

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
ARTH and ARTS	Art History and Art Studio
ASTR	Astronomy
BIOL	Biology
BUS	Business Administration
CALS	Chicano and Latino Studies
CHEM	Chemistry
COMS	Communication and Media Studies
CES	Computers and Engineering Science
CS	Computer Science
COUN	Counseling
CCJS	Criminology and Criminal Justice Studies
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
EDTE	Teaching English to Speakers of other Languages
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
HUM	Humanities
ITDS	Special Major/Interdisciplinary Studies

JWST	Jewish Studies
KIN	Kinesiology
LIBS	Hutchins School of Liberal Studies
LING	Linguistics
MATH	Mathematics
MLL	Modern Languages and Literature
MUS	Music
NAMS	Native American Studies
NURS	Nursing
OD	Organization Development
PHIL	Philosophy
PHYS	Physics
POLS	Political Science
PSY	Psychology
SOCI	Sociology
SPAN	Spanish
SSCI	Social Sciences
THAR	Theatre Arts & Dance
UNIV	University Courses
WGS	Women's and Gender Studies

AMERICAN MULTICULTURAL STUDIES

DEPARTMENT OFFICE

Nichols Hall 214
(707) 664-2486
www.sonoma.edu/depts/amcs

DEPARTMENT CHAIR

Michael Ezra

ADMINISTRATIVE COORDINATOR

Linnea Mullins

Faculty

Christina Baker / Education; Race and Gender; Mass Media and Society; Race/Ethnicity and Identity

Michael Ezra / African American History & Culture; 20th Century US History; Race Relations; Sport History; Popular Culture

Elenita Strobel / Transformative Education; Postcolonial Studies; Race, Ethnicity & Race Relations; Globalization Studies; Language, Culture & Identity

Kim D. Hester Williams / African American Literature and Aesthetics; 19th Century Literature and Culture; Multi-ethnic Literature; Gender, Race, and Visual Representation

Programs Offered

Bachelor of Arts in American Multicultural Studies

Minor in American Multicultural Studies

Concentration in Africana Studies

Since 1971, the American Multicultural Studies Department (AMCS) has taken an interdisciplinary and comparative approach to teaching students about the importance of race and ethnicity to people living in the United States. The AMCS Department provides students with the theoretical foundation to understand the complexity of these issues while training them to develop cultural competence, critical thinking, and leadership skills that will empower students to navigate the fast-changing multicultural and multiracial American landscape.

The AMCS Department is listed under American Studies programs in the CSU system. The newly-revised AMCS program reflects an innovative trend in American studies that is truly interdisciplinary. The core program remains grounded in Critical Ethnic Studies and the concentration and pathways draw upon concepts and methods in other disciplines in the humanities and social sciences. The revised program will enable students to develop multi- and intercultural competence, critical thinking, and leadership skills that will help them navigate the fast-changing multicultural and multiracial American landscape.

Our classes focus on the histories and cultures of African Americans, Chicanos and Latinos, Asian Americans, Multiracial Americans,

and Native American Indians so that students may understand more deeply America's multicultural heritage and future. Correspondingly, the teaching and research interests of our faculty explore how race and ethnicity intersect with power and inequality. Some of these areas of expertise are: Race and Representation; Race and Equality in Education; Race and Popular Culture; Race and Ethnicity in the Arts, Literature and Media; Race and Globalization; Multiracial Experience; Civil Rights Movement; Social Policy; Decolonization and Indigenization.

AMCS is committed to graduating students who have the knowledge and skills to live and work productively and competently in an increasingly diverse world. The faculty is committed to shaping students into culturally informed citizens who can make positive impacts on their communities. Students who complete our major or minor program will have the tools to adapt to a rapidly changing multicultural environment. At the core of our mission is the hope that our work will lead to a better world.

Through the various "AMCS Pathways" and the "Concentration in Africana Studies," students who major in AMCS can choose to focus on an area of interest and have a wide range of courses to choose from across selected departments in the university. This approach to learning will enhance students' multicultural awareness and competence and serves as a vibrant and imperative aspect of our contemporary society.

The AMCS degree is versatile as evidenced by our graduates who are now practicing lawyers, college professors, social workers, educators, student affairs professionals, academic counselors, nonprofit administrators, arts administrators, and social entrepreneurs.

Careers in American Multicultural Studies

The AMCS major encourages students to develop an in-depth understanding of American cultures and ethnicities in the 21st century. Since it is predicted that the U.S. will be fifty percent non-white in 2050, our goal is to teach the analytical tools for understanding the United States as a multiracial, multiethnic, multicultural, and multilingual nation and to help students shape their vision of leadership, civic engagement, and professional development for the future.

We invite students to explore our multifaceted course offerings focused on issues of justice, equity, and equal access to opportunity for all.

The AMCS Department offers a Concentration in Africana Studies that includes an array of courses within the AMCS Department as well as participating departments across the university. Students pursuing this concentration will learn about African American and African Diasporic history and culture.

The AMCS Pathways allow students to choose from participating departments across the university in the following areas of interest:

- Comparative Ethnic Studies
- Hemispheric Studies
- Critical Race, Sex, Gender, and Sexuality Studies
- Literature and the Arts
- Multicultural Education
- Film Studies
- Native American Studies
- Jewish Studies

Faculty advisors will work closely with students in choosing their Pathway.

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 lower-division courses that are equivalent to those offered within the AMCS Department. A maximum of ten lower-division units may be transferred. Upper-division courses from four-year institutions may be transferred above and beyond the ten units of lower-division transfer towards the AMCS major, based on advisor approval. Students should use assist.org to view official articulation agreements between SSU and other California colleges.

Degree Requirements	Units
General education	50
Major core requirements	20
Major electives	24
General electives	26
Total units needed for graduation	120

Students graduating with a B.A. in American Multicultural Studies must take 20 units of core courses and an additional 8 upper-division AMCS courses plus 16 units from their chosen AMCS Pathway or the Concentration in Africana Studies.

Grading Minimums

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

Major Core Requirements: 20 Units

Choose any three (12 units):

AMCS 165A/B Learning Community (C3)	4
AMCS 210 Ethnic Groups in America (D1)	4
AMCS 225 How Racism Works (C2)	4
AMCS 260 Ethnicity in the Arts, Culture, Media (C1)	4

Required (8 units):

AMCS 350 Ethics, Values, and Multiculturalism (C2)	4
AMCS 480 Research Methodology	4

Choose 8 units of Upper Division Electives:

AMCS 260 Ethnicity in the Arts, Culture, and Media (C1)**	4
AMCS 339 Ethnic Groups and American Social Policy (D1)	4
AMCS 355 Language and Ethnicity (C3)	4
AMCS 370 Topics in Ethnic Studies	4
AMCS 374 Multiracial Experience	4
AMCS 377 Asian American Experience (cross-listed WGS370)	3
AMCS 381 Research Assistantship*	2-4
AMCS 385 Facilitation Training*	2-4
AMCS 392 Ethnic Images in Film and Media (C1)	4
AMCS 395 Community Involvement Project*	3-4
AMCS 399 Student Initiated Course*	3-4
AMCS 420 Gender and Ethnicity	4
AMCS 445 Multiculturalism and Education	4
AMCS 475 Globalization and Race in the United States	4
AMCS 476 Topics in African American Studies	4
AMCS 481 Religion and Spirituality in America	4
AMCS 495 Special Studies	
AMCS499 Service Learning Internship	

**Based on advisor approval. Only one of these courses may count towards the degree.*

***Can count as an elective if not taken as a core course.*

Core Course Requirements	20
Concentration or Pathway	8
Upper Division Electives	16
Total in AMCS Major	44

Concentration in Africana Studies (16 units)

Students who select this option will earn a B.A. in AMCS with a Concentration in Africana Studies. The following courses are eligible towards the concentration. However, students can consult with their advisors and the department chair to request an unlisted course count toward the concentration. At least 8 upper division units are required.

AMCS 225 How Racism Works (C2)	4
AMCS 315 Muhammad Ali and the African American Freedom Struggle (E)#	4
AMCS 360 Ethnic Literature (C2)	4
AMCS 392 Ethnic Images in Film and Media (C1)	4
AMCS 420 Gender and Ethnicity	4
AMCS 476 Topics in African American Studies	4
FR 314 French Caribbean Literature (C2)	4
GEOG 394 Africa South of the Sahara	4
HIST 348 Race and Ethnicity in Latin America	4
HIST 468 Blacks in American History	4
HIST 470 The American South	4
HIST 498 The Civil Rights Movement (C3)	4
SOCI 263 Sociology of Race and Ethnicity (D1)	4

**Can count towards Africana Concentration if not used in the Core*

Under review by GE Sub Committee

Pathways

Students who do not complete the concentration in Africana Studies will select one of the following pathways. The following courses are eligible toward each pathway. However, students can consult with their advisors and the department chair to request an unlisted course count toward the Pathway. All pathways must include at least 8 upper division units. Total units in the Pathway: 16 units.

Pathway in Hemispheric Studies

Any CALS course is eligible for this concentration but check the catalog for pre-requisites. Other eligible courses are:

AMCS 475 Globalization and Race in the U.S.	4
GEOG 392 Geography of Latin America and the Caribbean	4
HIST 339 Ancient and Colonial Latin America	4
HIST 342 Modern Latin America	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
POLS 453 Politics of Latin America	4

Pathway in Comparative Ethnic Studies

Any CALS, NAMS, or AMCS course is eligible for this concentration. Other eligible courses are:

ANTH 451 Applied Ethnographic Methods*	4
COMS 321 International Communication	4
ENGL 315 California Ethnic Literature	4
HIST 468 Blacks in American History	4
HIST 470 The American South	4
HIST 472 History of California I	4
HIST 473 History of California II	4
HIST 498 The Civil Rights Movement	4
LIBS 204 Minorities in American Cinema	4
PHIL 275 Race, Racism, Law, and Society	4
POLS 330 Race, Ethnicity, and Politics	4
PSY 330 Stereotyping and Prejudice	4
SOCI 263 Sociology of Race and Ethnicity	4
SOCI 347 American Class Structure**	4
WGS 370 Gender in Asian America (cross-listed AMCS 377)	4
WGS 375 Gender, Race, and Class (D1)	4
THAR 375 Race, Gender, and Performance:	3

New Plays, Race, and Sexuality

*Must meet pre-requisite

** Open to SOCI majors and minors only

Pathway in Film Studies

AMCS 301 Africana Lecture Series	1
AMCS 390 Independent Film Studies	1-2
AMCS 392 Ethnic Images in Film and Media	4
CALS 393 Chicano/Latino Cinema	4
LIBS 204 Minorities in American Cinema	4
LIBS 320C Introduction to Film Studies	4
NAMS 338 Native Americans and the Cinema	4
SOCI 434 Cinema and Society **	4

PSY 490 Psychology of Film	4
PSY 490 Adolescent Development Through Film	4

**Open to SOCI majors/minors only

Pathway in Critical Race, Gender, and Sexuality Studies

Any WGS course is eligible for this Pathway but check WGS catalog for pre-requisites. Other eligible courses are:

AMCS 420 Gender and Ethnicity	4
CALS 405 The Chicano/Latino Family	4
CCJS 430 Women and Crime	4
ENGL 345 Women Writers	4
ENGL 451 Feminist Perspectives in Literature	4
HIST 345 Women's History and Women's Activism	4
HIST 445 Topics in American Women's History	4
HIST 446 Women in American History	4
HIST 449 Gender and Sexuality in Latin America	4
NURS 480 Health, Sexuality, and Society	4
POLS 313 Critical Theory: Race and Gender	4
POLS 391 Gender and Politics	4
PSY 362 Human Sexuality	4
PSY 405 Psychology of Gender	4
SOCI 360 Sociology of Sexualities**	4
SOCI 312 Sociology of Gender**	4
THAR 375 Race, Gender, and Performance:	3
New Plays, Race, and Sexuality	
WGS 385 Gender and Globalization	3-4

** Open to SOCI majors/minors only

Pathway in Native American Studies

Any NAMS course is eligible for this concentration. Other eligible courses are:

ANTH 327: Archaeology of North America*	4
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*must meet pre-requisite

Pathway in Jewish Studies

Any JWST course is eligible for this concentration. Other eligible courses are:

AMCS 481 Religion and Spirituality in the US	4
ANTH 326 Anthropology of the Bible*	4
ARTH 474 Islamic Art	4
HIST 469 Religion in America	4
POLS 446 International Relations of the Middle East	4
POLS 307 Perspectives on the Holocaust and Genocide	4
PSY 471 Psychology of Religion	4
SOCI 431 Sociology of Religion**	4

* Must meet pre-requisite

** Open to SOCI majors/minors only

Pathway in Literature and Art

AMCS 360 Ethnic Literature	4
AMCS 392 Ethnic Images in Film and Media	4
ARTH 460 History of American Art	4
ARTH 470A South and Southeast Asian Art	4
ARTH 470B Chinese and Japanese Asian Art	4

ARTH 474 Islamic Art	4
CALS 220 Chicano/Latino Arts and Literature	4
CALS 314 Latin American Literature in English Translation	4
CALS 374 Latino Literature	4
CALS 450 Latina/o Children's Literature	4
CALS 474 Major Authors in Latino Literature	4
ENGL 315 California Ethnic Literature	4
ENGL 482 Studies in American Literature: Jewish Literature – Home and Exile	4
ENGL 436 Studies in Postcolonial Literature	4
FR 314 French Caribbean Literature	4
NAMS 354 Native American Literatures	4
THAR 375 Race, Gender, and Performance: New Plays, Race, and Sexuality	3

Pathway in Multicultural Education:

AMCS 355 Language and Ethnicity (C3)	4
AMCS 360 Ethnic Literature (C2)	4
AMCS 445 Multiculturalism and Education	4
CALS 374 Latino Literature (C2)	4
CALS 403 Chicano/Latino Youth and Adolescents (C2)	4
HIST 468 Blacks in American History	4
EDUC 250 Teaching in a Changing World	3
EDUC 417 School and Society (D1)*	3
EDEC 420 Child Development in Family, School and Community (E)*	3
EDMS 470 Multicultural Pedagogy	3
EDSS 418 Learning and Development in Adolescents	3
EDSP 433 Teaching Adolescents with Special Needs	3

**Meets pre-requisite for the Multiple Subject Credential program*

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 (Choose up to three courses (12 units) from the following)

AMCS 165A/B Learning Community (C3)	4
AMCS 210 Ethnic Groups in America (D1)	4
AMCS 225 How Racism Works (C2)	4
AMCS 260 Ethnicity in the Arts, Culture, and Media (C1)	4

Required

AMCS 350 Ethics, Values, and Multiculturalism (C2)	4
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Elective

Additional four (4) units must come from upper-division AMCS courses. Courses taken from CALS, NAMS, or WGS can count towards the minor elective based on advisor approval.

Total Units in the Minor 20

ANTHROPOLOGY

DEPARTMENT OFFICE

Stevenson Hall 2054
(707) 664-2312
www.sonoma.edu/anthropology

DEPARTMENT CHAIR

Margaret Purser

ADMINISTRATIVE STAFF

Jill Martin, Viri Ruiz

Faculty

Alexis T. Boutin / Biological Anthropology
Karin Enstam Jaffe / Biological Anthropology
Adrian Praetzelis / Archaeology
Margaret Purser / Historical Archaeology
Richard J. Senghas / Linguistic Anthropology
John D. Wingard / Cultural and Applied Anthropology

Programs Offered

Bachelor of Arts in Anthropology
Master of Arts in Cultural Resources Management
Minor in Anthropology

Anthropology is the broadest and most holistic of all the human sciences. 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 and anatomy 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, how these forms of communication interrelate with other sociocultural phenomena, and how these forms change over time.

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 (as designers of captive habitats) and nature conservancies (as conservationists studying critically endangered primate species).

- 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. Such insights have led to the official adoption of sign language as the modality of instruction for deaf students.
- 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.

David Fredrickson 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. Students conducting primate behavior research can apply for a Marcia K. Brown memorial primatology scholarship.

Bachelor of Arts in Anthropology

(See page 53 for a sample four-year program.)

Degree Requirements	Units
General education	50
Major core requirements	37
Major electives	3
General electives	30
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 course during the first year of upper-division instruction:

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

Complete one course from each of the four subfields of anthropology and a methods course as listed below. 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 303 Human Behavioral Ecology 4

ANTH 305 Topics in Biological Anthropology 4

ANTH 313 Primate Behavioral Ecology 4

ANTH 315: Forensic Anthropology: Theory and Practice 4

Complete one of the following courses in Archaeology*:

ANTH 322 Historical Archaeology 4

ANTH 324: Archaeology the Bible 4

ANTH 325 World Prehistory 4

ANTH 326 Topics in Archaeology 4

ANTH 327 Archaeology of North America 4

ANTH 329 Bioarchaeology 4

ANTH 392 Research in California Prehistory 4

Complete one of the following courses in Cultural Anthropology*:

ANTH 342 Organization of Societies 4

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

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

Complete one course from the list of methods courses below*:

ANTH 412 Human Osteology 4

ANTH 414 Primate Observational Methods 4

ANTH 415 Forensic Anthropology Methods 4

ANTH 420/421 Archaeology Methods: Lecture 3
and Archaeology Methods: Laboratory 1

ANTH 444: Material Culture Studies 4

ANTH 451 Applied Ethnographic Methods 4

ANTH 454 Ethnographic Field School 4

ANTH 480 Studies of Language Use 4

Complete the following course the fall semester prior to graduation:

ANTH 491 Senior Seminar 1

Total Units In Major Core 37

*At least one such course offered each semester.

Major Electives

To complete the 40-unit requirement for the major, students must choose the remaining units from other anthropology courses, including courses listed above or ANTH 318, ANTH 340, ANTH 341, or SSCI 299. Anthropology units in internship, special studies, and the community involvement program may be included.

Total Units In Major Electives 3
Total Units In the Major 40

Minor in Anthropology

The anthropology minor consists of 20 units, at least 8 of which must be upper division, 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

Coordinator: Alexis T. Boutin

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 CRM 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 conducting research on 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. Experience with anthropological techniques of field and laboratory analysis, and archival and museum preparation; and
4. 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 (ASC) houses an archaeology laboratory and a cultural resources management facility. ASC maintains collections of artifacts, archaeological site records and maps, photographs, manuscripts and recordings, and a specialized research library. The ASC website can be found at www.sonoma.edu/asc/. The Northwest Information Center (NWIC), 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. The NWIC website is www.sonoma.edu/NWIC. In addition to archaeologists and other anthropologists, participating faculty in the CRM program include historians, geographers, soil scientists, and environmental planners.

