120

Minor in Applied Statistics

Twenty units are required. These must include MATH 165, MATH 265, MATH 367, MATH 381, MATH 467, and at least 6 units from statistically relevant courses in the department or elsewhere at Sonoma State University chosen in consultation with and approved by an advisor in the Department of Mathematics and Statistics.

Actuarial Science Career Preparation

Students interested in a career in actuarial science can prepare for the first two actuarial examinations by taking the following courses:

1. For Actuarial Exam 1: MATH 161, MATH 211, MATH 261, and MATH 345.
2. For Actuarial Exam 2: MATH 303, BUS 370, BUS 470, and ECON 375.

Entry-Level Mathematics (ELM) Requirement

Unless exempted, the Entry-Level Mathematics Examination must be taken within the past two years before enrollment in any general education course or developmental mathematics course (MATH 35 or 45). The ELM results will place the student in the appropriate level of mathematics courses. Note that if placement in the developmental mathematics sequence is necessary, satisfactory completion of MATH 45 is required for placement in MATH 103, 104, 105, 107, 111, 131, 141, 150, and 165. Please consult the Schedule of Classes or telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

Grading Policy in the Department of Mathematics and Statistics

Non-majors

All mathematics and statistics courses except MATH 35, 45, 103, 104, 105, 107, 111, 131, 141, 150, 161, and 165 are available in the Cr/NC grading mode to non-mathematics majors.

All Students

MATH 175, 210, 295, 330, 390, 395, and 499 are available only as Cr/NC.

Mathematics and Statistics Majors and Minors

A statistics major or minor must take all mathematics and statistics courses in the traditional grading mode, with the exceptions of courses offered only in the Cr/NC modes: MATH 107W, 161W, 175, 210, 211W, 295, 330, 390, 395, and 499, and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog). Majors are advised to take PHIL 102 for the GE category A3 (Critical Thinking).

Statistics Courses

Please see course titles and descriptions under the Mathematics section of this catalog.

THEATRE ARTS AND DANCE

Acting / Dance / Technical Theatre / General Theatre

DEPARTMENT OFFICE

Ives Hall 207
(707) 664-2474
www.sonoma.edu/theatre

DEPARTMENT CHAIR

Paul Draper

PERFORMING ARTS PROGRAM SPECIALIST

Shelley Martin

Faculty

Acting: Paul Draper, Danielle Cain, Stephanie Hunt, Doyle Ott, Tori Truss

Dance: Kristen Daley, Bernadette Alverio, Jennifer Jaffe, *Nancy Lyons, Scott Wells, Rebecca Wilson

Drama: Scott Horstein, Judy Navas

Technical Theatre: Anthony Bish, Peter Crompton

**Faculty Early Retirement Program*

Guest Artists

Joe Goode Performance Group, Rennie Harris, Peggy Hackney, Kathleen Hermesdorf, Claire Porter, Shelley Senter, Leibe Wetzel and "Lunatique Fantastic," JoAnne Winter/Susan Harlow and "Word for Word Performing Arts Company," Doug Elkins, Callie Floor, Theo Bridant, Amanda McTigue, John Sullins, Mikiko Uesugi, Peter Crompton, Brent Lindsay, Mark Haim, Tracy Ward, Adrian Eifenbaum

Programs Offered

- Bachelor of Arts in Theatre Arts with a
 - Concentration in Acting
 - Concentration in Dance
 - Concentration in Technical Theatre
- General Theatre Degree
- Minor in Theatre Arts (with acting, dance, drama emphases)

The Department of Theatre Arts and Dance provides a rigorous and nurturing learning context where students explore and share their passions and aptitudes toward the making of theatre and dance. Through a rich set of courses, a wide range of performance styles and opportunities, personal contact with faculty and guest artists, focused and comprehensive individual advising, and a supporting and caring staff, SSU theatre arts and dance majors and minors gain a deep impression of ensemble and individual creativity, and a lasting sense of community.

The department is committed to creating, teaching, and learning about theatre that enlightens as well as entertains, that explores the

values and ideas of many cultures and times, and that contributes to the artistic and personal growth of our students, faculty, and audiences. Faculty work to create a learning environment that is a model for the collaborative work of theatre in which student and teacher are equally important and respected.

The department believes that theatre artists – dancers, actors, singers, directors, playwrights, choreographers, designers, and technicians – are engaged in various ways of exploring, shaping, and communicating human experience. Our students learn that theatre can be a place in which values and beliefs, both personal and societal, are tested, deepened, and often reshaped through the making of theatrical performance. By entering into the world of a theatre or dance production, students temporarily assume the reality of the experiences, personalities, and beliefs of the characters and situations. In so doing, students are presented with unique opportunities to develop artistic skill and kinesthetic intelligence while growing in human understanding and empathy. Making theatre helps participants discover who they are, what they truly believe about theatre and life, and to express their own beliefs through theatre and dance.

Our theatre and dance faculty cultivate innovative approaches to theatre and dance, while respecting and learning from the past. The department offers numerous performance opportunities and actively encourages and supports the development of new work by both students and faculty.

The Theatre Arts program is closely associated with SSU's Music Department, especially in the area of voice and music theatre. Together, the Department of Theatre Arts and Dance and the Music Department form the School of Performing Arts which offers over 200 student performances of theatre, dance, and music each year.

Bachelor of Arts in Theatre Arts with Concentration in Acting

The acting concentration offers intensive training in acting, with supporting courses in voice, theatre production, theatre history, dramatic literature and directing, technical theatre, and special topics. We offer numerous performance opportunities including new works, playwriting, contemporary and modern plays, Shakespeare and other classics, and music theatre.

Degree Requirements	Units
General education	51
Theatre arts requirements	50
Electives	19
Total units needed for graduation	120

Phase I, required for acting concentration (freshman and sophomore years)

Students must complete Phase I before Phase II.

THAR 202 Intro to the History of Drama and Dance: Origins to 1800	4
THAR 203 Intro to the History of Drama and Dance: 1800 to present (strongly recommended)	4

THAR 120B Acting: Fundamentals for Acting Concentration Majors	2
THAR 220A Acting: Text and Scene Study	2
THAR 220B Acting: Characterization (strongly recommended)	2
<i>Any two of the following three technical theatre classes:</i>	
<i>* Prerequisite or concurrent enrollment in THAR 143A.</i>	
THAR 143B* Costumes	2
THAR 144A* Lighting	2
THAR 144B* Scenery	2
THAR 145A Voice for the Actor (strongly recommended)	1
THAR 145B Speech for the Actor (strongly recommended)	1

Total units required in Phase I 12

Phase II, required for acting concentration (junior and senior years)

THAR 300 Theatre in Action	3
THAR 320A Intermediate Acting Block A	5
THAR 320B Intermediate Acting Block B	5
ENGL 339 Introduction to Shakespeare (strongly recommended)	3
THAR 350 Directing Workshop	2
THAR 370A Early Plays: Evolution and Innovation	3
THAR 370B Modern Plays: Evolution and Innovation	3
THAR 400 Theatre of Today	1
THAR 420A Advanced Acting Block A	5
THAR 420B Advanced Acting Block B	5
Theatre Arts electives	4

Total units in Phase I 12

Total units in Phase II 38

Total units in the acting concentration 48

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Acting Concentration

FRESHMAN YEAR:: 31 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 120B (2)	THAR 120B (2) repeat
THAR 143A (2)	THAR 144A (2)
THAR 145A (1)	THAR 145B (1)
UNIV 150 (5) GE (A2 & A3)	THAR 302 (3) elective
Additional GE (6)	UNIV 150 (4)
	Additional GE (3)
ALTERNATIVE FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 116 (1)	THAR 203 (4) GE (C1)
THAR 110 (1)	THAR 120B(2)
THAR 143A (2)	THAR 144B (2)
THAR 145A (1)	THAR 145B (1) GE (9)
THAR 143B (2)	GE (6)