Requirements for the Degree

The coursework required for the CRM M.A. totals 30 academic units and is typically completed in six to seven semesters. This design presumes that students are enrolled full-time and not working more than part-time. Students are admitted to the program with Conditionally Classified graduate status. They must fulfill certain requirements before being fully accepted into the program and able to enroll in Thesis Prospectus units. These requirements include successful completion of Anth 500, maintenance of a minimum 3.6 GPA, and timely resolution of any incomplete grades. 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 595 Thesis prospectus	1
ANTH 596/597 Internships*	3
ANTH 599A/B Thesis	4
Supporting Courses	6
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. 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 by January 31 to the Graduate Coordinator and to the Office of Admissions and Records (via CSU mentor) for possible acceptance into the program the following academic year. Consult with the program's Graduate Coordinator and website for departmental requirements and submissions. 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

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 suggested; please see your advisor each semester.

FRESHMAN YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
GE (A2) (4)	GE (A3) (4)
GE (B3) (4)	GE (D3) (3)
GE (C1) (4)	ANTH 201 (B2) (3)
ANTH 203 (D1) (3)	University Elective (3)
University Elective (1)	University Elective (3)

SOPHOMORE YEAR: 30 Units

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

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ANTH 300 (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)	University Elective (3-4)

SENIOR YEAR: Minimum of 28 Units

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

TOTAL UNITS: 120

APPLIED ARTS

PROGRAM ADVISORS AND OFFICES

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

Jennifer Shaw / 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 4

One literary genre course selected from the following: 4

ENGL 367 Introduction to Short Story 4

ENGL 369 Introduction to Poetry 4

ENGL 371 Introduction to Novel 4

ENGL 373 Introduction to Drama 4

Music

MUS 105 Music Theory for Non-Majors 4

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 4

THAR 300 Theatre in Action 4

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 3-4

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 4

One of the following

MUS 150 Survey of US Music 3

MUS 250 Survey of Western Music 4

MUS 350 Survey of World Music 4

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 202 Introduction to the History of Drama and Dance: Origins to 1800	4
THAR 203 Introduction to the History of Drama and Dance: 1800 to the Present	4
THAR 300 Theatre in Action	4
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

Jennifer Shaw

ADMINISTRATIVE COORDINATOR

Cindy Menghini

Faculty

Nathan Haenlein
Kurt Kemp
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 Museum and Gallery Methods (see Career Minors)
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 and studio art are also available. 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 museum and gallery methods, the department facilities are located in one of the best equipped physical plants in California. 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 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. Students should also pursue language studies that will enable them to carry out primary research. 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.

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 methods. 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

(See page 61 for a sample four-year program.)

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

Degree Requirements	Units
General education	50
Major core requirements	43
General electives	27
Total units needed for graduation	120

Note: Reading comprehension of at least one foreign language is essential for Art History majors. 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 (6-8 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
Or ARTH 160 A and B	8

Lower-Division Studio/Language Courses (5-8 lower-division units)

ARTS 104 Fundamentals. In addition, one course in drawing, a beginning course in any medium.

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: ARTH 420, 422, 424
- Medieval: ARTH 430, 432
- Renaissance/Baroque: ARTH 440, 442, 444, 450
- 18th through 19th Centuries: ARTH 452, 454, 460
- History of Photography: ARTH 456

B) Modern/Contemporary, one upper-division course required: ARTH 460, 464, 465, 466

C) Non-Western, One upper- or lower-division course required: ARTH 270A, 270B, 470A, 470B, 474, 476

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

In consultation with the advisor, the art history major will choose additional language courses and/or 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. Examples include but are not limited to:

- ANTH 327 Archaeology of North America
- CALS 220 Chicano/Latino Arts and Literature
- HIST 400 History of Roman Republic
- NAMS 205 Introduction to Native American Arts
- NAMS 338 Native American Cinema

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

Minor in Art History

Complete All of the Following

ARTS 101-245 Any beginning studio course	2-3
ARTH 210 Introduction to Art History or 160A	3-4
ARTH 211 Introduction to Art History or 160B	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

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

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

(See page 62 for a sample four-year program.)

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

Degree Requirements	Units
General education	50
Major requirements	47
General electives	23
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

Traditional Track

ARTS 101 Art Fundamentals (2D)	3
ARTS 102 Art Fundamentals (3D)	3
ARTS 104 Fundamentals (2D and 3D)	4
ARTH 210 Introduction to Art History	3-4
ARTH 211 Introduction to Art History	3-4

Accelerated Track

ARTS 104 Art Foundations (2D and 3D)	4
ARTH 160 A and B Introduction to Art History, LC*	8

* LC = a Learning Community, taught over two semesters and counts for GE areas A1 and C3

Complete two of the following courses for a total of 4 units:

ARTS 202 Beginning Drawing	2
ARTS 204 Beginning Life Drawing	2
ARTS 210 Introduction to Digital Imaging	2

Choose at least **three** of the following studio courses. At least one course must be taken in a 2D medium and one in 3D medium: for a minimum of 8 units

ARTS 208 Basic Black and White Photography	2-4
ARTS 210 Introduction to Digital Imaging	2
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 22-27 units

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	2-3
ARTS 304 Intermediate Life Drawing	2-3
ARTS 402 Advanced Drawing	2-3
ARTS 404 Advanced Life Drawing	2-3

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

Minimum required is 5. 5-6

ARTH 450 Baroque Art	3-4
ARTH 452 Eighteenth Century Art	3-4
ARTH 454 Nineteenth Century Art	3-4
ARTH 460 History of American Art	3-4
ARTH 464 Modern Art from 1850 to 1945	3-4
ARTH 465 Modern Art from 1945 to 1979	3
ARTH 466 Contemporary Art	3
ARTH 470 Survey of Asian Art	3-4

Total upper-division core units 11-13

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 47

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:

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

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

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:

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:

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:

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:

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:

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:

ARTS 308 Photographic Darkroom Processes	2-4
ARTS 310 Digital Imaging	1-3
ARTS 457 Advanced Photography	1-4

Recommended Electives for All Studio Majors

ARTS 466 Portfolio 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) or (104) Every semester

Beginning Studio Courses

All courses (202, 204, 208, 220, 229, 236, 245) Every year; most every semester.

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) 2 units Fall, 1 unit 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.

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.

- 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	50
Major core requirements	70
Electives in art	12
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.

- 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.
- 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.
- 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

Traditional Track

ARTS 101 Art Fundamentals (2D)	3
ARTS 102 Art Fundamentals (3D)	3
ARTS 104 Fundamentals (2D and 3D)	4
ARTH 210 Introduction to Art History	3-4
ARTH 211 Introduction to Art History	3-4

Accelerated Track

ARTS 104 Art Foundations (2D and 3D)	4
ARTS 103 Shop Safety	1
ARTH 160 A and B Introduction to Art History, LC*	8

* LC = a Learning Community, taught over two semesters; counts for GE areas A1 and C3

Complete two of the following courses for a total of 4 units:

ARTS 202 Beginning Drawing	2
ARTS 204 Beginning Life Drawing	2
ARTS 210 Introduction to Digital Imaging	2
Total lower-division core units	14-18

Junior and Senior Years

Complete the following 5 courses:

ARTH 464 Modern Art from 1850 to 1945	3-4
ARTH 465 Modern Art from 1945 to 1979	3
ARTH 466 Contemporary Art	3
ARTS 465 B.F.A. Seminar	1-2
ARTS 466 B.F.A. Professional Artists' Practices	2
ARTS 491 Artist Lecture Series	1
Minimum required 15	15-16

Choose any combination of the following to total 5 units:

ARTS 302 Intermediate Drawing	2-3
ARTS 304 Intermediate Life Drawing	2-3
ARTS 402 Advanced Drawing	2-3
ARTS 404 Advanced Life Drawing	2-3
Minimum required 5	5-6

Total upper-division core units 20-22

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
-----------------------------	---

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
--	-----

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 (2D)	3
ARTS 102 Art Fundamentals (3D)	3
ARTS 104 Fundamentals (2D and 3D)	4
ARTH 210 Introduction to Art History	3-4
ARTH 211 Introduction to Art History	3-4
Studio courses at any level	5
Upper-division studio courses	6

Total units in the minor 21-22

Career Minor in Museum and Gallery Methods

The career minor in arts museum and gallery methods provides students of the arts with education, training, and hands-on experience in the theory and practice of nonprofit museums and galleries. Art majors completing this career minor will be in much stronger positions to find work and for graduate study in fields closely related to their majors. The career minor in museum and gallery methods can also be combined with any other major, provided the student also completes at least a minor in art history or art studio.

Internships are available in the University Art Gallery and at local regional galleries, museums, and other related nonprofit organizations.

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

FRESHMAN YEAR: 29-33 Units

<i>Fall Semester (15-18 Units)</i>	<i>Spring Semester (14-15 Units)</i>
ARTH 210 (3-4)*	ARTH 211 (3-4)*
ARTS 101 or 102 (3)	Any beginning Art Studio Course (2)
or ARTS 103 (1) and 104 (4)	GE courses (9)
GE courses (6)	
Elective (3)	

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

Sample Four-Year Program for Bachelor of Arts in Art

Studio Concentration, Painting Emphasis

FRESHMAN YEAR: 30 Units

Fall Semester (15 Units)

ARTS 104 (4)
ARTH 210 Art History (3)*
GE courses (9)

Spring Semester (15 Units)

Lower Division Studio Course (3)
ARTH 211 Art History (3)
GE courses (9)

SOPHOMORE YEAR: 30 Units

Fall Semester (14 Units)

ARTS 202 Beg. Drawing (2)
Lower-Division Studio course (3)
GE courses (9)

Spring Semester (16 Units)

ARTS 204 Beg. Life Drawing (2)
Lower-Division Studio course (2)
GE courses (12)

JUNIOR YEAR: 30 Units

Fall Semester (15 Units)

Upper-Div. studio emphasis (3)
ARTS 302 Int. Drawing (3)
ARTH 465 History of Mod. Art (3)*
ARTS 491 Upper-Division studio course (1)
GE courses (5)

Spring Semester (15 Units)

Upper-Div. studio emphasis (3)
Upper-Div. studio elective (3)
Upper-Div. studio course (3)
GE courses (6)

* also counts for GE requirements

SENIOR YEAR: 30 Units

Fall Semester (15 Units)

Upper-Div. studio emphasis (3)
ARTH 466 Contemporary Art (3)
Art Electives (6)
General Electives (3)

Spring Semester (15 Units)

Upper-Div. studio emphasis (3)
Art Electives (6)
General Electives (6)

TOTAL UNITS: 120

ASTRONOMY

DEPARTMENT OFFICE

Darwin Hall 300
(707) 664-2119
<http://phys-astro.sonoma.edu>

DEPARTMENT CHAIR

Lynn R. Cominsky

ADMINISTRATIVE COORDINATOR

Andrea Cullinen

Faculty

Lynn R. Cominsky
Jeremy S. Qualls
Saeid Rahimi*
Scott A. Severson
Hongtao Shi

* *Faculty Early Retirement Program*

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 houses two telescopes: a 14-inch Schmidt-Cassegrain and a 10-inch Newtonian. Both are computer controlled, and can be equipped with auxiliary instrumentation for CCD imaging and spectroscopy. A NASA-funded research observatory, located in the darker skies of northern Sonoma County includes a remote controlled and operated 14-inch telescope, equipped with a high-efficiency CCD detector and a filter wheel. Equipment available for observational work in astronomy by SSU students is ideally suited for studying objects that vary in time and space. This includes pulsating, eclipsing and cataclysmic star systems, the variable nuclei of active galaxies (such as quasars and blazars), gamma-ray bursts, and extrasolar planetary systems that exhibit planetary transits. Our equipment is also well-suited for follow-up observations of Near Earth Objects, which may threaten life on Earth.

The department houses a laboratory for experimental astrophysics research, where students can test and build cameras, spectrometers and other equipment for SSU's telescopes. The laboratory includes an Adaptive Optics testbed, which uses advanced technology to measure and sharpen images. The department partnered with Pomona College to construct KAPAO, a remotely operable adaptive optics system for a 1-meter telescope at Table Mountain Observatory in Southern California. Access to optical and near-infrared diffraction-limited imaging brings additional research opportunities to our students.

In November 2013, the Department launched its first CubeSat, T-LogoQube. This student-designed and built small satellite is the first in a series of planned space science missions that will make astrophysical measurements.

The on-campus observatory is used by students in laboratory and lecture courses, and all the astronomical facilities described above are available for faculty and student research projects. All students are strongly encouraged to participate in the ongoing research programs of the department, and/or to propose student-initiated research programs.

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

DEPARTMENT OFFICE

Darwin Hall 200
(707) 664-2189
www.sonoma.edu/biology/

DEPARTMENT CHAIR

Murali Pillai

ADMINISTRATIVE COORDINATOR

Jen Aaseth, Rosemary Galten

Faculty

Michael F. Cohen
Daniel E. Crocker
J. Hall Cushman
Nicholas R. Geist
Derek J. Girman
Joseph Lin
Murali C. Pillai
Sean Place
Nathan E. Rank
Andrew Rogerson
Richard Whitkus

Programs Offered

- Bachelor of Arts in Biology
 - Zoology Concentration
- Bachelor of Science in Biology
 - Ecology and Evolutionary Biology Concentration
 - Marine Biology Concentration
 - Molecular Cell Biology Concentration
 - Physiology Concentration
- Minor in Biology
- Master of Science in Biology

The Department of Biology offers a dynamic learning environment, exciting research and training opportunities, and intensive mentoring of students at all levels. Our distinguished faculty members are dedicated educators and active scholars who engage in primary research to address diverse topics in the biological sciences. The overall mission of our undergraduate and graduate programs is to educate the next generation of scholars, professionals, and citizens so that they are prepared to meet the biological, environmental, and technological challenges of the future.

Students in the Department of Biology may select from two broadly based Bachelor's degree programs or a Master of Science degree. Within the Bachelor of Arts and Bachelor of Science program, students can select a more focused concentration.

The educational and research activities in the department explore the full range of biology, including molecular and cell biology, physiology, marine biology, microbiology, genetics, ecology, conservation biology, evolutionary biology, and zoology.

Laboratory instruction includes use of modern facilities to provide students with valuable hands-on experience in the latest techniques and research methods. Excellent laboratory and greenhouse facilities exist for maintaining live material for education 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, (North Coast Herbarium of California), vertebrates (Jack Arnold Vertebrate Collection) insects, and other invertebrates.

The Master's program is comprised of an active cohort of graduate students engaged in primary research with faculty members. External funding sources often support graduate student research. Graduate student support includes teaching associate positions that involve close mentoring relationships with instructional faculty.

Careers in Biology

The biology curriculum, supported by physical sciences and mathematics, is designed to provide students with a strong background in the principles of biology and their application to current research questions and biological resource management challenges. This combination of breadth and in-depth instruction allows students to develop the intellectual foundations, skills and flexibility needed to deal with the specific biological concerns of today and future needs of the profession.

Biology graduates enter careers in many areas including health care, biological and biotechnology research, education, and agency positions in parks, recreation, conservation and restoration. Graduates from the department have an outstanding record of acceptance in advanced degree programs in health professions and graduate programs.

Secondary Education Teaching Credential Preparation in Life Science

Contact the department chair for information on completing a biological sciences preparation program for a Single Subject Credential.

Biology Degree Plans

Many students are well served by the B.A. and B.S. plans, which do not include a specific concentration. Students seeking a B.S. may also select one of two concentrations. The B.A. and B.S. plans share a common lower-division core, which allows beginning students to select a degree plan after the first or second year. Students should contact the department and their assigned advisor for additional advice concerning how to complete the requirements for various concentrations.

Degree Requirements

(See page 67 for a sample four-year program.)

	B. A.	B. S.
General Education (50 units, 12 units covered by major requirements in math and science)	38	38
Lower-Division Biology (BIOL 130, 131)	8	8
Upper-Division Biology Core (BIOL 320, 321)	8	8
Upper-Division Organismal Biology/Diversity	4	4
Upper-Division Biology Electives (as specified by concentration)	20	24
Research Experience	--	3
Physical Sciences and Mathematics:		
CHEM 115AB	10	10
CHEM 335A	3	3
CHEM 335B	--	3
CHEM 336A*	--	2
CHEM 445 or 446*	--	3
MATH 165 or Math 161 (BA)	4	4
MATH 161	--	4
B. A.		
PHYS 210A and 209A or GEOL 102	4 or 3	--
B. S.		
PHYS 210A, 209A and 210B (PHYS 114 and 116 may substitute for 210A and 209A)	--	7-8
General Electives	21-22	4
Total units needed for graduation	120	120

* Required for Molecular Cell Biology, and Physiology concentrations only.

Upper-Division Biology Electives

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

1. Additional courses from the upper-division core areas and alternative courses in a concentration.
2. Any Biology course numbered greater than 321 (except BIOL 398). 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 393, 494, 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 total) for major credit.
5. A maximum of 4 units from courses related to biology from other departments, or from Biology non-majors courses numbered 200-319. To apply the units to the major, students are required to obtain written permission from their advisor and Department chair before taking these courses by completing course substitution forms (available from the department office). Acceptable courses in this category from other departments include: ANTH 301, 302, 318, 345, 414; CHEM 441, 445, 446; ENSP 315, 322; GEOL 313; 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, 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, 393, 494, 495, 496A, 496B, 498, and 499.