SOPHOMORE YEAR:: 31 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 202 (C1 GE) (4)	THAR 203 (C1 GE) (4)
THAR 220A (2)	220 B (2)
THAR 143B (2)	THAR 325 (2)
THAR 302 (3) Elective	ENG 339 (3)
GE (5)	GE (6)
ALTERNATIVE SOPHOMORE YEAR:: 31 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 143B (2)	THAR 110 (1)
THAR 202 (4) (C1 GE)	THAR 220 B (2)
THAR 220A (2)	THAR 302 (3) Elective
GE (9)	GE (9)
JUNIOR YEAR:: 29 Units	
<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 320A (5)	THAR 320B (5)
THAR 350 (2)	THAR 300 (3) GE UD (C1)
THAR 370A (3)	THAR 375 (3)
GE UD (3)	THAR 400 (1)
Electives (1)	GE (3)
SENIOR YEAR:: 29 Units	
<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 420A (5)	THAR 420B (5)
THAR 302 (3)	THAR 371B(3)
GE UD (3)	GE UD (3)
Electives(3)	Electives (4)
TOTAL UNITS:: 120	

Bachelor of Arts in Theatre Arts with Concentration in Dance

The dance concentration offers dance and movement studies with an emphasis on choreography, performance, and somatic approaches to dancing, with supporting courses in dance and theatre history, technical theatre, and special topics.

Degree Requirements	Units
General education	51
Theatre Arts requirements	48
Electives	21
Total units needed for graduation	120

Students must complete Phase I before Phase II.

Phase I, Required (freshman and sophomore years)

THAR 202 Intro to the History of Drama and Dance Origins to 1800 or	4
THAR 203 Intro to History of Drama and Dance: 1800 to present	4
THAR 210A Contemporary Dance I	2

THAR 210B Contemporary Dance II	2
THAR 240 Choreography I	2

Choose two from the following technical theatre courses:

*prerequisite or concurrent enrollment in THAR 143A.

THAR 143B* Costumes (2)	
THAR 144A* Scenery (2)	
THAR 144B* Lighting (2)	4

Total units required in Phase I 13

Phase II, Required (Junior and Senior Years)

THAR 300 Theatre in Action	3
THAR 310A Intermediate Dance Block A	2 or 5
THAR 310B Intermediate Dance Block B	2 or 5
THAR 340 Choreography II	2
THAR 345 Choreography III	2
THAR 371A History of Dance A	3
THAR 371B History of Dance B	3
THAR 400 Theatre of Today	1
THAR 410A Advanced Dance Block A	2 or 5
THAR 410B Advanced Dance Block B	2 or 5
Electives - Dance	1

Total units in Phase I 13

Total units in Phase II 35

Total units in the dance concentration 48

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Dance Concentration

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
THAR 110 (1)	THAR 110 (1)
THAR 143A (2)	THAR 144A (2) or
THAR 143B (2)	THAR 144B (2)
GE (10)	THAR 202 (4) (GE-C1)
	GE (9)

SOPHOMORE YEAR:: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
THAR 210A (2)	THAR 210B (2)
THAR 240 (2)	THAR 340 (2)
GE (8)	GE (7)
Electives (3)	Electives (4)

JUNIOR YEAR:: 31 Units

Fall Semester (16 Units)	Spring Semester (15 Units)
THAR 310A (2 or 5)	THAR 310B (2 or 5)
THAR 345 (2)	THAR 300 (3) GE UD (C1)
THAR 371A (3)	THAR 400 (1)
GE UD (3)	GE (UD) (3)
Electives (3)	Electives (3)

SENIOR YEAR:: 29 Units

Fall Semester (15 Units)	Spring Semester (14 Units)
THAR 410A (2 or 5)	THAR 410B (2 or 5)
GE (5)	THAR 371B (3)
Electives (5)	Electives (3)
	GE (3)
TOTAL UNITS:: 120	

Bachelor of Arts in Theatre Arts with Concentration in Technical Theatre

The technical theatre concentration offers intensive work in design, theatre technology, and stage management, with supporting courses in acting and movement, theatre and dance history, and special topics.