General B.A. in Biology

The upper-division major requirements are:

BIOL 320 Integrated Ecology and Evolution	4
BIOL 321 Molecular Biology and Physiology	4
One upper-division Organismal Biology/Diversity course	4
Additional upper-division major electives	20

General B.S. in Biology

The upper-division major requirements are:

BIOL 320 Integrated Ecology and Evolution	4
BIOL 321 Molecular Biology and Physiology	4
One upper-division Organismal Biology/Diversity course	4
Additional upper-division major electives	24
Research Experience (minimum of 3 units)	3
BIOL 494 Independent Research (3) or BIOL 496A and BIOL 496B Honors Thesis (3-6)	

Concentrations in Biology

The following is the approved concentration in the B.A. that will appear on a student's diploma. The upper-division major requirement are:

B.A. Zoology Concentration

BIOL 320 Integrated Ecology and Evolution	4
BIOL 321 Molecular Cell Biology and Physiology	4
Four additional upper-division courses	14-16
Additional upper-division major electives	8-11

The following are approved concentrations in the B.S. that will appear on a student's diploma. The upper-division major requirements for each are:

B. S. Molecular Cell Biology Concentration

- BIOL 320 Integrated Ecology and Evolution
- BIOL 321 Molecular Cell Biology and Physiology
- BIOL 344 Cell Biology

One upper-division Organismal Biology/Diversity course

- BIOL 325 Molecular and Cellular Lab Techniques
- BIOL 342 Molecular Genetics

Research Experience (minimum of 3 units)

- BIOL 494 Independent Research (3) or
- BIOL 496A and 496B Honors Thesis (3-6)

Additional upper-division major electives

B. S. Ecology and Evolutionary Biology Concentration

- BIOL 320 Integrated Ecology and Evolution
- BIOL 321 Molecular Cell Biology and Physiology
- BIOL 333 Ecology
- BIOL 341 Evolution

One upper-division Organismal Biology/Diversity course

Research Experience (minimum of 3 units)

- BIOL 494 Independent Research (3) or
- BIOL 496A and 496B Honors Thesis (3-6)

Additional upper-division major electives

B. S. Marine Biology Concentration

- BIOL 320 Integrated Ecology and Evolution
- BIOL 321 Molecular Cell Biology and Physiology

One upper-division Organismal Biology/Diversity course

- BIOL 332 Marine Biology

Additional upper-division requirements

Additional upper-division major electives

Research Experience (minimum of 3 units)

- BIOL 494 Independent Research (3) or
- BIOL 496A and 496B Honors Thesis (3-6)

B. S. Physiology Concentration

- BIOL 320 Integrated Ecology and Evolution
- BIOL 321 Molecular Cell Biology and Physiology

One upper-division Organismal Biology/Diversity course

Additional upper-division requirements

Additional upper-division major electives

Research Experience (minimum of 3 units)

- BIOL 494 Independent Research (3) or
- BIOL 496A and 496B Honors Thesis (3-6)

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 336A, 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:

- 4 BIOL 328 Vertebrate Evolutionary Morphology
- 4 BIOL 340 General Bacteriology
- 4 BIOL 342 Molecular Genetics
- 4 BIOL 344 Cell Biology
- 1 BIOL 349 Animal Physiology
- 4 BIOL 472 Developmental Biology
- 3 BIOL 480 Immunology

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

10

Minor in Biology

The minor consists of a minimum of 20 units in the Department of Biology. The purpose of the minor is to provide a 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:

Two lower-division major's courses listed below 8

BIOL 130 (4)

16

BIOL 131 (4)

Additional units in Biology 12

4

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

4

4

4

3

14-16

5-7

3

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, which may include classroom courses in addition to mentor-supervised research units, 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 associate positions available each semester. The University offers a limited number of tuition fee waivers for qualified teaching associates. In addition, students may receive research associate positions through their faculty mentor's research grants. Students can also obtain academic scholarships and financial aid.

Faculty in the Biology Graduate Program are actively involved in research in a wide range of disciplines, including ecology and restoration ecology, evolutionary biology, molecular and cell biology,

biochemistry, physiology, microbiology, functional morphology, marine biology, and primatology.

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

Admission to the Program

To apply, you must submit: A) items 1-2 (listed below) to SSU Admissions and Records Office and B) copies of items 1-2 and originals of items 3-5 to the Department of Biology Graduate Coordinator. The application deadline in the department is January 31 for Fall semester admission and October 31 for Spring semester admission.

1. Complete an online University application via CSU Mentor (www.csumentor.edu) NOTE: After you submit online, be sure to print a hardcopy to send to the Department of Biology.
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 your background in biology and able to comment on your potential for conducting original work.
5. Graduate Record Examination (GRE) scores for the General test. Biology Subject scores are recommended, but not required.

IMPORTANT: A completed application package must be received in the Admissions and Records Office, and by the Graduate Coordinator in Biology, 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 should contact their potential faculty advisor prior to completing an application and refer to this communication in the Statement of Purpose.
- 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 of Biology 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 and original research in Biology.

Admission requirements, policies, and other information related to the Master's Degree program in Biology can be found at: www.sonoma.edu/biology/graduate/

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

FRESHMAN YEAR: 30-32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14-16 Units)</i>
BIOL 130 (B2) (4)	BIOL 131 (B2) (4)
CHEM 115A (B1) (5)	CHEM 115B (B1) (5)
GE A2, A3, or C3 (4)	GE A2, A3, or C3 (4)
GE Electives (3)	GE Electives (1-3)

SOPHOMORE YEAR: 28-30 Units

<i>Fall Semester (12-14 Units)</i>	<i>Spring Semester (16 Units)</i>
BIOL 320 (4)	BIOL 321 (4)
CHEM 335A (3)	MATH 165 (4)
ENGL 101 (A2) (4)	Support Course (4)
GE Electives (1-3)	GE Electives (4)

JUNIOR YEAR: 28-33 Units

<i>Fall Semester (16-17 Units)</i>	<i>Spring Semester (14-16 Units)</i>
Two BIOL UD Electives (8)	Two BIOL UD Electives (8)
GE (4)	Support Course or BIOL UD Electives (3-4)
Support Course (4-5)	GE (3-4)

SENIOR YEAR: 30-35 Units

<i>Fall Semester (15-17 Units)</i>	<i>Spring Semester (15-18 Units)</i>
BIOL UD Electives (9-13)	BIOL UD Electives (12-14)
Support Course (3)	GE (3-4)
GE (3-4)	

TOTAL UNITS: 120

BUSINESS ADMINISTRATION

DEPARTMENT OFFICE

Stevenson Hall 2042
(707) 664-2377
www.sonoma.edu/sbe

DEPARTMENT CHAIR

Karen Thompson

ADMINISTRATIVE ANALYST

Tracy Navas

UNDERGRADUATE ACADEMIC ADVISOR

Sheila Mackintosh-Sims

CAREER CENTER DIRECTOR

Sarah Dove

INTERNSHIP DIRECTOR

Duane Dove

EXECUTIVE DIRECTOR OF GRADUATE AND EXECUTIVE PROGRAMS

John Stayton

DIRECTOR OF WINE BUSINESS INSTITUTE

Ray Johnson

Faculty

Thomas Atkin
Richard Campbell
Kathryn Chang
*T.K. Clarke
*Duane Dove
Kirsten Ely
Armand Gilinsky
*Robert Girling
David Horowitz
Aidong Hu
Douglas Jordan
Terry Lease
Kyuho Lee
Sandra Newton
Janeen Olsen
Vincent Richman
Michael Santos
Elizabeth Stanny
Janejira Sutanonpaiboon
Elizabeth Thach
Karen Thompson
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 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

(See page 77 for a sample four-year program.)

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 students in the major 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 both domestically and globally.

Degree Requirements

General Education (freshmen)	50 or
General Education (transfer)	48
Pre-Major Preparatory Courses	
GE-A area	
MATH 131 or MATH 161 in GE category B4	
ECON 204 in GE category D5	
ECON 205 in GE category D1	
Major requirements [minimum]	55
General electives (to meet minimum degree requirements)	15-17
Minimum units needed for graduation:	120

A minimum of 120 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; 20-21 additional units are needed in preparatory courses, many 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-business status should consult on matters regarding general education, University requirements, the pre-business program, and routine major issues. When students move from pre-business 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

Prior to being admitted to Business Administration status all business majors must demonstrate computer competency. Students may demonstrate competency by passing an approved Microsoft Excel competency examination. Students should plan carefully and

consult with the school website, www.sonoma.edu/sbe/students, for test and registration information. Students may also demonstrate competency by earning a grade of C or better in an approved course that covers Microsoft Excel at an intermediate level.

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 area
- 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 the major)

- BUS 211 Business Statistics (4) or MATH 165 Elementary Statistics (4)
or ECON 217 Statistics for Economics and Business (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, 399, 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 the following core requirements. (Note that 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 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 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: Kathryn Chang, Elizabeth Stanny, Vincent Richman, Kirsten Ely, Terry Lease

Finance: Aidong Hu, Douglas Jordan, Michael Santos, Zachary Wong

Financial Management: Kathryn Chang, Kirsten Ely, Elizabeth Stanny, Aidong Hu, Douglas Jordan, Vincent Richman, Michael Santos, Zachary Wong

Management: Robert Girling, Elizabeth Thach, Duane Dove, Armand Gilinsky, Sandra Newton, John Urbanski, Janejira Sutanonpaiboon

Marketing: Janeen Olsen, Thomas Atkin, Richard Campbell, David Horowitz, Kyuho Lee

Wine Business Strategies: Elizabeth Thach, Armand Gilinsky, Janeen Olsen, Thomas Atkin

Special: Department Chair

Accounting Concentration: 5 Courses

Five courses are required. The accounting concentration 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.

Required Courses:

BUS 330A Intermediate Accounting	4
BUS 330B Intermediate Accounting	4

Select at least three of the following courses:

BUS 385A Special Topics in Accounting	3-4
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	4
BUS 436 Business Law	4
BUS 437 Governmental Accounting	4

Finance Concentration: 5 Courses

Five courses are required. The finance 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 470 Managerial Finance	4
BUS 471 Case Studies in Finance	4
BUS 473 International Finance	4
BUS 476 Risk Management and Insurance	4

Group B

BUS 330A Intermediate Accounting	4
BUS 385F Special Topics in Finance	4
BUS 399F Advanced Work Experience in Finance	3-4
BUS 433B Corporate Tax	4
BUS 475W Wine Accounting and Finance	4
BUS 499F Internship in Finance	3-4
ECON 311 Public Economics	4
ECON 317 Econometrics	4
MATH 303 Interest Theory	3

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. 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 385F Special Topics	3-4
BUS 437 Governmental Accounting	4
BUS 470 Managerial Finance	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
BUS 350 Management	4
BUS 452 Leadership in Organizations	4

Select at least two courses:

BUS 385MG Special Topics in Management	4
BUS 391 Cross Cultural Communication and Negotiation	4
BUS 393 Introduction to International Business	4
BUS 399MG Advance Work Experience in Management	3-4
BUS 446 Government Regulation of Human Resources	4
BUS 451 Entrepreneurship	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 469 Marketing Management	4

Select at least three courses:

BUS 362 Services Marketing	4
BUS 364 Sports Marketing	4
BUS 366 Retail Management	4
BUS 368 International Marketing	4
BUS 385MK Special Topics in Marketing	3-4
BUS 396W The Global Wine Industry	3
BUS 399MK Advance Work Experience in Marketing	3-4
BUS 451 Entrepreneurship	4
BUS 453 Small Business Analysis	4
BUS 461 Promotion Management	4
BUS 462 Marketing Research	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: 5 Courses

Five courses are required. The wine business 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 362 Services Marketing	4
BUS 366 Retail Management	4
BUS 385W Special Topics in Wine	3-4
BUS 396W Global Wine Industry	3
BUS 397W The Global Marketplace for Wine	4
BUS 399W Advanced Work Experience in Wine Business Strategies	3-4
BUS 463 Sales Management and Personal Selling	4
BUS 467W Wine E-Commerce and Direct Sales	4
BUS 475W Wine Accounting and Finance	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 of at least three-units each should be selected with approval from 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 and demonstrated computer competency. 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.

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 Financial Accounting	4
BUS 230B Managerial 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.

Professional Sales Certificate

The Professional Sales Certificate is an academic certificate program that offers a skillset to launch students into a professional sales career in any industry. It consists of 21-22 units, many of which are required in the Business Administration Degree or the Marketing Concentration.

Required Courses:

ECON 205 Intro to Microeconomics OR	4
BUS 211 Business Statistics	4
BUS 230A Financial Accounting	4
BUS 360 Introduction to Marketing	4
BUS 463 Sales Management and Personal Selling	4
BUS 493 Advanced Topics in Professional Sales (offered through the School of Extended and International Education)	2

Elective Course (Choose one of the following courses):

BUS 391 Cross-Cultural Communication and Negotiation	4
BUS 367 Consumer Behavior	4
BUS 499 Internship in Sales	3-4

As in the Business Administration degree program, there are prerequisites for many of the courses. Check the course descriptions in the catalog for these prerequisites. Enrollment in the Professional Sales Certificate program 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 work-

ing student. The M.B.A. degree program has two concentrations: traditional and wine business.

M.B.A. Admissions

The M.B.A. program launches each year in the fall. The application period is November 1 to March 30. 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 first step in the application process is to submit a preliminary application at www.sonoma.edu/sbe/admissions/part-time-mba. After the preliminary application is submitted, applicants will be advised as to the next steps in the admission process. Applicants are encouraged to apply early! 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 M.B.A. program in Wine Business will be expected to have completed 24 units of wine related coursework, 24 months of wine industry work experience, or any combination thereof, before being admissible to the M.B.A. program in Wine Business. This requirement may be met by completing all levels of our online Wine Business Management Certificate offered through the Wine Business Institute's Professional Development programs.

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
- Have earned a minimum score of 550 on the paper version or 80 on the computerized version of the Test of English as a Foreign Language (TOEFL) for those 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.

International students must meet the criteria set forth by International Services for graduate students.

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 requires a GMAT score of at least 450. Applicants are expected to have two years of full time work experience prior to starting the program. The department considers the candidate's application, academic background, work experience, and performance on the GMAT in evaluating high promise of success in the program.

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

After applicants have been advised by the M.B.A. Coordinator 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. An online 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 80 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. A copy of each transcript should be sent to both the Office of Admissions and Records and the Director of M.B.A. Programs, School of Business and Economics at:

Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609

All community college and university transcripts that provide evidence of completion of M.B.A. foundation courses must be included.
3. A current resume should be sent to the Director of M.B.A. Programs, School of Business and Economics, at the address above.
4. An official GMAT score report should be sent to California State University - Sonoma. Information regarding ordering GMAT score reports, locating a GMAT testing site, and GMAT preparation materials can be obtained on www.mba.com.

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 Director of M.B.A. Programs. 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 current GMAT score and resume.

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 should take the M.B.A. core courses to begin the program.

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 is forwarded to the Director of M.B.A. Programs for the department recommendation. When the GMAT score and resume are 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

Up to 6 units of approved graduate level work from accredited universities may be transferred to meet part of the 33 units for the M.B.A.. However, these requests are not routinely granted. Graduate courses equivalent to our foundation courses will not be accepted to meet elective or required M.B.A. courses. Transfer courses must be approved by the Director of M.B.A. Programs. Students are advised to get approval prior to taking any transfer courses.

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 may take a leave of absence from the program for one or two semesters by completing a 'Leave of Absence' form and filing it with the Office of Admissions and Records. Students who take more than two semesters off and/or do not complete a 'Leave of Absence' form 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.

Additional M.B.A. Program Requirements

M.B.A. Program Curriculum

Sonoma State's part-time M.B.A. program has been adapted to meet the ever-changing needs of today's business world. It will equip students with business tools and strategies to deliver results in today's transformational economy. Newly re-designed, it will teach students not just how to read financial statements, but how to apply that information to make decisions and shape strategy. It will help students learn not just the principles of marketing, but how to develop a brand, deliver transformational customer experiences, and integrate marketing communication across numerous outlets. Students will gain knowledge not just in business strategies, but in innovation, entrepreneurship, and building a learning organization.

The new part-time M.B.A. is organized around a 4-3-2-1 model: four core courses, three theme areas, two electives, and one capstone course. Three theme areas - International Business and Global Issues, Leadership and Ethics, and Contemporary Business Issues - allow students to choose their career emphasis.

Inside and outside of the classroom, students gain access to the deep knowledge of our regional business partners and to career support services.

Evening classes are designed to easily fit into busy schedules, small class sizes allow students to make personal connections with classmates, and professional instructors are committed to helping students reach their future business goals.

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.

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.

The Traditional M.B.A. program (33 units) consists of the following course sequence:

- eMBark Weekend
- 4 Core Courses
- 3 Theme Area Courses
- 2 Elective Courses
- 1 Capstone Experience
- Dis-eMBARK Weekend

If students do not have an undergraduate business degree, there may be an additional foundation step of the program that needs to be completed (see M.B.A. Foundation Courses below). Contact our office for a transcript review and/or assistance, (707) 664-3501.

eMBark Weekend (1 Unit)

The M.B.A. experience begins with an immersion weekend that combines academic planning, network development, and practice case analysis skills.

4 Core Courses (12 Units)

The M.B.A. core courses are a cluster of graduate business courses that provide a base knowledge upon which other courses and theme areas build. In the first year, students complete the four core courses as a cohort, a group study model that builds relationships and mirrors a team workforce environment. Two courses are completed in the Fall Semester and two courses are completed in the Spring Semester. The four core courses which are prerequisites for all other courses are:

BUS 535 Cost Analysis Control	3
BUS 540 Managing Human Capital	3
BUS 570 Managerial Finance	3
BUS 580 Business Intelligence	3

3 Theme Areas (9 Units)

Breadth of exposure and relevance to today's workplace are ensured by requiring students to take one course in each of three thematic areas: Leadership and Ethics, International Business and Global Issues, and Contemporary Business Issues. A sample of possible courses in each theme areas include:

- Leadership and Ethics
 - BUS 552 Leadership and Team Building
 - BUS 554 Social Entrepreneurship
- International Business and Global Issues
 - BUS 516 Operations Management
 - BUS 593 International Business
- Contemporary Business Issues
 - BUS 519 Management Information Systems
 - BUS 563 Strategic Bonding

2 Elective Courses (6 Units)

Students gain depth in the areas of their interest by choosing two electives taken from any thematic area, or by setting up a special study experience, or an internship project.

1 Capstone (5 Units)

Students put it all together in a final business strategy course (BUS 591) that requires them to develop a comprehensive strategic plan for an existing business or a business plan for a new venture. To enroll in the capstone course, it must be the student's last semester in the program and the student must have completed the 4 core and 3 theme area courses. Exceptions require the approval of the Director of M.B.A. Programs.

Dis-eMBARK Weekend (2 Units)

The MBA Program concludes with a final weekend immersion experience and requires students to develop a portfolio of their graduate work.

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

Our Wine Business M.B.A. program is intended to prepare graduates for positions of leadership in organizational settings in the wine industry. Located in the heart of California's wine country, we offer extraordinary experiences in learning through local internships, special studies, student-run projects, and professional connections to alumni in the industry.

The part-time Wine Business M.B.A. program is designed to primarily meet the needs of the working student in Sonoma County and the North Bay region. Our evening classes easily fit into busy schedules, small class sizes allow for students to make personal connections with classmates, and professional instructors are committed to helping students reach future business goals.