Degree Requirements	Units
General Education	51
Theatre Arts requirements	48
Electives	21
Total units needed for graduation	120

Students must complete Phase I before Phase II.

Phase I, Required (freshman and sophomore years)

THAR 202 Intro to the History of Drama and Dance: Origins to 1800 or	4
THAR 203 Intro to the History of Drama and Dance: 1800 to Present (strongly recommended)	4
* Prerequisite or concurrent enrollment in THAR 143A.	
THAR 143B* Costumes	2
THAR 144A* Scenery	2
THAR 144B* Lighting	2
THAR 230 Stage Management	3
ART 101 Art Fundamentals (strongly recommended)	3
ART 102 Art Fundamentals (strongly recommended)	3
Choose 3 units from the following dance/drama courses:	
THAR 120A or B Acting: Fundamentals	2
THAR 110 Dance Fundamentals	1
THAR 210A Contemporary Dance I	2
THAR 116 Comedy and Improvisation	1

Total units required in Phase I 15

Phase II, Required (junior and senior years)

THAR 300 Theatre in Action	3
THAR 344A Design for the Stage	3
THAR 344B Design for the Stage	3
THAR 321A Intermediate Technical Block	2
THAR 321B Intermediate Technical Block	2
THAR 350 Directing Workshop	2
THAR 370A Early Plays: Evolution and Innovation	3
THAR 370B Modern Plays: Evolution and Innovation	3
THAR 400 Theatre of Today	1
THAR 421A Advanced Technical Block	2

THAR 421B Advanced Technical Block	2
THAR 444 History of Ornament	2
Electives - Theatre	5
Total units required in Phase II	33
Total units in Phase I	15
Total units in Phase II	33
Total units in the technical theatre concentration	48

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Technical Theatre Concentration

FRESHMAN YEAR:: 30 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 143A (2)	THAR 144A (2)
THAR 143B (2)	THAR 144B (2)
GE (12)	GE (10)
SOPHOMORE YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 202 GE (C1) (4)	THAR 120 or 210A (2)
GE (9)	THAR 230 (2)
THAR 110 or 116 (1)	GE (9)
Electives (2)	Electives (2)
JUNIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 321A (2)	THAR 321B (2)
THAR 344A (3)	THAR 344B (3)
THAR 350 (2)	THAR 300 (3)
THAR 370A (3)	THAR 400 (1)
GE UD (3)	GE UD (3)
Electives (2)	Electives (3)
SENIOR YEAR:: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 421A (2)	THAR 421B (2)
THAR 444 (2)	THAR 370B (3)
GE (3)	Theatre Electives (3)
Theatre Electives (2)	Electives (7)
Electives (6)	
TOTAL UNITS:: 120	

Bachelor of Arts in Theatre Arts (General Theatre Degree)

The general theatre degree takes a liberal arts approach to studies in theatre and provides students with a broad-based theoretical background in the history, theory, and practice of theatre. It is for students aiming for careers in education, directing, research, script writing, arts management, film production, and other careers that may not have performance or theatre technology at their centers.

Degree Requirements	Units
General education	51
Theatre arts requirements	48
Electives	21
Total units needed for graduation	120

Phase I, Required (freshman and sophomore years)

Students must complete Phase I before Phase II.