The Wine Business M.B.A. program (33 units) consists of the following course sequence:

- eMBark Weekend
- 4 Core Courses
- 3 Theme Area Courses
- 2 Elective Courses
- 1 Capstone Experience
- Dis-eMBARK Weekend

Note: A minimum of 3 of the Theme Area and Elective Courses need to be Wine Business Courses..

Special Program Requirements: All candidates for the M.B.A. program in Wine Business will be expected to have completed 24 units of wine related coursework, 24 months of wine industry work experience, or any combination thereof, before being admissible to the M.B.A. program in Wine Business. This requirement may be met by completing all levels of our online Wine Business Management Certificate offered through the Wine Business Institute's Professional Development programs.

eMBark Weekend (1 unit)

The M.B.A. experience begins with an immersion weekend that combines academic planning, network development and practice case analysis skills.

4 Core Courses (12 Units)

The M.B.A. core courses are a cluster of graduate business courses that provide a base knowledge upon which other courses and theme areas build. In the first year, students complete the four core courses as a cohort, a group study model that builds relationships and mirrors a team workforce environment. Two courses are completed in the Fall Semester and two courses are completed in the Spring Semester. The four core courses which are prerequisites for all other courses are:

BUS 535 Cost Analysis Control	3
BUS 540 Managing Human Capital	3
BUS 570 Managerial Finance	3
BUS 580 Business Intelligence	3

3 Theme Areas (9 Units)

Breadth of exposure and relevance to today's workplace is ensured by requiring students to take one course in each of three thematic areas: Leadership and Ethics, International Business and Global Issues, and Contemporary Business Issues. A sample of possible courses in each theme areas include:

- Leadership and Ethics
 - BUS 552 Leadership and Team Building
 - BUS 555W Sustainability in the Wine Hospitality Industry
 - BUS 593 International Business
- International Business and Global Issues
 - BUS 516 Operations Management
 - BUS 545W Global Wine Business (required)
 - BUS 597W Country Intensive Wine Business Analysis
- Contemporary Business Issues
 - BUS 525W A/B Wine Business Experience
 - BUS 563 Strategic Branding
 - BUS 565W Marketing and Sales Strategies for Wine

2 Elective Courses (6 Units)

Students gain depth in the areas of your interest by choosing two electives taken from any thematic area, or by setting up a special study experience or an internship project.

1 Capstone (3 Units)

Students put it all together in a final business strategy course (BUS 591) that requires them to develop a comprehensive strategic plan for an existing business or a business plan for a new venture. To enroll in the capstone course, it must be the students last semester in the program and the student must have completed the 4 core and 3 theme area courses. Exceptions require the approval of the Director of M.B.A. Programs.

Dis-eMBARK Weekend (2 Units)

The MBA Program concludes with a final weekend immersion experience and requires students to develop a portfolio of their graduate work.

M.B.A. Foundation Courses (32 semester 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 211 Business Statistics	4
BUS 230A and 230B Financial and Managerial Accounting	8
BUS 344 Organizational Behavior or BUS 504	4 2
BUS 360 Introduction to Marketing or BUS 506	4 2
BUS 370 Introduction to Managerial Finance or BUS 507	4 2
ECON 204 and 205 (previously 201A and 201B) 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.

M.B.A. Foundation Course Series

To assist our conditionally classified students complete their foundation courses, the School of Extended Education offers the M.B.A. Foundation Course Series. The course series is comprised of three (2) unit courses which will meet the requirements of BUS 344, BUS 360, and BUS 370, respectively.

BUS 504 Foundations of Organizational Behavior

BUS 506 Foundations of Marketing

BUS 507 Foundations of Managerial Finance

Each course is held on two evenings per week over a 5 week period. The courses may be taken individually if students do not need all three of the courses; however, to be eligible for financial aid a student requires six units. The class methods will vary by instructor; however, they will likely be hybrid classes involving work in the classroom as well as online instruction.

If you are a candidate for these Extended Education courses, contact our office, (707) 664-3501, for assistance with the registration process.

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 program begins with a skills-driven set of courses, starting with financial statement analysis, marketing, production, and human resource management. The focus here is on these skills being used to manage multiple functional areas of business. During the first module, there is an off-site, leadership development experience. The second module is about optimizing the firm's infrastructure and making internal decisions about business strategy. The third module is about reacting to the external forces on businesses, at both the domestic and global levels. 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 Talent Management

BUS 546E Global Business Operations

BUS 552E Leadership Intelligence

BUS 554E Leading Sustainable Enterprise

BUS 559E Leadership North Bay

BUS 560E Strategic Marketing Management

BUS 570E Financial Markets and Business Strategy

BUS 581E Analyzing Business Research

BUS 591E Strategy in Practice

BUS 592E Business Plan

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 and International Education. Some special admissions requirements and application procedures apply.

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

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

FRESHMAN YEAR: 30-31 Units

[Avoid UD GE until Junior year]

*Computer Competency Requirement should be met in freshman year**

Fall Semester (15-16 Units)

PHIL 101 or 102 (A3) (4)
ECON 204 (D5) (4)
Math 131 or 161 (B4) (3-4)
GE (C1) (4)

Spring Semester (15 Units)

ENGL 101 (A2) (4)
ECON 205 (D1) (4)
GE (C3) (4)
GE (B3) (3)

SOPHOMORE YEAR: 31-32 Units

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

Fall Semester (16 Units)

BUS 230A (4)
GE (B1 or B2) (3)
GE (D3) (3)
GE (D4) (3)
Elective (3)

Spring Semester (15-16 Units)

BUS 230B (4)
BUS 211 or MATH 165 (4)
BUS 225 (4)
GE (B1 or B2 with lab) (3-4)

JUNIOR YEAR: 30 Units

[Take WEPT]

Fall Semester (14 Units)

UD BUS Core** (4)
UD BUS Core*** (4)
UD GE (D2) (3)
Elective (3)

Spring Semester (16 Units)

UD BUS Core (4)
UD BUS Core (4)
BUS Concentration (4)
UD GE (C2) (4)

SENIOR YEAR: 30-31 Units

[Apply for graduation at beginning of senior year]

Fall Semester (15 Units)

BUS concentration (4)
BUS concentration (4)
UD BUS Core (4)
Elective (3)

Spring Semester (15-16 Units)

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

TOTAL UNITS: 120

[refer to catalog and consult advisor(s) for additional information]

**Computer Competency is a prerequisite for any upper-division Business Core class. Computer Competency can be met by taking designated sections of CS 101 (GE B3).*

***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 and application for award of degree).*

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 Museum and Gallery Methods

The career minor in museum and gallery methods provides students of the visual arts with education, training, and hands-on experience in the theory and practice of non-profit museums and galleries. Art history and art studio majors completing this career minor will be in much stronger positions to find work and prepare for graduate study in fields closely related to their majors. The career minor in museum and gallery methods may also be combined with any other major, provided the student also completes at least a minor in art history or art studio.

Internships are available in the University Art Gallery and at local regional galleries, museums, and other related nonprofit organizations.

Program Advisor

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

Requirements for the Career Minor in Museum and Gallery Methods

To earn the career minor in museum and gallery methods, students must complete the following 21 units:

ARTS 210 Introduction to Digital Imaging	2
ARTH 466 Contemporary Art	3
ARTH 467 Museum Collections Management	3
ARTH 468 Curatorial Practice	3
ARTH 493 Museum and Gallery Management	3
ARTH 494 Museum Theory and Practice	3
ARTH 499 Internship	4
Business, computer, or other related courses to be determined by the program advisor	3
Total units in the minor	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

Gerryann Olson, Gerontology/Psychology
Stevenson Hall 3095
(707) 664-2411

Minor Core Requirements

Courses to be offered are pending; please see advisor for details.

PSY 358 Health Psychology	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

Lena McQuade

Rachel Carson Hall 31, (707) 664-2950

mcquade@sonoma.edu

Minor Core Requirements

WGS 280 Women's Bodies: Health and Image	3
NURS 480 Sexuality, Health, and Society or	
WGS 350 Gender, Sexuality and Family	3-4
Practical Application	
WGS 499 Internship in Women's Health Setting	4
Prerequisite: senior standing or	
NURS 497(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

ANTH 318 Human Development: Sex and Life Cycle	3
BIOL 311 Sexually Transmitted Diseases	3
BIOL 318 Biology of Aging	3
GERN 300 The Journey of Adulthood	3
GERN 319/SOCI 319 Aging and Society	4
KIN 316 Women in Sports: Issues, Images, Identities	3
NURS 303 Maternity & Women's Health Care (NURS only)	6
PSY 454 Biofeedback and Somatic Psychology	4
PSY 358 Health Psychology	3-4
PSY 362 Human Sexuality (Summer)	4
PSY 405 The Psychology of Gender	4
PSY 408/GERN 408 Transitions of Adult Development	4
PSY 454 Biofeedback Somatics & Stress Management	4
SCI 150 Intro to Careers in Health Professions	1
WGS 301 Feminist Lecture Series	1-2
WGS 440/SOCI 440 Sociology of Reproduction	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

Faculty

Steven Farmer
Jon M. Fukuto
Monica Lares
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
(Certified by the American Chemical Society)

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 Chemistry Department

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 freshman year, students participate in a learning community with other chemistry and biochemistry majors and in their senior year participate in a capstone experience to further prepare themselves for entry into industry or graduate education. Novel undergraduate research experiences are an integral part of our program. 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 high field resonance spectrometer; high-pressure liquid, gas, and ion exchange chromatographs; and gas chromatographs with mass spectrometer detectors.

Repeat Policy

Any student wishing to repeat a chemistry course must first fill out a course repeat form and have it approved by the chemistry department chair before they will be allowed a seat in the class. Students repeating a class will be given last priority at registration. Students that register for the class without following this policy will be administratively dropped from the course. Course repeat forms are available in the department office.

Chemistry and Biochemistry majors may only repeat a total of three chemistry courses, any combination, in order to graduate with a chemistry or biochemistry degree. Students can petition the department for reinstatement on a case-by-case basis.

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

(See page 83 for a sample four-year program.)

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	50
Major requirements	48
Supporting courses	19
Electives	3
Total units needed for graduation	120

Major Core Requirements

CHEM 125AB General Quantitative Chemistry 10 units, 4 in the major core, 6 in GE (B1 and B3)	4
CHEM 255 Quantitative Analysis*	4
CHEM 275 Instrumental Analysis	2
CHEM 310AB Physical Chemistry	6
CHEM 315 and 316 Introduction to Research Methods	3
CHEM 325 Inorganic Chemistry	3
CHEM 335AB Organic Chemistry Lecture	6
CHEM 336AB Organic Chemistry Laboratory	4
CHEM 401 Senior Integrated Lab	3
CHEM 402 Advanced Synthesis and Analysis	3
CHEM 445, 446, or 340 Biochemistry	3
CHEM 496UD CHEM Elective	6
CHEM 497 Research Seminar	1
Total units in the major core	48

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 120AB	4
CHEM 125AB	6
MATH 161	3
Others	37
Total units in GE courses	50
Electives	3
Total units to graduate	120

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

(See page 83 for a sample four-year program.)

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. 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	50
Major requirements	39
Biology / Chemistry courses	7-9
Supporting courses	13-15
Electives	3-7
Total units needed for graduation	120

Major Core Requirements

CHEM 125 AB General Chemistry 10 units, 4 in the major core, 6 in GE (B1 and B3)	4
CHEM 255 Quantitative Analysis*	4
CHEM 275 Instrumental Analysis	2
CHEM 310 AB Physical Chemistry	6
CHEM 315 and 316 Introduction to Research Methods	3
CHEM 325 Inorganic Chemistry	3
CHEM 335 AB Organic Chemistry	6
CHEM 336 A Organic Chemistry Lab	2
CHEM 401 Senior Integrated Lab	3
CHEM 441 Biochemical Methods	3
CHEM 445 Structural Biochemistry	3
CHEM 446 Metabolic Biochemistry	3
CHEM 497 Research Seminar	1
Total units in the major core	43

Biology/Chemistry Courses

BIOL 123 Molecular and Cell Biology (4 units, 1 in the major core, 3 in GE B2)	1
Choose 2 from the following:	
CHEM 496, UD CHEM Elective	3
BIOL 338 Environmental Microbiology and Biotechnology	4
BIOL 340 General Bacteriology	4
BIOL 342 Molecular Genetics	4
BIOL 344 Cell Biology	4
BIOL 348 Plant Physiology	4
BIOL 349 Animal Physiology	4
BIOL 383 Virology	4
BIOL 480 Immunology	4

BIOL 481 Medical Microbiology	5	CHEM 401 Senior Integrated Lab	3
BIOL 544 Advanced Cell Biology	4	CHEM (315, 316, 336B, 402, 441, 445, 446, or 496)	3
or other courses approved by the Chemistry Department		CHEM 497 Research Seminar	1
Total units in Biology/Chemistry Courses	7-9	Total units in the major core	34

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 120AB	4
CHEM 125AB	6
MATH 161	3
BIOL 123	3
Others	34
Total units in GE courses	50
Electives	3-7
Total units to graduate	120

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 120AB	4
CHEM 125AB	6
MATH 161	3
Others	37
Total units in GE courses	50
Electives	21-23
Total units to graduate	120

Recommended course

CHEM 315 and 316 Introduction to Research Methods	3
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Bachelor of Arts in Chemistry

(See page 84 for a sample four-year program.)

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	50
Major requirements	34
Supporting courses	13-15
Electives	21-23
Total units needed for graduation	120

Major Core Requirements

CHEM 125AB General Chemistry 10 units, 4 in the major core, 6 in GE (B1 and B3)	4
CHEM 255 Quantitative Analysis*	4
CHEM 275 Instrumental Analysis	2
CHEM 310AB Physical Chemistry	6
CHEM 325 Inorganic Chemistry	3
CHEM 335AB Organic Chemistry	6
CHEM 336A Organic Chemistry Lab	2

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 (3 units), and 336A (2 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. CHEM 125A/B may be substitute for the combined requirement of 115A/B and 255.

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.

Sample Four-Year Program for Bachelor of Science in Chemistry

FRESHMAN YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 125A (5)	CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
CHEM 120A (GE A3,2)	PHYS 114 (4)
GE (4)	PHYS 116 (1)
	CHEM 120B (GE A3) (2)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 335A/336A (5)	CHEM 335B (3)
MATH 261 (4)	CHEM 336B (2)
PHYS 214 (4)	CHEM 255 (4)*
PHYS 216 (1)	GE (7)

JUNIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
CHEM 445 (3)	CHEM 310B (3)
CHEM 310A (3)	CHEM 316 (2)
CHEM 315 (1)	CHEM Elective (3)
GE (8)	GE (6)

SENIOR YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 275 (2)	CHEM 325 (3)
CHEM 401 (3)	CHEM 402 (3)
CHEM Elective (3)	CHEM 497 (1)
GE (6)	GE (6)
	Elective (3)

TOTAL SEMESTER UNITS: 120

* 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.

Sample Four-Year Program for Bachelor of Science in Biochemistry

FRESHMAN YEAR: 30-31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15-16 Units)</i>
CHEM 125A (5)	CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
CHEM 120A (GE A3,2)	PHYS 210A (3) or PHYS 114 (4)
GE (4)	PHYS 209A (1) or PHYS 116 (1)
	CHEM 120B (GE A3) (2)

SOPHOMORE YEAR: 30-31 Units

<i>Fall Semester (15 or 16 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 335A/336A (5)	CHEM 335B (3)
PHYS 210B (3) or PHYS 214 (4)	CHEM 255 (4)*
PHYS 209B (1) or PHYS 216 (1)	GE (4)
BIOL 123 (GE) (4)	
Elective (2)	

JUNIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 310A (3)	CHEM 310B (3)
CHEM 315 (1)	CHEM 316 (2)
CHEM 445 (3)	CHEM 446 (3)
GE (7)	GE (4)
Elective (2)	Elective (3)

SENIOR YEAR: 29-31 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (14-15 Units)</i>
CHEM 401 (3)	CHEM 497 (1)
BIOL or CHEM elective UD (3-4)	CHEM 325 (3)
CHEM 275 (2)	CHEM 441 (3)
GE (7)	BIOL or CHEM elective UD (3-4)
	GE (4)

TOTAL SEMESTER UNITS: 120

* 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.

Sample Four-Year Program for Bachelor of Arts in Chemistry

FRESHMAN YEAR: 30-31 Units

Fall Semester (15 Units)

CHEM 125A (5)
MATH 161 (4)
GE (4)
CHEM 120A (GE A3,2)

Spring Semester (15 or 16 Units)

CHEM 125B (5)
MATH 211 (4)
PHYS 210 A (3) or PHYS 114 (4)
PHYS 209A (1) or PHYS 116 (1)
CHEM 120A (GE A3,2)

SOPHOMORE YEAR: 26-29 Units

Fall Semester (13-16 Units)

CHEM 335A/336A (5)
PHYS 210B (3) or PHYS 214 (4)
PHYS 209B (1) or PHYS 216 (1)
GE (3)
Elective (1-4)

Spring Semester (13 Units)

CHEM 335B (5)
CHEM 336B (2) (Elective units)
CHEM 255 (4) *
GE (4)

JUNIOR YEAR: 31 Units

Fall Semester (16 Units)

CHEM 310A (3)
GE (10)
Elective (3)

Spring Semester (15 Units)

CHEM 310B (3)
GE (12)

SENIOR YEAR: 31 Units

Fall Semester (15 Units)

CHEM 275 (2)
CHEM 401 (3)
Chemistry Elective (3)
GE (4)
Elective (3)

Spring Semester (16 Units)

CHEM 497 (1)
CHEM 325 (3)
Elective (12)

TOTAL SEMESTER UNITS: 120

* 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.

Chemistry Electives: CHEM 315, 316, 336B, 402, 441, 445, 446, or 496

CHICANO AND LATINO STUDIES

DEPARTMENT OFFICE

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

DEPARTMENT CHAIR

Patricia Kim-Rajal

ADMINISTRATIVE COORDINATOR

Linnea Mullins

Faculty

Patricia Kim-Rajal, Cultural Studies/Gender/Globalization

Ronald López, History/Politics

Daniel Malpica, Sociology/Immigration/Labor

Programs

Bachelor of Arts in Chicano and Latino Studies,
Interdisciplinary Track

Bachelor of Arts in Chicano and Latino Studies, Teacher
Preparation Track, Multiple Subjects Program

Minors in Chicano and Latino Studies

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. Students are 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 skills to understand the key role Chicanos will increasingly play in the future, given the rapidly changing demographics of 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, or in the CALS Learning Community.