THAR 202 Intro to the History of Drama and Dance: Origins to 1800	4
THAR 203 Intro to the History of Drama and Dance: 1800 to the Present	4
THAR 120A or B Acting: Fundamentals	2
THAR 143A Stagecraft	2

Any one of the following three technical theatre classes:

* Prerequisite or concurrent enrollment in THAR 143A.	
THAR 143B* Costumes	2
THAR 144A* Lighting	2
THAR 144B* Scenery	2
THAR 230 Stage Management	3
THAR 220A Acting: Text and Scene Study (may substitute 2 units of dance)	2

Total units required in Phase I 17

Phase II, Required (junior and senior years)

THAR 300 Theatre in Action	3
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Any one of the following three workshop classes:

THAR 301 Dance Ensemble	
or THAR 302 Drama Ensemble Workshop	
or THAR 303 Technical Theatre Workshop	3
ENGL 339 Introduction to Shakespeare	3
THAR 350 Directing Workshop	2
THAR 370A Early Plays: Evolution and Innovation	3
THAR 371A History of Dance A	3

One of the following two classes:

THAR 370B Modern Plays: Evolution and Innovation or	
THAR 371B History of Dance B	3

One of the following two classes:

THAR 374 World Theatre	
or THAR 373 Dances of the World	3
THAR 375 Contemporary Plays and Playwrights	3
THAR 400 Theatre of Today	1

<i>One of the following two teaching classes:</i>	2
THAR 460 Drama for Children	
or THAR 470 Dance for Children	2
Theatre Arts electives	2
Total units in Phase I	17
Total units in Phase II	31
Total units in the general drama concentration	48

Student may substitute 3 units from the following courses with consent of Theatre Arts advisor.

In English

ENGL 439 Studies in Shakespeare	3
ENGL 329 Screen/Script Writing (Film-TV-Stage)	3
ENGL 373 Introduction to Drama	3
ENGL 474 Studies in Drama	3
ENGL 377 Film and Literature	3

In Chicano and Latino Studies

Chicano/Latino Theatre	1-2
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In Modern Languages and Literatures

One of the above may be substituted for an upper-division dramatic literature course offered in the Modern Languages and Literatures Department (as available, and if student's language skills allow).

Sample Four-Year Program for Bachelor of Arts in Theatre Arts (General Theatre Degree)

FRESHMAN YEAR:: 31 Units	
<i>Fall Semester (14 Units)</i>	<i>Spring Semester (17 Units)</i>
THAR 101 (3) GE (C1)	THAR 200 (3) GE (C4)
THAR 143A (2)	THAR 144B (2)
THAR 120 A or B (2)	THAR 302 (3)
GE (7)	GE (9)
SOPHOMORE YEAR :: 31 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 202 (3) GE (C1)	THAR 203 (4) GE (C1)
THAR 220A (2)	THAR 220B (2)
THAR 110 (1)	THAR 325 (2)
THAR 230 (3)	THAR 301, 302 or 303 (3) Elective
GE (6)	GE (6)
JUNIOR YEAR:: 29 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 350 (2)	THAR 370B (3)
THAR 370A (3)	THAR 375 (3)
ENGL 339 (3)	THAR 400 (1)
GE UD (3)	GE UD (3)
Electives (4)	THAR 301, 302 or 303 (3) Elective

SENIOR YEAR:: 29 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 371 A (3)	THAR 300 (3) GE UD (C1)
ENG 373 (3)	THAR 374 (3)
GE (3)	THAR 460 or 470 (2)
Theatre Electives (3)	Theatre Electives (3)
Electives (3)	THAR 301, 302 or 303 (3) Elective
	Electives (3)
TOTAL UNITS:: 120	

Minor in Theatre Arts

The minor in theatre arts consists of 24 units of theatre arts courses. Students may choose a minor concentration in acting, dance, technical theatre, or drama. Six of the elective units must be upper-division. Students contemplating a minor in theatre arts should consult the Theatre Arts Department's full-time faculty at the earliest possible date for approval and advising.

Minor Core Requirements

THAR 203 Intro to the History of Drama and Dance: 1800 to present	4
THAR 300 Theatre in Action	3
THAR 301 Dance Ensemble or	
THAR 302 Drama Ensemble Workshop or	
THAR 303 Technical Theatre Workshop	3
Total units in the minor core	10

Minor Electives

Electives must include at least 6 upper-division units and should be chosen in consultation with an advisor. (For dance emphasis, students may choose THAR 103 Intro to History of Drama and Dance, or THAR 371A or 371B History of Dance. Choreography I is a core requirement for a dance emphasis.)

Total units in the minor electives	15
Total units in the minor	25

WOMEN'S AND GENDER STUDIES

DEPARTMENT OFFICE

Rachel Carson Hall 18
(707) 664-2840
www.sonoma.edu/womenstudies

DEPARTMENT CHAIR

Charlene Tung

ADMINISTRATIVE COORDINATOR

Jo-Ann Smith

FACULTY

Lena McQuade
Don Romesburg

Programs Offered

- Major in Women's and Gender Studies
- Minor in Women's and Gender Studies
- Career Minor in Women's Health
- Minor in Queer Studies

Women's and gender studies (WGS) is an interdisciplinary major that examines the experiences and opportunities of women and men in relation to race, ethnicity, class, and sexuality. WGS places gender in specific cultural and historical contexts in relation to families, communities, and nations. In addition, feminist scholarship in recent years has inspired a vast array of work on those who identify as gay, lesbian, bisexual, transgender, or queer. Uniting inquiry in women's and gender studies is the effort to understand and explain the inequalities between and among men and women and to envision change.

The Women's and Gender Studies Department allows students to engage in both classroom and community work. In addition to building skills through coursework in social science research methods, feminist theory, and original research projects, students are also required to complete at least 4 units of internship in a community organization. These combined experiences provide women's and gender studies students with critical analytical skills and an opportunity to apply the theories and methods discussed in the classroom to practice in everyday life and the job market.

Major in Women's and Gender Studies

The major is an interdisciplinary curriculum that explores the nature and function of gender as it intersects with race, class, ethnicity, sexuality, and nation within our everyday institutions and lives. This includes contemporary, historical, and cross-cultural examinations of the sexual division of labor, the social construction of the family, the law, media, and other public and private institutions. Women's and gender studies also focuses on how ideological conceptions of masculinity and femininity shape human development and con-

structions of knowledge itself.

The women's and gender studies major is constructed to encourage students to double-major or to minor in another discipline. The major has three components:

1. An interdisciplinary core of 21 units that exposes students to feminist theory and research about women and gender;
2. A disciplinary concentration of 15 units that exposes students to how gender analyses develop within, and can influence, a specific discipline; and
3. Skills application in social services for a total of 8 units, including 4 units of internship or community involvement.

Careers in Women's and Gender Studies

Women's and gender studies graduates hold tools – knowledge of gender issues, critical thinking skills, and breadth of perspective – that public service organizations, private industry, government, and graduate schools want and need. The women's and gender studies major or minor provides excellent preparation for students going into teaching, counseling, social work, public relations, public policy and management, advocacy work, and other fields. WGS graduates also pursue advanced degrees in education, law, public policy, history, psychology, sociology, and other areas.

Bachelor of Arts in Women's and Gender Studies

Degree Requirements	Units
General education	51
Major core requirements	44
Electives	25
Total units needed for graduation	120

I. Core Requirements

WGS 280 Women's Bodies: Health and Image or WGS 285 Men and Masculinity or WGS 350 Gender, Sexuality, and Family	3-4
WGS 375 Gender, Race, and Class	3
WGS 425 Feminist Research Methods	4
WGS 475 Contemporary Feminist Theory	4
WGS 485 Senior Seminar	4
Elective	3

The elective should be from within WGS, although appropriate courses from another department may be considered (in consultation with a WGS advisor). The elective course is separate from those taken to fulfill II and III below.

Total core units 21

II. Disciplinary Concentration

Students must specialize in one discipline (defined as any recognized major or minor in the University) by completing 15 units of coursework in that area as follows:

- A course on women, men, or gender (3-4 units). Examples: Sociology of Gender, Women Writers, Gender and Archaeology, or Women in U.S. History;
- An introductory (3-4 units) course in the discipline (may be lower- or upper-division); and
- Additional upper-division courses (8-10 units) in the discipline, chosen in consultation with a women's and gender studies advisor.