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, Interdisciplinary Track

(See page 87 for a sample four-year program.)

Degree Requirements	Units
General education	50
Major requirements	40
Second major/minor or electives	30
Total units needed for graduation	120

Major Core Requirements

	Units
CALS 350 Latino Cultural Studies	4
CALS 442 Gender, Race and Class	4
CALS 445 Chicano/Latino History	4
CALS 458 Research and Methodology	4

One of the Following Courses:

CALS 165B CALS Learning Community (GE C3)	4
CALS 219 The Latino Experience (GE D1)	3
CALS 220 Latina/o Arts and Humanities (GE C2)	4
Total units in the major core	19-20

Elective Courses

Two of the Following Courses (8 units):

CALS 225 Spanish for Bilinguals (GE C3)	4
CALS 273 Latinos & Performance: Critical and Creative Readings (GE C2)	4
CALS 314 Latin American Literature in English Translation (GE C2)	4
CALS 339 Latinos and the US Labor Market (GE D1)	4
CALS 352 Chicano/Latino Philosophy (GE C2)	4
CALS 368 Chicano/Latino Music (GE C1)	4
CALS 374 Latino Literature (GE C2)	4
CALS 393 Chicano/Latino Cinema (GE C1)	4
CALS 403 Chicano/Latino Youth & Adolescents (GE E)	4
CALS 432 Latinos in a Global Context (GE D5)	4
CALS 451 Chicano/Latino Humanisms (GE C3)	4
CALS 479 Chicano/Latino Art History (GE C1)	4

Three of the Following Courses (12 units):

CALS 400 Special Topics	4
CALS 405 The Chicano/Latino Family	4
CALS 426 Latina/o Sociolinguistics	4
CALS 456 Latinos and Education	4
CALS 474 Major Authors in Latino Literature	4
CALS 480 Latin American Migration to the U.S.	4

Total elective units in the major 20

Capstone Project

All CALS majors must complete a capstone project/paper during their senior year. Please consult with your major advisor about this requirement **prior** to the start of your senior year.

Bachelor of Arts in Chicano and Latino Studies, Teacher Preparation Track, Multiple Subjects Program

(See page 87 for a sample four-year program.)

Students interested in preparing for the teaching profession while completing a major in Chicano and Latino Studies are encouraged to enroll in the Pre-Teaching Credential Preparation Track (Multiple Subject). It is designed to help students qualify for entry into the Multiple-Subject (Elementary) Teaching Credential program, and to pass the CBEST. This program is suited for all students. Please refer to the Education section of the catalog for more information on the multiple subjects teaching credential program.

Degree Requirements	Units
General education	50
Major Core requirements	35-36
Multiple subjects concentration	26
Credential prerequisites	9
Total units needed for graduation	120-121

Major Core Requirements

CALS 350 Latino Cultural Studies	4
CALS 374 Latina/o Literature or CALS 450 Latina/o Children's Literature	4
CALS 405 The Chicano/Latino Family	4
CALS 442 Gender, Race and Class	4
CALS 445 Chicano/Latino History	4
CALS 451 Latino Humanisms or CALS 456 Bilingual Cross-Cultural Education	4
CALS 458 Research and Methodology	4
CALS 480 Latin American Migration to the U.S. or CALS 432 Latinos in a Global Context	4

One of the Following Courses:

CALS 165B CALS Learning Community (GE C3)	4
CALS 219 The Latino Experience (GE D1)	3
CALS 220 Latina/o Arts and Humanities (GE C2)	4

Total units 35-36

Multiple Subjects Concentration

Required Courses:

Mathematics: MATH 300A	3
Physical Education and Health Education: KIN 400	3
Total units required	6

Elective Courses (others may be substituted with advisor recommendation):

Human Development: CALS 403	4
Language: CALS 426 or LING 411	4
Science: Chemistry, Physics or Astronomy	3
Visual & Performing Arts	3
Geography: Geology or Physical Geography	3
Math 300B	3

Total Recommended units 20

Credential Prerequisites

	Units
EDUC 417 School and Society	3
EDMS 470 Multicultural Pedagogy	3
EDEC 420 Child Development in the Family & School	3
Total units	9

Capstone Project

All CALS majors must complete a capstone project/paper during their senior year. Please consult with your major advisor about this requirement **prior** to the start of your senior year.

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 350	4
CALS 339 or 432	4
CALS 405 or 442	4
CALS 445	4
CALS 458	4
CALS 395, CIP or Service Learning Project (optional)	1-4
Total units required	20-24

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	12-16
Total units required	20-21

Sample Four-Year Plan for the Bachelor of Arts in Chicano and Latino Studies, Interdisciplinary Track

FRESHMAN YEAR: 30-32 Units

<i>Fall Semester (15-16 units)</i>	<i>Spring Semester (15-16 units)</i>
CALS 219 or CALS Learning Community (3-4) GE (12)	CALS 220 or CALS Learning Community (4) GE (11-12)

SOPHOMORE YEAR: 30-32 Units

<i>Fall Semester (15-16 units)</i>	<i>Spring Semester (15-16 units)</i>
CALS 458 (4) GE (11-12)	CALS 339 (4) GE (11-12)

JUNIOR YEAR: 31-32 Units

<i>Fall Semester (16 units)</i>	<i>Spring Semester (15-16 units)</i>
CALS 314 or CALS 374 (4) CALS 405 or CALS 456 (4) CALS 350 (4) CALS 403 (4) Take the WEPT	CALS 368 or CALS 393 (4) CALS 405 or CALS 339 (GE D1) (4) CALS 445 (4) GE (3-4) Consult with your advisor about the capstone requirement

SENIOR YEAR: 30-32 Units

<i>Fall Semester (15-16 units)</i>	<i>Spring Semester (15-16 units)</i>
CALS 456 or CALS 474 (4) CALS 480 (4) CALS elective or concentration (4) GE (3-4)	CALS 400 or CALS 426 (4) CALS 442 (4) Internship (4) GE (3-4)

TOTAL Units: 120-128

Sample Four-Year Plan for the Bachelor of Arts in Chicano and Latino Studies, Teacher Preparation Track, Multiple Subjects Program

FRESHMAN YEAR: 30-32 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
CALS 219 or CALS Learning Community (3-4) GE (12)	CALS 220 or CALS Learning Community (4) GE (11-12)

SOPHOMORE YEAR: 30-32 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
CALS 458 (4) MATH 300A (3) GE (8)	CALS 368 (4) MATH 300B (3) GE (8)

JUNIOR YEAR: 31-32 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15 Units)</i>
CALS 350 (4) CALS 374 or CALS 450 (4) CALS 403 (4) Science concentration course (3-4) Take the WEPT	CALS 405 (4) CALS 442 (4) KIN 400 (3) GE (4) Take CSET (3 subtests) Retake in summer if necessary

SENIOR YEAR: 29-30 Units

<i>Fall Semester (17-18 Units)</i>	<i>Spring Semester (12 Units)</i>
CALS 432 or CALS 480 (4) CALS 451 or CALS 456 (4) EDUC 420 (3) GEOG 332 (3) GE (3-4) Apply to EDMS (Credential) Program, Nov.-Jan.	CALS 426 (4) CALS 445 (4) EDMS 470 (3) EDUC 417 (3)

TOTAL Units: 120-126

COMMUNICATION AND MEDIA STUDIES

DEPARTMENT OFFICE

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

DEPARTMENT CHAIR

Marco Calavita

ADMINISTRATIVE COORDINATOR

Brooke Tester

Faculty

Ed Beebout / Broadcast Journalism, Broadcast Management
Elizabeth Burch / Ethics, Scriptwriting, Environmental Communication,
International Communication, Theory and Research
Marco Calavita / History, Theory, Criticism, Screenwriting, Film Analysis
Nate Campbell / Radio Broadcasting, Recording
Michael Little / Film, Video, Criticism
Emily Acosta Lewis / Public Relations, New Media
Paul Gullixson / Newspaper Writing and Editing

Program Offered

Bachelor of Arts in Communication Studies

The Communication and Media Studies major is an innovative, interdisciplinary program that prepares students for careers in the media or for advanced graduate study.

Communication and Media 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, online, 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 televi-

sion stations, newspapers, magazines, public relations firms, and other media groups.

All on-campus media operate in conjunction with Communication and Media 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.ksun.fm; SSU-TV, the campus television station that provides news, information, and entertainment; and Primitivo PR, the campus public relations firm.

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 and Media Studies graduates work in corporate or non-profit organizations doing sales, publicity, or marketing. Wherever communication takes place and whenever media are used, Communication and Media Studies graduates can be found.

Bachelor of Arts in Communication Studies

(See page 89 for a sample four-year program.)

Degree Requirements	Units
General Education	50
Major Requirements	44
University Electives	26
Total units needed for graduation	120

Communication and Media 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 24 units of required coursework.
- **Major Skill:** All students complete 4 units of skill coursework.
- **Major Outlet:** All students complete 8 units of media outlet coursework.

- **Major Electives:** All students complete 8 units of COMS elective coursework.

Core Courses (24 Units Required)	24 Units
COMS 200 Principles of Media Communication or COMS 160 A/B Media and Society	4
COMS 202 Methods of Media Criticism or COMS 162 A/B Media Literacy	4
COMS 301 Media Theory and Research	4
COMS 302 Media Ethics and Law	4
COMS 402 Senior Seminar	4
COMS 499 Media Internship	4
Skill Courses (4 units required- additional units can be used for COMS elective credit)	4 Units
COMS 201 Video Production	4
COMS 210 Web and Print Journalism	4
COMS 240 Public Relations	4
COMS 265 Radio and Audio Production	4
COMS 320 Selected Topics in COMS (e.g. Screenwriting for Film)	4
COMS 322 Broadcast Journalism	4
COMS 323 Health, Science, and Environmental Journalism	4
COMS 324 Scriptwriting for TV	4
COMS 325 New Media	4
COMS 326 Advanced Presentation Techniques	4
Media Outlets (8 units required- additional units can be used for COMS elective credit)	8 Units
COMS 340 PR Firm	4
COMS 368 The Star	4
COMS 369 SSU TV	4
COMS 385 KSUN	4
Major Electives (8 units are required)	8 Units
COMS 320 Selected Topics in COMS (International Film)	4
COMS 320 Selected Topics in COMS (Media and the Movies)	4
COMS 321 International Communications	4
COMS 327 Media and Children	4
COMS 329 Reality TV and Film	4
COMS 435 Seminar in Mass Media (cross-listed as SOCI 435)	4
Total units in major	
	44

Note: 4 Elective Units are also earned by any of the following: 1) The COMS 160 A/B LC or COMS 162 A/B which yields 4 Elective units for the year; 2) Taking an extra/additional Skill or Media Outlet course; or 3) Taking an approved course in another Arts and Humanities department.

Four-Year Plan for Bachelor of Arts in Communication Studies

Freshman must take the COMS Learning Community (COMS 160 A/B, A3 and C3 or COMS 162 A/B, A3 and C3). Change of majors or transfers must enroll for COMS 200 and COMS 202 (or equivalent transfer credit). COMS 160 A/B satisfies the COMS 200 and COMS 162 A/B satisfies the COMS 202 requirement (LC alternates every other year), and yields 4 COMS Elective units.

50 GE (A-E)	Transfers 48 GE (A-E)
44 COMS	44 COMS
26 University Electives (or more, depending on how much major/GE unit double-counting)	28-30 University Electives (or more, depending on how much major/GE unit double-counting)

FRESHMAN YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
COMS 160A or 162A / GE Area A3/C3 (4)	COMS 160B or 162B / GE Area A3/C3 (4)
GE Area B4 (3)	GE Area B1 (3)
GE Area A2 (4)	University Elective (2)
GE D1 (3)	GE Area D2 (3)
	GE Area C1 (4)

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
GE Area B2 (3)	GE Area D4 (3)
GE Area D3 (3)	GE Area B3 (4)
GE Area C2 (4)	University Elective (3)
University Elective (2)	COMS Skill Course (4)
COMS 200 (4) or COMS 202	

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Upper-Division GE Area D5 (4)	Upper-Division GE (4)
Upper-Division GE Area E (3)	GE Elective (3)
Upper-Division University Elective (4)	COMS 301 (4)
COMS 302 (4)	COMS Outlet Course (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Upper-Division University Elective (3)	Upper-Division University Elective (3)
Upper-Division University Elective (4)	*COMS 402 (4)
*COMS 499 (4)	COMS Elective (4)
COMS Outlet Course (4)	COMS Outlet Course (4)

TOTAL UNITS: 120

* Students must take in their senior year

COMPUTER SCIENCE

DEPARTMENT OFFICE

Darwin Hall 116
(707) 664-2667
www.cs.sonoma.edu

DEPARTMENT CHAIR

Ali A. Kooshesh

ADMINISTRATIVE COORDINATOR

Elisabeth Meyer

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.

Bachelor of Science in Computer Science

(See page 91 for a sample four-year program.)

Degree Requirements for a Bachelor of Science in Computer Science

General Education (50 units, 6 covered by major requirements)	44 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:	3-5 units
Total units needed for graduation:	120

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 330 Introduction to: Game Programming	3
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 497 Internship	2

*Selected topics courses include Bioinformatics, Data Compression, 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 496 Senior Research Project	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: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
CS 115 (4)	CS 210 (1)
MATH 161(4) *	CS 215 (4)
GE (8)	CS 242 (4)
	GE (7)

SOPHOMORE YEAR: 29-31 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (14-15 Units)</i>
CS 252 (4)	CS 355 (4)
CS 315 (4)	Supporting Course in MATH/PHYS (3/4)
Supporting Course in MATH/PHYS (3/4)	CS Elective (3)
GE (4)	GE or University Elective (4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CS 351 (4)	CS 370 (4)
CS 460 (4)	CS 415 (4)
CS Elective (3)	CS Elective (3)
GE (4)	GE (4)

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
CS 450 (4)	CS 470 (3) or CS 496 (3)
CS 454 (4)	GE or University Elective (11)
CS Elective (3)	
GE (4)	

TOTAL UNITS: 120

* Students who are GE Math eligible but are not ready to take MATH 161 should consider taking MATH 161X (6 units)

COUNSELING

DEPARTMENT OFFICE

Nichols Hall 220
(707) 664-2544
www.sonoma.edu/counseling

DEPARTMENT CHAIR

Maureen Buckley

ADMINISTRATIVE COORDINATOR

Stephanie Wilkinson

Faculty

Maureen Buckley
Adam Hill
Tiffany O'Shaughnessy
Julie Shulman
Adam Zigelbaum

Programs Offered

Master of Arts in Counseling

Option I Clinical Mental Health Counseling: Marriage and Family Therapy (MFT) and Licensed Professional Clinical Counseling (LPCC)

Option II School Counseling: Pupil Personnel Services Credential

The 60-unit graduate program in counseling offers two professional training options: Option I prepares students for Clinical Mental Health Counseling (CMHC) and eventual licensure as a Marriage and Family Therapist (MFT) and/or as a Licensed Professional Clinical Counselor (LPCC); 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 traineeship/field experience in some aspect of counseling, permitting the integration of theory, research, and practical application. The Department is prepared to assist CMHC 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 and college-level counseling services. 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 fieldwork 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 for Higher Education Accreditation (CHEA), 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 Clinical Mental Health 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, 511, 520, 524, 527A/B, 528A/B, and 545. Admission to individual courses in no way implies admission to the master's degree program. You may take these courses through Open University. Call Extended Education for more information (664-2394).

Master of Arts in Counseling

(See page 94 for a sample four-year program.)

Admission Requirements

1. Have a B.A. degree, preferably in psychology or other related behavioral sciences. School Counseling students should have some first hand knowledge of the K-12 school system.
2. For both options, a course in personality theory is required; in addition, a course in abnormal psychology is required for the CMHC 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. Students accepted into the School Counseling track will need to provide evidence of a valid Certificate of Clearance.
3. Applicants are 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. Applicants with an undergraduate GPA below 3.0 should include an explanation of any extenuating circumstances.
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.

The Departmental Admissions Committee has found the following criteria meaningful 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.

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 web page. 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/contact/).

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, visit the department web page at www.sonoma.edu/counseling/.

Major Core Requirements

COUN 501 Theory and Practice of the Professional Counselor	4
COUN 510A Applied Counseling Techniques and Assessment	4
COUN 513 Research, Evaluation and Assessment in Counseling	4
COUN 570 Multicultural Counseling	4
Total units in M.A. core	16

Option I - Clinical Mental Health Counseling (MFT & LPCC)

Completion of the CMHC option, in addition to the major core requirements above, satisfies all academic requirements for the MFT & LPCC licenses. If the Board of Behavioral Sciences (BBS) mandates changes in curriculum for trainees, in either license path 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 502 Whole Lifespan Development	4
COUN 503 Clinical Diagnosis & Treatment Planning	4
COUN 510B Applied Counseling Practicum & Advanced Techniques	4
COUN 511F Career Counseling: Theoretical Foundations, Measurement and Assessment, and Issues Throughout the Life Span	3
COUN 512 Theory and Practice of Group Counseling	4
COUN 515A (CMHC) Supervised Field Experience I	4
COUN 515B (CMHC) Supervised Field Experience II	4
COUN 540 Counseling Diverse Couples & Families	4
COUN 545 Counseling Orientation - Law and Ethics, and Case Management Practices	4
COUN 580 Relationship and Sexuality Counseling	4
COUN 582 Psychopharmacology for Counselors	3
COUN 583 Substance Abuse & Dependence	2
Total units in the Community Counseling/MFT option	44

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 511F Career Counseling: Theoretical Foundations, Measurement and Assessment, and Issues Throughout the Life Span	3
COUN 511G Academic/Career Planning and Counseling Issues of K-12 Populations	1
COUN 514A School Counseling Field Experience I	4
COUN 514B School Counseling Field Experience II	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	4
COUN 528A Consultation	3
COUN 528B Crisis Intervention	1
Total units in the School Counseling option	36
Total units in the degree	60

All master's candidates are required to complete a culminating project (in lieu of a Master's thesis) demonstrating a comprehensive and integrated understanding of the field of counseling. School Counseling culminating projects will be comprised of 1) a clinical case presentation in the 514A/B Field Experience sequence; and 2) a culminating portfolio. Clinical Mental Health Counseling culminating projects will be comprised of 1) a clinical case presentation in the 514 A/B Field Experience sequence; and 2) passing the Counselor Preparation Comprehensive Exam (CPCE). Six hundred (600) hours of supervised field experience are required for both the CMHC and School Counseling options.