Total disciplinary concentration units 15

III. Skills Application

WGS 390 Gender and Work 4

WGS 395 Community Involvement Project (CIP) or

WGS 499 Internships 4

Internships/Community Involvement Projects must be completed in a community organization chosen in consultation with a WGS advisor. Sites usually address social inequalities related to issues raised in WGS courses. Examples: United Against Sexual Assault, Circle of Sisters after-school program, The Living Room (drop-in center for at-risk women and children), and The Family Connection (work with families transitioning out of homelessness).

Total skills application units 8

Total units necessary for major 44

Minor in Women's and Gender Studies

The minor in women's and gender studies is an interdisciplinary curriculum that applies feminist perspectives to the study of women and men. It draws upon both courses offered through the women's and gender studies department (e.g., WGS 350) and courses on gender offered through various departments on a regular and occasional Special Topics basis. The minor is composed of 10 units of core courses and at least 6 units of supporting courses, for a minimum total of 16 units. At least 13 of these units must be upper-division.

Minor Core Requirements (10 units)

The core courses provide an organized framework for understanding women's and men's lives and individual experiences within cultural groups, and from a societal perspective. It is recommended that students enroll in the core courses in the following order:

WGS 280 Women's Bodies: Health and Image or
 WGS 285 Men and Masculinity or
 WGS 350 Gender, Sexuality, and Family 3-4
 WGS 375 Gender, Race, and Class 3
 WGS 475 Contemporary Feminist Theory 4

Minor Supporting Courses (6 units)

Minors in women's and gender studies must complete at least two courses from at least two of the following categories for a total of 6 units.

Note: Courses on women and gender offered in other departments can fulfill these requirements.

- I. Women and Gender in American Society
- II. Women and Gender in the Humanities
- III. Biological and Psychological Perspective on Women or Gender
- IV. Women or Gender in International and Cross-Cultural Perspective
- V. Special Topics on Women or Gender

For more information, please come to the Women's and Gender Studies Department office (664-2840), Rachel Carson 18.

Total units in the WGS minor 16

Career Minor in Women's Health

Women's health is a large and growing area of research and policy interest in the United States. The career minor in women's health provides students with interdisciplinary coursework, training, and work experience in the social, political, and economic aspects of women's health and illness. Career needs of both health care providers and liberal arts and sciences majors are addressed. It is a highly suitable program for those interested in pursuing careers as nurses, physicians, counselors, therapists, public health workers, research analysts, policy makers, and in a variety of other fields.

Minor Core Requirements (6 units)

WGS 280 Women's Bodies: Health and Image 3

NURS 480 Health, Sexuality, and Society or

WGS 350 Gender, Sexuality, and Family 3-4

Practical Application (3-4 units)

WGS 499 Internship in Women's Health Setting (4) or

NURS 425 Senior Clinical Study (3) 3-4

Electives (10-11 units)

All electives must be health-related (including mental health). When the health course does not explicitly deal with women's health, students are expected to do their term papers and projects on women's health issues and to be prepared to share these course materials with the program coordinator.

Suggested Electives

GEOG 396 Medical Geography 3

GERN 300 Basic Gerontology 3

GERN 319/SOCI 319 Aging and Society 3

NURS 340 Health and Illness in the Expanding Family 4

PSY 404/WGS 330 Psychology of Women 4

PSY 408 Transitions in Adult Development 4

PSY 454 Biofeedback and Somatic Psychology 4

SOCI 452 Health Care and Illness (cross-listed as GERN 452) 4

WGS 301 Women's Health Lecture Series 1-2

WGS 440/SOCI 440 Sociology of Reproduction 4

WGS/NURS 495 Special Study Research on Women's Health 1-4

Total units required in women's health minor 20

For more information come to the Women's and Gender Studies Department Office in Rachel Carson 18.

Minor in Queer Studies

The minor in queer studies gives students competency within a dynamic field of interdisciplinary scholarship related to lesbian, gay, bisexual, and transgender lives as well as gender and sexual structures and identities. It provides coursework in queer theory, politics, history, sociology, psychology, cultural criticism, and methodology. The queer studies minor will augment students' pursuit of graduate and professional degrees. In a public- and private-sector job market with increasing demand for nuance in issues of diversity and critical flexibility, the minor will position graduates on the leading edge in many fields, including social work, counseling, education, health-care, social service, media, policy, nonprofit advocacy, and social marketing.

Minor Core Requirements (12 units)

WGS 255 Introduction to Queer Studies (Fall only) (GE D1)	4
WGS 301 Queer Studies Lecture Series (Spring only)	1
WGS 350 Gender, Sexuality, and Family (GE E)	3
WGS 455 Queer Theory/Queer Lives (Spring only)	4

Electives (6-8 units)

Students choose two interdisciplinary sexuality-themed courses in consultation with the queer studies minor advisor.

Suggested Electives

ANTH 302 Biological Basis of Sex Differences	4
ANTH/HD 318 Human Development: Sex & the Life Cycle	3
HIST 449 Gender and Sexuality in Latin America	4
NURS 480 Health, Sexuality, and Society (GE E)	3
PHIL 378 Feminist Philosophy	3
PSY 290 Sexual Identities Across the Lifespan	4
PSY 490 Psychology of Gender	4
SOCI 360 Sociology of Sexualities	4
WGS 285 Men and Masculinity (GE E)	3
Queer/LGBT/sexuality-related Special Studies courses offered in Sciences, Arts/Humanities, and Social Sciences.	

Total units required in queer studies minor 18

For more information, please visit the Women's and Gender Studies Department Office in Rachel Carson Hall 18.

Sample Four-Year Plan for Women's and Gender Studies Major (Freshman Entry to Program)

Plan to complete the major (44 units) and graduate (120 units) in eight semesters starting in the freshman year. This major is organized to facilitate a double major or minor in another discipline. Hence 20 units of the major can be counted toward the double major (e.g., all the disciplinary concentration and 4 additional units can be counted for both majors).

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE (3), GE (3)	GE (3), GE (3)
GE (3), GE (3), GE (3)	GE (3), GE (3), GE (3)

SOPHOMORE YEAR:: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
WGS 280 (GE) (3) or WGS 285 (3)	WGS Elective (3)
Lower-division course in disciplinary concentration (4)	Disciplinary course (4)
GE (3)	GE (3)
Electives (6)	Electives (4)

JUNIOR YEAR:: 30 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (13 Units)</i>
WGS 375 (3)	WGS 390 (4) and WGS 499 (2)
Gender course in disciplinary concentration (4)	Disciplinary course needed for 20-unit minor (4)
WGS 350 (3)	Upper-Division GE (3)
Disciplinary course needed to complete a minor (4)	
Upper-Division GE (3)	

SENIOR YEAR:: 30 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (13 Units)</i>
WGS 425 (4)	WGS 485 (4)
WGS 475 (4)	WGS 499 (2)
Electives (9)	Electives (7)

TOTAL UNITS:: 120

Sample Four-Semester Plan for Women's and Gender Studies Major (Transfer Students and Upperclassman Entry to Program)

Plan for transfer students and those who declare a major in women's and gender studies at the start of their junior year. (This plan assumes the student has completed 62 units toward graduation and all lower-division GE.) This plan is organized to facilitate a minor in another discipline.

JUNIOR YEAR:: 29 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
WGS 350 (3)	WGS 375 (3)
WGS Elective (3)	WGS 390 (4) and WGS 499 (2)
Gender course in disciplinary concentration (4)	Disciplinary course (4)
Course in disciplinary concentration (4)	Upper-Division GE (3)

SENIOR YEAR:: 30-32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
WGS 425 (4)	WGS 485 (4)
WGS 475 (4)	WGS 499 (2)
Disciplinary course (4)	WGS elective (3)
Course to complete the minor in a discipline (4)	Upper-Division GE (3)
	Electives (3)

TOTAL UNITS:: 120