Community College Counseling Credential

The M.A. degree program is not intended to meet criteria for a community college counseling specialization.

Sample Two-Year Program for Master of Arts in Counseling

FIRST YEAR: 29-32 Units	
<i>CMHC: MFT/LPCC</i>	<i>School Counseling/PPSC</i>
<i>Fall Semester (16 Units)</i>	<i>Fall Semester (16 Units)</i>
COUN 501 (4)	COUN 510A (4)
COUN 510A (4)	COUN 520 (4)
COUN 502 (4)	COUN 511F (3)
COUN 545 (4)	COUN 511G (1)
	COUN 527 (4)
<i>Spring Semester (13 Units)</i>	<i>Spring Semester (16 Units)</i>
COUN 510B (4)	COUN 501 (4)
COUN 503 (4)	COUN 510B (4)
COUN 582 (3)	COUN 524 (4)
COUN 583 (2)	COUN 526 (4)
SECOND YEAR: 28-31 Units	
<i>Fall Semester (15 Units)</i>	<i>Fall Semester (12 Units)</i>
COUN 515A (4)	COUN 514A (4)
COUN 540 (4)	COUN 528A/B (4)
COUN 570 (4)	COUN 513 (4)
COUN 511F (3)	
<i>Spring Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
COUN 513 (4)	COUN 514B (4)
COUN 515B (4)	COUN 521 (4)
COUN 512 (4)	COUN 523 (4)
COUN 580 (4)	COUN 570 (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 author of eight works of fiction: *Scars Make Your Body More Interesting*, *The Unexamined Wife*, *The Faces Reappear*, *House Tours*, *Interior Designs*, *Expiration Date*, and *You Are Not Alone and Other Stories*, winner of the 2011 Spokane Prize for Short Fiction. She has also published two works of non-fiction: a memoir, *Ground Rules*, and, in collaboration with Alan Lew, *One God Clapping*, winner of the 2000 Josephine Miles PEN Award for Literary excellence. Her stories have appeared in literary journals such as *zzyzva*, *Epoch*, *Alaska Quarterly*, and *Superstition Review*. She is a MacDowell Fellow and before coming to SSU taught at U.C. Davis, U.C. Berkeley, 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*, (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
Eric Williams

ADMINISTRATIVE ANALYST
Lisa Kelley

ADMINISTRATIVE COORDINATOR
Elsa Thompson

Faculty

Emily Asencio
*Barbara Bloom
Diana Grant
Patrick Jackson
Napolean Reyes
Eric Williams
* Faculty Early Retirement Program

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; the implications of diversity along the lines of race, gender, and class; and the reactions of those agencies to social perceptions and political pressures.

The student is offered an interdisciplinary, multi-methodological, 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. Adult and juvenile probation, law enforcement, judicial administration, public advocacy, prevention and diversion, and correctional and parole services are studied in detail from several perspectives. 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, law, criminology, and other graduate fields.

Bachelor of Arts in Criminology and Criminal Justice Studies

(See page 97 for a sample four-year program.)

Degree Requirements	Units
General education	50
Major core requirements	40
CCJS electives	8
Criminal Justice and/or Social Science electives (chosen under advisement)	12
Total units needed for graduation	120

Please note that transferable units from other institutions may be applied to the category “Criminal Justice and/or Social Science electives.” Coursework taken at this university to complete the major requirements must be selected in consultation with your department advisor

Upper division GE in Social Sciences may count toward the 12 units of “Criminal Justice and/or Social Science electives.”

Students must consult with a faculty advisor before beginning core courses. CCJS students (majors and minors) must receive a C- or better in the core and elective courses.

Major Core Requirements

CCJS 201 Criminal Justice and Public Policy	4
CCJS 370 Seminar in Research Methods	4
CCJS 330 Government and the Rule of Law or CCJS 404 Introduction to Constitutional Law	4
CCJS 405 Rights of the Accused or CCJS 489 Civil Liberties and the Constitution	4
CCJS 407 Police, Courts, and Community Relations or CCJS 430 Women and Crime or CCJS 470 Media, Crime, and Criminal Justice or CCJS 480 White Collar Crime	4
CCJS 420 Seminar in Criminology	4
CCJS 450 Punishments and Corrections	4
CCJS 490 Senior Seminar: Criminology and Criminal Justice Studies	4
CCJS 497 Juvenile Justice	4
CCJS 499 Internship*	4
Total units in major core	40

* The internship requirement may, at the department's discretion, be waived for students currently or previously employed in criminal justice or a related area. It must be substituted with another 4-unit CCJS course.

Minor in Criminology and Criminal Justice Studies

The minor consists of a 20-unit pattern of Criminology and Criminal Justice Studies courses at SSU 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 and 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 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: 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (18 Units)</i>
ENGL 101 (4)	PHIL 101 (4)
Mathematics GE (3)	Computer Science (3)
GE (3)	SPAN 101 (4)
Electives (5)	SPAN 101L (1)
	GE (3)
	GE (3)

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CCJS 201 (4)	GE (3)
SPAN 102 (4)	GE (3)
SPAN 102L (1)	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>
CCJS 420 (4)	CCJS 405 or 489 (4)
CCJS 404 or 330 (4)	CCJS 370 (4)
CCJS 450 (4)	Upper-Division GE (3)
Upper-Division GE (3)	Electives (4)

SENIOR YEAR: 27 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CCJS 499 (4)	CCJS 490 (4)
CCJS 497 (4)	CCJS 407, 430, 470, or 480 (4)
Upper-Division GE (4)	Electives (4)
Upper-Division GE (3)	

TOTAL UNITS: 120

ECONOMICS

DEPARTMENT OFFICE

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

DEPARTMENT CHAIR

Steven Cuellar

ADMINISTRATIVE COORDINATOR

Tracy Navas

Faculty

Florence Bouvet
Steven Cuellar
Robert Eyler
Merlin Hanauer
Chong-Uk Kim
Michael Visser

**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 these types of courses.

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

(See page 99 for a sample four-year program.)

Degree Requirements	Units
General education	50
Major requirements	41-44
General electives	26-28
Total units needed for graduation	120

Prerequisites

Majors must complete a math/statistics requirement (ECON 217, 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	8
Total units in the major core	26-28
Field concentration or advisory study plan	15-16
Total units in the major	41-44

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
ECON 317 Introduction to Econometrics	4
Total units in the minor	20

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.

Sample Four-Year Program for Bachelor of Arts in Economics

FRESHMAN YEAR: 29-30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14-15 Units)</i>
ENGL 101 (A2) (4)	PHIL 101 or 102 (A3) (4)
MATH 165 (B4) (4), BUS 211 (4) or Econ 217 (4)**	GE (B1 or B2 with lab) (3-4)
ECON 204 (D5) (4)	ECON 205 (4)
Elective: UNIV 102 (3)	GE (D3) U.S. History (3)

SOPHOMORE YEAR: 30-33 Units

<i>Fall Semester (14-16 Units)</i>	<i>Spring Semester (16-17 Units)</i>
GE (C2) (3-4)	GE (B1 or B2) (3)
ECON 304 (4)	POLS 200 or 202 (D4) (3)
ECON 317 (4)	GE (C1*) (3-4)
GE (D1* or D2) (3-4)	GE (B3) (3)
	ECON 305 (4)

JUNIOR YEAR: 28-30 Units

<i>Fall Semester (14-15 Units)</i>	<i>Spring Semester (14-15 Units)</i>
UD GE (C3*) (3-4)	GE (additional C if units needed) (3-4)
Economics Elective	Economics Elective
Elective Course (3)	UD GE (E*) (3)

SENIOR YEAR: 34 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (15 Units)</i>
Economics Seminar (4)	Economics Seminar (4)
Elective Courses (12)	Electives (11)
UD GE (D1 or D2) (3)	

TOTAL UNITS: 120

* One of these courses must be *Ethnic Studies*

** If you plan to take either MATH 131 or MATH 161 (B4), then you can take BUS 211 instead of MATH 165

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

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 receive eligibility and application procedures at the SSU Financial Aid Office.

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.

Noyce Scholarship

The Noyce 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 internship 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/smtri).

SMTRI (Mathematics and Science Teacher Initiative) Programs

SMTRI supports a variety of programs to recruit math and science majors into the teaching profession as well as ensure more credentialed teachers receive an additional Foundational Level Credential in science and/or math. It supports undergraduate education courses to introduce future teachers to the teaching profession; it assists newly-credentialed math and science teachers with a stipend to offset some of the costs associated with obtaining a credential. Additionally, it pays the five units for the Foundational Level General Science Teaching Credential Institute offered in the summer for credentialed teachers and nine units for the Foundational Level Mathematics Teaching Credential Institute offered in the spring, summer, and fall.

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.

Undergraduate Programs

The School of Education offers a BA degree in Early Childhood Studies and a minor in Early Childhood Studies.

Career Opportunities

The Program will prepare graduates for multiple career paths, including:

- Infant, toddler, and preschool teachers
- Administrators of programs for young children and families
- Professional in health fields, including child life specialists
- Pre-requisite work for the multiple subjects credential for elementary school teachers
- Pre-requisite work for the special education teaching credential

Students may also work with an advisor to prepare for graduate studies in related fields such as education; human development; social work; and counseling.

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 www.ctc.ca.gov/credentials/creds/child-dev-permits.html

Multiple Subject and Single Subject Credentials

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).

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.

Education Specialist Credential

The Education Specialist (special education) Credentials, Preliminary and Clear, 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). Added Authorization for Autism Spectrum can be added to Level I.

Advanced Credentials and Certification

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:

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

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; 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 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 (requirement depends on type of credential sought);
8. Submission of negative TB test dated within 60 days 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 the Multiple Subject program, a passing score on the appropriate CSET subtests is required. See the CSET Exam information and registration guide: <http://www.ctcexams.nesinc.com>.
14. For admission to the Single Subject and Education Specialist programs, a passing score on the appropriate CSET subtest is required or verification of having completed a subject matter waiver program. See the CSET exam information and registration guide for more details (www.ctcexams.nesinc.com).

Contact the Student Services Office for CTC 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.

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.

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, an integrated program is available for majors in music 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 Student Services 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 retaken 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
- All credential candidates in Multiple Subject and Single Subject programs will be required to successfully complete the Performance Assessment for California Teachers (PACT).

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 concentrations 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/ma-handbook.pdf

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: the thesis/project, cognate, or 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 the development of 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 three 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)

DEPARTMENT OFFICE

Stevenson Hall 1078
(707) 664-3238
fax: (707) 664-2483
www.sonoma.edu/education/csse/index.html

DEPARTMENT CHAIR

Jessica Parker

ADMINISTRATIVE ANALYST

Kathryn Teixeira

Faculty

Kelly Estrada
Karen Grady
Jessica K. Parker
Megan Taylor

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 commitment 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, the corporate sector, and leadership-based initiatives and programs. 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 establish the professional understandings and attitudes for growth and development throughout a teaching career.

Coursework combined with the field experience in the program will prepare candidates to be:

- Competent in basic classroom skills.
- Knowledgeable and enthusiastic about students, learning, and teaching.
- Respectful of and knowledgeable about cultural, linguistic, and learning diversity, and informed about practices for teaching all students.
- Continue their development as professional educators. After completion of the Single Subject Credential Program, candidates will be recommended for the Preliminary California Single Subject Teaching Credential in a subject area. Successful completion of the program prepares candidates to teach in California's culturally and linguistically diverse classrooms.

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 in the fall semester only. Credentials are offered in the following areas:

Art
English
Mathematics
Music
Physical Education
Science
Social Studies
World Language

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 who wish to take longer than two semesters to complete the credential program may extend their program to four semesters. More information regarding the extended program may be obtained from the single subject program advisor at (707) 664-3176.

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

Program Prerequisite Courses

EDUC 417 School and Society	3
EDSS 418 Development in Adolescence and Emerging Adulthood	3
Total Prerequisite courses	6

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

EDSP 433 Teaching Adolescents with Special Needs	3
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	19
Total units for program (including Prerequisites)	42

Teaching Performance Assessment

A teaching performance assessment (TPA) is required for all those seeking a single subject teaching credential in California. The Performance Assessment for California Teachers (PACT) is the teaching performance assessment used by the SSU 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 samples 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 kinesiology and music, who are seeking a single subject teaching credential. All other subject areas prepare students for subject matter competency.

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. Jessica Parker (664-3176).

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

- Earned a baccalaureate degree from an accredited college or university;
- Completed corequisite courses and all Phase I program courses in the single subject credential program;
- 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

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.

Potential Areas of Emphasis (AREM)

- Education Technology
- Reading and Language
- Early Childhood Education
- English as a Second Language
- Psychology
- Kinesiology
- History
- Critical Theory
- Community Education
- Leadership

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:	If You Begin Spring Semester:
<i>Fall</i>	<i>Spring</i>
EDUC 570	EDUC 570
EDCT 585	AREM
<i>Spring</i>	<i>Fall</i>
EDCT 586	EDCT 585
AREM	AREM
<i>Fall</i>	<i>Spring</i>
EDUC 571 or AREM	EDCT 586
AREM	EDUC 571 or AREM
<i>Spring</i>	<i>Fall</i>
AREM	EDUC 571 or AREM
AREM or EDUC 571	AREM

**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 598/599, EDUC 572 or EDUC 573. (See the M.A. Graduate Student Handbook for a discussion of the thesis, cognate, and individualized examination pathway options for completing your program)

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 abroad, for teaching English learners in K-12 settings, and in adult education settings, such as community colleges. The concentration will also prepare candidates for doctoral studies in related fields in education. Courses in the concentration can be used to apply for a TESOL certificate and to prepare for the CTEL examination from the California Commission on Teacher Credentialing.

Prerequisites

- Two years of university foreign language study or equivalent
- 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
EDTE 540

Spring

EDUC 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
EDTE 541

Fall

EDUC 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: EARLY CHILDHOOD STUDIES (ECS)

DEPARTMENT OFFICE
 Stevenson 1078
 (707) 664 3238
 fax: (707) 664 2483

DEPARTMENT CHAIR
 Chiara Bacigalupa

ADMINISTRATIVE ANALYST
 Kathryn Teixeira

Faculty

Chiara Bacigalupa
 Charles A. Elster
 Johanna Filp-Hanke

Programs Offered

The Department of Early Childhood Studies offers a major in Early Childhood Studies, a minor in Early Childhood Studies and a Master of Arts in education with concentration in Early Childhood Education. Students 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.

Bachelor of Arts in Early Childhood Studies

The Bachelor of Arts Degree in Early Childhood Studies is designed to provide graduates with the knowledge, skills, and dispositions needed to work effectively with children in early childhood (birth to age 8). Students will study multi-disciplinary theories, research, and best practices, with an emphasis on socio-cultural factors that affect learning and development. They will learn how to use theories and research from anthropology, child development, education, health, psychology, sociology, and multicultural studies to promote the cognitive, social, emotional, and physical development of diverse young children. Students will study the science of assessing children's growth and development, and they will acquire skills in effectively communicating these findings to families and community partners. The program also prepares professionals to be leaders and advocates on behalf of all children and families.

Career Opportunities

The program prepares graduates for multiple career paths, including:

- Infant, toddler, and preschool teachers
- Administrators of programs for young children and families
- Child Life Specialists
- Pre-requisite work for the multiple subjects credential for

elementary school teachers

- Pre-requisite work for the special education teaching credential

Students may also work with an advisor to prepare for graduate studies in related fields such as education, human development, social work, and counseling.

Degree Requirements	Units
General education	50
Lower Division	16
Upper Division	26
Electives	28
Total units needed for graduation	120

Admission Requirements

For admissions to the major, students must have achieved:

- 2.0 GPA
- There is no prerequisite coursework for this major

Major Core Requirements (36 units)

EDEC 201 Foundations of Early Care and Education	4
EDEC 220 Observing Child Development in the First Eight Years	4
EDEC 237 Creating Environments for Young Children	4
EDEC 270 Children and Families in a Diverse Society	4
EDEC 420 Child Development in the Family, School and Community	3
EDEC 437 Integrated Curriculum in Early Childhood Classrooms	4
EDSP 432 Young Children with Special Needs	4
EDEC 435 Advocating for Children and Families	4
EDEC 460 Studying Children in Context	4
EDEC 478 Early Childhood Studies Portfolio	1

Major Electives (6 units)

EDEC 490 Special Topics	1-4
EDUC 417 School and Society	3
EDMS 470 Multicultural Pedagogy	3
AMCS 339 Ethnic Groups and American Social Policy	4
AMCS 374 The Multiracial Experience	4
AMCS 445 Multiculturalism and Education	4
CALS 405 The Chicano/Latino Family	4
CALS 450 Chicano/Latino Children's Literature	4
ENSP 440 Education and the Environment	4
ENSP 442 Methods and Models in Education and the Environment	4
KIN 400 Elementary School Physical Education	3
KIN 410 Lifespan Motor Development	3
PSY 409 Social and Emotional Development	4
PSY 411 Behavioral and Emotional Problems of Children	3-4
PSY 418 Psychology of the Family	3-4
PSY 431 Introduction to Art Therapy	3-4

PSY 448 Cognitive Development	4
SOCI 345 Sociology of Families	4
SOCI 445 Sociology of Childhood and Adolescence	4

Electives should be chosen in consultation with an advisor. Students interested in applying to the Multiple Subjects Credential program should choose EDUC 417 and EDMS 470 as electives.

Early Childhood Studies Minor

The minor in Early Childhood Studies 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, Social Work, Nursing, and others. For a minor in Early Childhood Studies, students must take five upper-division core courses in Early Childhood Education (19 units) and an additional six units of elective courses, for a total of 25 units. Complete information about the requirements for the minor and complete application packets may be found online at www.sonoma.edu/education/ecs/index.html

Program Course Work

The Early Childhood Studies Minor involves 25 units of coursework: 19 units of core courses and 6 units of electives. The courses can be completed in four semesters, together with the coursework for the major.

Core Courses

EDEC 220 Observing Child Development in the First Eight Years	4
EDEC 237 Creating Environments for Young Children	4
EDEC 270 Children and Families in a Diverse Society	4
EDEC 420 Child Development in the Family, School and Community	3
EDSP 432 Young Children with Special Needs	4

Elective Courses

Choose two courses from:

AMCS 339 Ethnic Groups and American Social Policy	3
AMCS 374 The Multicultural Experience	4
AMCS 445 Multiculturalism and Education	4
CALS 405 The Chicano/Latino Family	3
CALS 450 Chicano/Latino Children's Literature	3
EDEC 201 Foundations of Early Care and Education	4
EDEC 435 Leadership/Advocacy for Children/Families	4
EDEC 437 Integrated Curriculum in Early Childhood Class Rooms	4
EDEC 460 Studying Children in Context	4
EDEC 490 Special Topics	1-4
EDMS 470 Multicultural Pedagogy	3
EDUC 250 Teaching in a Changing World	3
EDUC 417 School and Society	3
ENSP 440 Education and the Environment	4
ENSP 442 Methods and Models in Education and the Environment	3
KIN 400 Elementary School Physical Education	3
KIN 410 Lifespan Motor Development	3
PSY 409 Social and Emotional Development	4

PSY 411 Behavioral and Emotional Problems of Children	3
PSY 418 Psychology of the Family	3
PSY 431 Introduction to Art Therapy	3
PSY 448 Cognitive Development	4
SOCI 345 Sociology of Families	4
SOCI 445 Sociology of Childhood and Adolescence	4

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 www.sonoma.edu/education/leee/early-childhood/

Permit Course Work

Applicants for the Child Development Permit must complete 15 units of coursework from the following categories. Please see an Early Childhood advisor for more information.

Child Growth and Development

EDEC 220 Observing Child Development in the First Eight Years	4
EDEC 420 Child Development in the Family, School and Community	3
EDEC 532 Social-Moral Development in Childhood	3
EDEC 538 The Development of Language and Thinking, Infancy through Middle Childhood	3
PSY 302 Development of the Person	3
PSY 410 Child Development	3

Child, Family, and Community

EDEC 270 Children and Families in a Diverse Society	4
EDEC 420 Child Development in the Family, School, and Community	3
PSY 418 Psychology of the Family	3
SOCI 345 Sociology of Families	4

Early Childhood Programs/Curriculum

EDEC 237 Creating Environments for Young Children	4
EDEC 437 Integrated Curriculum in Early Childhood Classrooms	4

General Early Childhood Development

EDEC 201 Foundations of Early Care and Education	4
EDEC 460 Studying Children in Context	4
EDEC 435 Leadership and Advocacy on Behalf of Children and Families	4
EDEC 531 Play and its Role in Development and Learning	3
EDEC 535 Advocacy and Leadership on Behalf of Families and Children	3
EDEC 490 Special Topics	1-4
EDSP 432 Young Children with Special Needs	4
LING 430 Language Acquisition and Communicative Development	4
PSY 411 Behavioral and Emotional Problems of Children	3
PSY 448 Cognitive Development	4

Supervised Field Experience

EDEC 220 Observing Child Development in the First Eight Years	4
EDEC 437 Integrated Curriculum in Early Childhood Classrooms	4

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 www.sonoma.edu/education/ecs/index.html

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	3
EDEC 535 Advocacy and Leadership on Behalf of Families and Children	3
EDEC 538 Cognitive and Language Development 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	4
EDSP 423 Assessment, Curriculum and Instructional Strategies	3
EDSP 432 Young Children with Special Needs	4

Curriculum Teaching and Learning

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

Reading and Language

EDRL 507 Research in Language and Literacy	3
EDRL 521A Language Development in First and Second Languages	3
EDRL 524 Literature and Literacy	3

EDUCATION: EDUCATIONAL LEADERSHIP AND SPECIAL EDUCATION (ELSE)

DEPARTMENT OFFICE

Stevenson Hall 1078
(707) 664-3115
fax: (707) 664-2483
www.sonoma.edu/education/else/index.html

ADMINISTRATIVE ANALYST

Kathryn Teixeira

DEPARTMENT CHAIR

Jennifer Mahdavi

Faculty

Emiliano Ayala
Sandra Ayala
Jennifer Mahdavi
Viki Montera
Paul Porter

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 a Preliminary and Clear Education Specialist in Special Education and the Preliminary and Clear Administrative Services Credentials. Masters of Arts degrees are also offered in conjunction with these programs. 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 professionally 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, Intern and Clear Mild/Moderate, Moderate/Severe Disabilities

SERVICE CREDENTIALS

Administrative Services - Preliminary, Intern, and Clear

ADDED AUTHORIZATIONS

Autism Spectrum Disorders

MASTER'S DEGREE (M.A.) PROGRAMS

Educational Leadership

Special Education

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-22 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 have autism or are English learners. The Clear credential may be earned at SSU in place of a Beginning Teacher Support and Assessment (BTSA) program.

The Administrative Service Credentials, Preliminary Administrative Services, and Clear Administrative Services prepare graduates for positions of leadership in P-12 educational institutions. The Clear Administrative Services Credential Program 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 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, autism, 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

Corequisites (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 421D Healthy Learners and School Environments 1

EDSP 422A Case Management and Transition Planning in Special Education 3

EDSP 422B Participant Observation/Fieldwork 1

EDSP 423 Assessment of 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 a Preliminary Education Specialist (EP) 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 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 www.sonoma.edu/education/else/preliminary-education/es-internship.html or in the School of Education.

Interns are bound by the same program requirements, policies and procedures as all ES candidates except for the student teaching requirement. Instead of student teaching in the final semester of the program, which is typical in the ES 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 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.

Clear Education Specialist Credential

After a candidate has completed a Preliminary Education Specialist Credential, which permits employment as a special education teacher, he or she must complete a Professional Credential Program (Induction) within five years of the date of issuance of the Preliminary Credential. A single induction program will clear all preliminary education specialist credentials at one time (mild-moderate, moderate-severe, etc.). Candidates may choose to complete Clear Induction through BTSa or a university based program.

A valid Preliminary Education Specialist Credential is a prerequisite to this program. However, holding a teaching position is not a requirement for entering an Induction program, nor for clearing a preliminary credential. Candidates will need field experience with students with disabilities to be able to complete induction requirements.

Candidates will be able to apply for the Clear Education Specialist Credential through the Credentials Office at the end of a one-year, 12 unit program.

The SSU Clear Induction program aligns with our Master's Degree in Education with an emphasis in Special Education.

Please note that our Clear Induction program admits candidates during the Fall term only.

Coursework for Clear Induction

EDSP 501 (3) Formative Assessment and Induction into Teaching (FALL)

EDSP 504 (3) Formative Assessment and Induction Culmination (SPRING)

Electives (6) Select two courses of interest to candidate from a menu of options

Total units for Clear Education Specialist Credential 12

Electives

Each candidate will also take 6 units of coursework that reflect his or her own interests for professional development. A menu of options is offered to candidates to advance expertise and to become a more knowledgeable, reflective and effective special education teacher. These courses may not have been taken as part of a previous credential program. Additional options may be considered on an individual basis (e.g., independent study about transition programs). The Education Specialist Clear Credential Coordinator will advise and evaluate the menu of options in consultation with the beginning teacher and district support provider.

Candidates may also choose to complete a Non University Based Activity (NUBA) to complete a portion of the Induction Program (see description below).

Academic Focus

EDSP 425: Developing Academic Performance for Students with Disabilities

EDMS 474: Mathematics in the Elementary School

EDMS 475: Science in the Elementary School

EDMS 471: Social Studies in the Elementary School

EDSP 502: Advanced Pedagogy in Special Education

Special Education Focus

EDSP 513: Current and Emerging Research in Special Education

EDSP 515: Special Education Law

Focus on English/Second Language Learners

EDMS 411: Teaching Second Language Learners

EDTE 541: Advanced Pedagogical Grammar

Focus on Teaching Students with Moderate to Severe Disabilities

EDSP 426: Communication Development: Assessment & Instruction

EDSP 428: Teaching Students with Moderate to Severe Disabilities

Focus on Reading and Language Arts

EDRL 521A: Language Development in First and Second Languages

EDRL 521B: Reading & Language Arts in First and Second Languages (3)

EDRL 522: Assessment & Teaching in Reading (3)

EDRL 524: Literature and Literacy

Focus on Technology

EDCT 552: Educational Technology Praxis

EDCT 557: Educational Technology Project Management

Focus on Early Childhood

EDEC 532 (3) Social-Moral Development in Childhood

EDEC 538 (3) The Development of Language and Thinking in Infancy through Middle Childhood

Non-University Activities

As part of our CCTC approved course of study, Clear Induction candidates may choose to waive specific course elements via approved Non University Based Activities.

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	3
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 districts to prepare graduates for positions of leadership in P-12 educational settings. Both the Preliminary Administrative Services Credential and the Clear Administrative Services Credential 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 Preliminary program of 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 including field experiences are provided that emphasize the acquisition of personal awareness and personal reflection about leadership.

Preliminary Administrative Services Credential

The Preliminary Administrative Services Credential 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 five 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 a Personal Statement of Interest (see application for criteria);
5. Submit evidence of successful passage of CBEST before or within the first semester of program course work;
6. Attend a program admissions interview and/or submit an application, including a statement of professional goals; and
7. Two copies of valid clear teaching or service credential.

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 Preliminary Administrative Services Credential 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 Preliminary/Intern programs	27

The program is usually completed in two semesters; 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.

Clear Administrative Services Credential

The Clear Administrative Services Credential program 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, Clear Administrative Services Credential candidates must:

1. Possess a valid Preliminary Services Credential
2. Verify grade point average of at least 3.00 in the last 30 semester units;
3. Secure favorable recommendations from two school administrators indicating applicant's administrative and leadership capability and current administrative activities and accomplishments;
4. Provide two photocopies of a valid Preliminary Administrative Services Credential; and
5. Submit a Personal Statement of Interest (see application for criteria).
6. Verify an offer of employment as an administrator.

The Clear 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.

Clear Administrative Services 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 Clear 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 30-36 semester units inclusive of course requirements for the Preliminary or Clear 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.

EDUCATION: LITERACY STUDIES AND ELEMENTARY EDUCATION (LSEE)

DEPARTMENT OFFICE

Stevenson 1078
(707) 664 3238
fax: (707) 664 2483

DEPARTMENT CHAIR

Susan Campbell

ADMINISTRATIVE ANALYST

Kathryn Teixeira

Faculty

Susan Campbell
Paul Crowley
Paula Lane
Kathy Morris
MaryAnn Nickel

Programs Offered

The Department of Literacy Studies and Elementary Education meets the needs of Kindergarten through upper elementary students and teacher credential candidates. The goal of SSU's Literacy program and Multiple Subject Credential program is to prepare current and future educators 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 coursework and field experience. Upon completing the program, students will have both breadth and depth of knowledge about teaching and learning, and will be capable of making informed decisions in diverse settings.

The Department of Literacy Studies and Elementary Education offers the following programs: 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.

The goal of the Department of Literacy Studies and Elementary 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 Program

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. 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.

Multiple Subject Program Courses

The Department of Literacy Studies and Elementary Education provides professional preparation for aspiring teachers to play a vital role in California public schools. The design of Sonoma State University's Multiple Subject 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 Corequisite

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 (Corequisite)	3

**Total Prerequisite/corequisites 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 Younger Readers	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 for 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 LSEE faculty eagerly participates in this experience is evidence of the value placed on this aspect of the Multiple Subject Program.

CORE School Sites

The LSEE 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 Alameda County (Oakland U.S.D.).

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 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 summative assessment employed in 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 that are videotaped and analyzed by the student teacher. 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 be recommended for a teaching credential.

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. Teachers, administrators, and curriculum specialists in all areas are encouraged to take elective courses in the graduate program to increase their knowledge of literacy.

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 Added Authorization Program

The Reading Added Authorization (AA) prepares individuals to take a leadership role at the school site and emphasizes work with students who experience difficulties with reading. Reading AA 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 AA Program are encouraged to continue to earn the Reading and Language Arts Specialist Credential (program revisions are currently under review by the California Commission on Teacher Credentialing). Teachers at any level, multiple or single subject, Special Ed educators, may take these five courses to be better informed about teaching reading, writing, listening and speaking.

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 On-Campus Reading and Writing Clinic	3

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

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 serves as the Graduate Reading Advisor. For more information, please visit the Reading Program website at www.sonoma.edu/lsee/index.html or contact Dr. Nickel at nickel@sonoma.edu.

ENGINEERING SCIENCE

DEPARTMENT OFFICE

Salazar Hall 2004

(707) 664-2030

Fax: (707) 664-2361

www.sonoma.edu/engineering

DEPARTMENT CHAIR/PROGRAM DIRECTOR

Meng-Chih Su

ADMINISTRATIVE COORDINATOR

Ronnie Goodlund

TECHNICAL STAFF

Shahram Marivani

Faculty

Farid Farahmand

Haider Khaleel

Jack Ou

*Saeid Rahimi

B. Ravikumar

Meng-Chih Su

ASSOCIATED FACULTY

Elaine McDonald-Newman, Suzanne Rivorie, Hongtao Shi, Lynn Stauffer

ADJUNCT FACULTY

Alan Bloom, Jim Brede, Eric Drucker, Don Estreich, Tim Griesser, Ali Kujoory, David Leyba, Shahram Marivani, Salam Marougi, Mario Righi, Gordon Stuck, Giampaolo Tardioli

* Faculty Early Retirement Program

Programs Offered

Bachelor of Science in Electrical Engineering
(Electrical Engineering with minor in Mathematics)

Minor in Electrical Engineering for non-EE majors

Professional Science Masters (PSM) programs:
Master of Science in Computer and Engineering Science
(Two tracks: Communications and Photonics, and
Computer Hardware and Software Systems)

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 Electrical Engineering, 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 Electrical Engineering (BSEE) program has been designed to prepare students for an exciting career in

designing and manufacturing of electronic systems, communications systems and networks, microprocessors 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.

Bachelor of Science in Electrical Engineering (Electrical Engineering with focus in Electronics and Communications)

(See page 129 for a sample four-year program.)

Consistent with the mission of the University, the mission of the BSEE 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 Electrical Engineering (EE) Program at Sonoma State University is an innovative program in which the curriculum has been designed to provide students with education in electrical engineering with electronics and communications.

The curriculum includes 50 units of General Education courses (9 units overlap with the required Physics, Computer Science, and Mathematics courses); a 33-unit core in mathematics, computer science, and basic sciences; a 48-unit core in Electrical Engineering 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 Electrical Engineering 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.

BSEE Educational Objectives

1. Educate and prepare students to be successful in the profession of electrical engineering.
2. Educate students to successfully pursue graduate degrees.
3. Provide a strong foundation to the students for lifelong learning and being responsible citizens.

BSEE Program Outcomes

The students will attain:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. 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.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in lifelong learning.
10. A knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
12. 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.
13. Expertise to design and conduct scientific and engineering experiments, analyze data and interpret results.

Career Paths and Opportunities

The BSEE 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:

1. Designing and manufacturing of electronic systems;
2. Communications systems;
3. Networking;
4. Computer engineering;
5. Telecommunications;
6. Optical fiber communications;
7. Integrated circuits;
8. Research and development in the areas above; and/or
9. 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 engineering, and computer science.

Program Requirements

Degree Requirements	Units
Major requirements (including technical electives)*	52
Support courses (physics, computer science, and mathematics**)	31
GE courses	37
Total units needed for graduation	120**

* 4 units double count in GE units.

** 9 units double count in GE units.

Electrical Engineering

ES 110 Introduction to Engineering & Lab Experience	1
ES 112 Fundamentals of Digital Logic Design	1
ES 210 Digital Circuits & Logic Design (GE Area A3)	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 Advanced Programming, Modeling and Simulation	4
ES 330 Electronics II	2
ES 345E Engineering Applications of Probability Theory	1
ES 400 Linear Systems Theory	3
ES 442 Analog and Digital Communications	4
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	1
ES 493 Senior Design Project	3
ES 497 Engineering Science Colloquium	1
Subtotal	52
Computer Science	
CS 115 Programming I (GE Area B3)	4
Subtotal	4
Physics	
PHYS 114 Introduction to Physics I (GE Area B1)	4
PHYS 116 Introductory Lab Experience (GE Lab)	1
PHYS 214 Introduction to Physics II	4
Subtotal	9
Mathematics	
MATH 161 Calculus I (GE Area B4)	4
MATH 211 Calculus II	4
MATH 241 Calculus III	4
MATH 261 Calculus IV	4
MATH 345E Probability Theory for Engineering	2
Subtotal	18
General Education	
(Excluding math, physics, and CS courses)	
ENGL 101 Expository Writing & Analytical Reading	4
Remaining GE courses*	33
Subtotal	37
Total Units for Graduation	120**

* A list of recommended GE courses for BSEE major can be found at the department website or obtained from the department office.

Minor in Mathematics

The course ES 400 Linear Systems Theory is crosslisted with MATH 430 and ES 435E is recognized as equivalent of an upper division math course. As such, the BSEE curriculum includes 24 units of Mathematics including 6 units in upper-division (MATH 345E, ES 345E, and MATH 430) required to minor in mathematics. Therefore, a student satisfying BSEE degree requirement is automatically completing a minor in mathematics, and can obtain such a certification from the math department.

Minor in Electrical Engineering (EE)

The Department offers a minor program in EE to provide an opportunity to any non-EE 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 40 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 23 units of Electrical Engineering courses: 14 units of core courses and 9 units of electives and 17 units of support courses in Mathematics, Physics as follows:

Core Courses (14 Units):

ES 110 Introduction. to Engineering & Lab Experience	1
ES 112 Fundamentals of Digital Logic Design	1
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

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 Introduction. 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 161 Calculus I	4
MATH 211 Calculus II	4

Total units without support courses 23

Total units including support courses 40

Additional support courses may be needed depending upon the 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 or major 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 www.sonoma.edu/engineering/bsee/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

- **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. TOEFL-Test of English as a Foreign Language with a minimum paper based score of 550, minimum computer based score of 213 or minimum internet based score of 79. Sonoma State's ETS code is 4723. (This requirement does not apply to those applicants who have studied in the U.S. for at least three consecutive years.)
4. Demonstrate competency in writing by one of the Written English Proficiency Test criteria for MS-CES students given below. If this requirement is to be met by writing an essay, 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 3.0 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).

Whenever possible, the department offers highly intense and compressed courses such as CES 490 which cover the material necessary to satisfy the prerequisite requirements in an expeditious manner.

Please contact department office for more information regarding such offerings.

Conditional Admission

The applicants whose GPA is less than 3.0 but greater than 2.5, 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 may write and submit an article of at least 500 words in length to demonstrate his/her writing proficiency in English. It will be evaluated by the MS-CES curriculum committee for (i) competent analysis of complex ideas, (ii) development and support of main points with the relevant reasons and/or examples, (iii) organization of ideas, (iv) ease in conveying meaning with reasonable clarity, and, (v) demonstration of satisfactory control of sentence structure and language (including spelling, punctuation, and proper use of grammar). If accepted by the curriculum committee, the student will be deemed to have satisfied the WEPT requirement.

Degree 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). In addition, a student must also demonstrate that he/she has acquired proficiency in written English.

Program of Study

The program offers two tracks or areas of specialization:

- Track 1: 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 2: 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 Introduction. 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

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

IV. Culminating Experience

Thesis (Plan A), Project (Plan B) or Lab and Technical Report Experience (Plan C)	3
---	---

V. Approved Technical Electives

(Plan A: 6 units; Plan B: 6 units; Plan C: 9 units)

Choose from the following list of courses:

Course Description	Units
CES 430: Photonics	3
CES 432 Semiconductor Devices	3
CES 500: Queuing and Transform Theory	3
CES 510: Intelligent Systems Design	3
CES 512: Theory of Software Systems	3
CES 514: Data Mining	3
CES 516: High Performance Computing	3
CES 520: Embedded Systems	3
CES 522: VLSI Design	3
CES 524: Advanced Computer Architecture	3
CES 530: Analog and Digital Microelectronics	3
CES 532: Advanced Semiconductor & Photonics Devices	3
CES 540: Digital Data Transmission	3
CES 542: Digital Signal Processing	3
CES 543: Optical Fiber Communications	3
CES 544: Wireless Communications	3
CES 546: Data Compression	3
CES 547: Digital Switching: Techniques and Architectures	3
CES 552: Network Architecture and Protocols	3
CES: 554: Broadband Access Technology	3
CES 561: Computational Techniques for Biomolecules	3
CES 562: Biomedical Instrumentation	3
CES 563: Biophotonics	3
CES 564: Medical Image Processing	3
CES 590: Selected Topics in Communications and Photonics	3
CES 592: Selected Topics in Hardware & Software Systems	3
CES 592B: Selected Topics in Bioengineering	3

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.

Sample Four-year Program for Bachelor of Science in Electrical Engineering

SEMESTER 1: 16 Units

ES 110 Introduction to Engineering & Lab Experience	1
CS 115 Programming I	4
MATH 161 Calculus 1 (GE B4)	4
ENGL 101 Expository Writing & Analytical Reading (GE A2)	4
GE	3

SEMESTER 2: 14 Units

ES 112 Fundamentals of Digital Logic Design	1
PHYS 114 Introduction to Physics I	4
PHYS 116 Introductory Lab Experience	1
MATH 211 Calculus II	4
GE	4

SEMESTER 3: 16 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	4

SEMESTER 4: 16 Units

ES 210 Digital Circuits & Logic Design (GE A3)	4
ES 230 Electronics I	3
ES 231 Electronics I Laboratory	1
MATH 261 Calculus IV	4
GE	4

SEMESTER 5: 16 Units

ES 314 Adv. Program., Modeling and Simulation	4
ES 330 Electronics II	2
ES 345E Engineering Applications of Probability Theory	1
MATH 345E Probability Theory for Engineering	2
ES 400 Linear Systems Theory	3
GE	4

SEMESTER 6: 15 Units

ES 310 Microprocessors and System Design	4
ES 442 Analog & Digital Communications	4
ES 430 Electromagnetic Theory & Applications	3
GE	4

SEMESTER 7: 14 Units

ES 443 Introduction to Optical Fiber Communications	3
ES 465 Introduction to Networking and Network Management	3
ES 492 Senior Design Project Planning	1
ES 497 Eng. Science Colloquium	1
GE	6

SEMESTER 8: 13 Units

ES 493 Senior Design Project	3
Approved Technical Elective I	3
Approved Technical Elective II	3
GE	4

TOTAL UNITS: 120

ENGLISH

DEPARTMENT OFFICE

Nichols Hall 362
(707) 664-2140
www.sonoma.edu/english

DEPARTMENT CHAIR

Chingling Wo

ADMINISTRATIVE COORDINATORS

Bron Anderson
Angela Follenvaider

Faculty

*William Babula
Brantley Bryant
Gillian Conoley
Anne Goldman
Kim Hester-Williams
*Sherril Jaffe
Catherine Kroll
Mira-Lisa Katz
John Kunat
Noelle Oxenhandler
Thaine Stearns
Greta Vollmer
Timothy Wandling
Chingling Wo

* Faculty Early Retirement Program

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 both expository and creative non-fiction.

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

(See page 133 for a sample four-year program.)

Degree Requirements	Units
General education	50
Major requirements, core (20 units) and concentration (20 units)	40
General electives	30
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

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**

Plus 4 collateral units and field work in Education

**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.

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 can count towards the major if it has already been used for GE requirements. (ENGL 214, 215, 314, 315, 345 are exceptions.)
4. 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.
5. At least 24 units of the courses listed above must be upper-division.
6. 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.
7. 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 235, 236, 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. At least 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. At least 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 www.sonoma.edu/english/docs/ma_program_hndbk_2_2012.pdf.

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.

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 (4)	GE Area A3: PHIL 101 (4)
GE Area B2 (4)	GE Area C2: ENGL 214 (4)
GE (4)	GE Area B1 (4)
Electives (3)	GE Area D2 (3)
SOPHOMORE YEAR: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 237 or 239 (4)	GE Area C1 (4)
GE Area B4 (4)	ENGL 238 or 240 (4)
Electives (7)	GE Area D3 (3)
	Electives (4)
JUNIOR YEAR: 30 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 301 (4)	ENGL 339 (4)
UD Major Literature Course (4)	Major Elective (4)
GE Area C3 UD (4)	GE Area D1 (3)
Electives (3)	Electives (4)
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	

ENVIRONMENTAL STUDIES AND PLANNING

DEPARTMENT OFFICE

Rachel Carson Hall 18
(707) 664-2306
www.sonoma.edu/ensp/

DEPARTMENT CHAIR

Laura A. Watt

ADMINISTRATIVE COORDINATOR

Jo-Ann Smith

Faculty

Caroline Christian / Conservation and Restoration, Track 1
Thomas Jacobson / Planning and ENSP minors
Rocky Rohwedder / Water Resources Management
Daniel Soto / Energy Management and Design
Laura A. Watt / Conservation and Restoration, Track 2

Programs Offered

Bachelor of Arts in Environmental Studies
Energy Management and Design
Conservation and Restoration
Planning Concentration
Water Resources Management

Bachelor of Science in Environmental Studies
Energy Management and Design
Water Resources Management

Minor in Environmental Studies and Planning
Double Major with Economics

For over forty years, beginning in 1972, ENSP has offered a distinctive undergraduate program of interdisciplinary study aimed at the analysis, management, and solution of environmental problems and issues. Students and faculty work together across disciplines to develop a thorough understanding of environmental sustainability in all its dimensions.

Specifically, the program combines a core education in ecology, physical science, social sciences, and the humanities with targeted coursework in an area of expertise, including energy, conservation, water, education, and planning. This involves integrating knowledge from multiple disciplines to understand the functioning of environmental systems and the nature of human impact upon these systems at local, regional, and global scales. The department's goals are to prepare students for careers in the environmental professions, graduate studies, and positive action in their own lives, and to broadly promote ecological literacy in order to help maintain and enhance the quality of human and natural environments.

Each student chooses a study plan, which has one or more assigned advisors who specializes in that area of interest. Students and faculty work together to plan a course of study that will provide the best possible preparation for personal and professional fulfillment. Students

enjoy small class sizes and personalized teaching by distinguished and dedicated professors. ENSP faculty are committed to enhancing both the quality of education and the environment.

Many students pursue a double major, or a major and minor, in conjunction with traditional disciplines to prepare for specific careers related to the environment. All students must complete a senior project or internship.

Admission Requirements

When applying to Sonoma State University, a student may declare a major in Environmental Studies and Planning. Students will be admitted to the major only if they meet departmental academic requirements which is currently a minimum GPA of 2.75. A student considering this major should make an appointment to see a faculty member for academic advising.

Financial Aid and Scholarships

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 for each study plan are listed below.

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. Additional coursework is required for certain study plans.

Required Courses

All ENSP majors are required to complete:
ENSP 201 Environmental Forum (1)

In addition, in consultation with an advisor, students must complete one of the four study plans described below. 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 only offered Cr/NC.

Bachelor of Arts in Environmental Studies

(See page 136-139 for sample four-year programs.)

Degree Requirements	Units
General education	48 or 50
Major requirements	36-53
General electives	17-37
Total units needed for graduation	120

Bachelor of Science in Environmental Studies

(See page 136-139 for sample four-year programs.)

A bachelor of science degree is available for students in the Energy Management and Design and Water Resources Management plans.

Degree Requirements	Units
General education	48 or 51
Science support courses	29-31
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 Resources Management.

CHEM 115A* General Chemistry	5
CHEM 115B* General Chemistry	5
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 science support courses	29-31

* Courses that meet general education requirements.

Study Plans

In consultation with an advisor, students must complete one of the four 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, or on our web page.

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.

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, private firms, or non-profits, or may pursue graduate studies in planning or related fields. Students interested in future careers in environmental law typically follow the planning concentration.

Water Resources Management Concentration (B.A. and B.S. degree options)

The Water Resources Management concentration provides excellent preparation for professional careers in the expanding field of water management. Graduates find employment in a wide variety of occupations with industry, private consulting firms, non-profit organizations, or government agencies that provide, conserve, regulate, or manage water resources and systems.

Double Major with Economics

The double major in economics and environmental studies and planning is designed for those students whose particular academic and career interests lie in natural resource economics, economic development planning, and/or energy management. 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 both their ENSP and ECON advisors 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 411-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.

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.

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 Center for Sustainable Communities: The Center works with cities and counties, special districts, and regional and state government agencies utilizing ENSP faculty, students, and “encore career” professionals on a wide array of projects.

The Classroom Garden: The garden adjacent to the ETC teaches SSU students and members of the public about sustainable landscape practices and how these contribute to biodiversity and environmental health. Through internships, volunteering, and classroom experiences, students gain a sense of place, community, purpose, and an enriched academic experience.

Sample Four-Year Program for Bachelor of Arts in ENSP-Conservation and Restoration (with Biology Minor)

Track I, Biological Emphasis

The course plan below satisfies requirements for minor in the Department of Biology. Waiting to complete the one-year introductory course until transferring to SSU may add one additional semester. Students must complete a total of 120 units to meet university graduation requirements.

* Plan assumes that all lower-division GE courses (50 units) are completed prior to starting junior year, including MATH 165 (Statistics) or equivalent.

**Transfer students must complete a one-year equivalent introductory biology course.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (12-15 Units)</i>	<i>Spring Semester (13-16 Units)</i>
ENSP 200 (D5) (3)	MATH 165 (B4) (4)
GEOG 203 (D2) (4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (11-13 Units)</i>	<i>Spring Semester (14-16 Units)</i>
BIOL 130 (B2) (4)	BIOL 131 (B2) (4)
ENSP 201 (1)	GEOG 201 (B1) (4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (14-16 Units)</i>	<i>Spring Semester (13-16 Units)</i>
BIOL 333 (4)	ENSP 322 (4)
GEOG 387 (4)	ENSP Core Course (4) <i>(physical science, social science or humanities)</i>
ENSP Core Course (3-4) <i>(physical science, social science or humanities)</i>	Upper-Division GE (3-4)
Upper-Division GE (3-4)	Upper-Division GE (3-4)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (11-15 Units)</i>
ENSP 423 (5)	ENSP 497 (1)
ENSP 499 - Internship (2)	ENSP 499 - Internship(2)
ENSP Core Course (3-4) <i>(physical science, social science or humanities)</i>	ENSP elective (2-4)
UD Biology Elective (4) <i>(see study plan for list of eligible courses)</i>	Elective (2-4)
	UD Biology Elective – taxonomic course (4) <i>(see study plan for list of eligible courses)</i>

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in ENSP-Conservation and Restoration (with Geography minor)

* Please note that the Geography minor is optional, not required.

Track II, Social Sciences Emphasis

This is only an example of how one might plan our your four years as a C&R Track II student; the only classes that have specific prerequisites are noted. Most GE classes can be taken in any order or sequence. Please consult with your advisor for suggestions of when to take particular courses, or when choosing electives. Students must complete a total of 120 units to meet university graduation requirements.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (13-16 Units)</i>	<i>Spring Semester (13-16 Units)</i>
MATH 165 (B4) (4)	ECON 205 (D1) (4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (13-16 Units)</i>	<i>Spring Semester (14-16 Units)</i>
GEOG 203 (D2) (3)	GEOG 201 (B1) (4)
ENSP 201 (1)	SSCI 299 (1)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (13-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
ENSP 302 (4)	ENSP 322 (4)
ENSP 307 (4)	ENSP 401 (4)
Elective in major (2-4) <i>(see study plan for list of eligible courses)</i>	GEOG elective for minor (4)
Upper-Division GE (3-4)	Upper-Division GE (3-4)

SENIOR YEAR: 30 Units

<i>Fall Semester (12-14 Units)</i>	<i>Spring Semester (14-16 Units)</i>
ENSP 416 (4) OR ENSP 404 (3)	ENSP 425 (4)
GEOG 387 (4)	ENSP 497 (2)
Upper-Division GE (3-4)	ENSP 499 - Internship (2)
ENSP 499 - Internship (2)	GEOG elective for minor (4) <i>(see study plan for list of eligible courses)</i>
	Elective in major (2-4)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in ENSP-Energy Management and Design

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 115A (5)	GE (A3) (4)
ECON 205 (4)	GE (B2) (4)
GE (A1) (3)	GE (C) (4)
GE (A2) (3)	GE (D1) (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 160 (4)	ENSP 202 (3)
GE (C) (4)	PHYS 210A (3)
GE (D2) (3)	GE (D3) (3)
GE (C) (4)	GE (D4) (3)
	GE (D5) (3)

JUNIOR YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
ENSP 201 (1)	ENSP 401 (2)
ENSP 307 (4)	ENSP 430 (4)
ENSP 330 (4)	ENSP 437 (4)
ENSP 337 (4)	GE (E) (3)
GE (B3) (3)	Elective (3)

SENIOR YEAR: 28 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (13 Units)</i>
ENSP 303 (4)	ENSP 430 (2)
ENSP 338 (4)	ENSP 438 (4)
ENSP 499 - Internship (4)	Elective (4)
Elective (3)	Elective (3)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in ENSP-Planning

This is just an example of how one might plan four years as a Planning student. Classes that have prerequisites are noted, though those prerequisites can change. Most GE classes can be taken in any order or sequence. Consult with your advisor for suggestions on when to take particular courses and when choosing electives.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (13-16 Units)</i>	<i>Spring Semester (14-16 Units)</i>
ENSP 200 (D5) (3)	MATH 165 (B4) (4)
ENSP 201 (1)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (12-15 Units)</i>	<i>Spring Semester (13-16 Units)</i>
GEOG 203 (D2) (3)	ECON 205 (D1) (4)
ENSP 201 (1)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	

JUNIOR YEAR: 30 Units

<i>Fall Semester (13-15 Units)</i>	<i>Spring Semester (14-16 Units)</i>
ENSP 302 (4)	ENSP 303 (4)
ENSP 310 (3)	ENSP 311 (4)
A course from the "Planning Skills" category (3-4)	A course from the "Humanities" category (3-4)
Upper-Division GE (3-4)	Upper Division GE (3-4)

SENIOR YEAR: 30 Units

<i>Fall Semester (12-15 Units)</i>	<i>Spring Semester (14-15 Units)</i>
ENSP 315 (3)	ENSP 411B (4)
ENSP 411A (4)	ENSP 415 (3)
ENSP 499 - Internship (3)	ENSP 498 (1)
A course from the "Technical and Research Skills" category (2-4)	An additional course from the "Planning Skills" category (3-4)
Upper-Division GE (3-4)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in ENSP-Water Resources Management

This is only an example of how one might plan our your four years as a Water Resources BA student; the only classes that have specific prerequisites are noted. Most GE classes can be taken in any order or sequence. Please consult with your advisor for suggestions of when to take particular courses, or when choosing electives.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (13-15 Units)</i>	<i>Spring Semester (14-16 Units)</i>
GEOL 102 (B1) (3)	ECON 205 (D1) (4)
MATH 165 (B4) (4)	MATH 160 *if needed (4)
GE/Elective (3-4)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (13-14 Units)</i>	<i>Spring Semester (13-14 Units)</i>
BIOL 130 (B2) (4)	BIOL 131 (4)
CHEM 115A (B3) (5)	CHEM 115B (5)
ENSP 201 (1)	SSCI 299 (1)
GE/Elective (3-4)	GE/Elective (3-4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (12-16 Units)</i>	<i>Spring Semester (10-15 Units)</i>
ENSP 303 (4)	GEOL 323 (3)
ENSP 308 (3) OR ENSP 307 (4)	Elective in major (2-4)
Elective in major (2-4)	(see study plan for list of eligible courses)
(see study plan for list of eligible courses)	Upper-Division GE (3-4)
Upper-Division GE (3-4)	Elective in major (2-4)
	(see study plan for list of eligible courses)
	Upper Division GE (3-4)

SENIOR YEAR: 30 Units

<i>Fall Semester (11-14 Units)</i>	<i>Spring Semester (11-15 Units)</i>
ENSP 404 (3)	ENSP 450 (3)
ENSP 451 (3)	ENSP 499 – Internship (4)
Upper-Division GE (3-4)	ENSP 498 (1)
Elective in major (2-4)	Elective (2-4)
(see study plan for list of eligible courses)	Elective (2-4)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Science in ENSP-Water Resources Management

This is only an example of how one might plan out your four years as a Water Resources BS student; the only classes that have specific prerequisites are noted. Most GE classes can be taken in any order or sequence. Please consult with your advisor for suggestions of when to take particular courses, or when choosing electives.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-17 Units)</i>
GEOL 102 (B1) (3)	CHEM 115B (5)
MATH 165 (B4) (4)	MATH 161 (4)
CHEM 115A (B3) (5)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (13-14 Units)</i>	<i>Spring Semester (14-16 Units)</i>
BIOL 130 (B2) (4)	BIOL 131 (4)
MATH 211S (2)	PHYS 210B (3)
ENSP 201 (1)	SSCI 299 (1)
PHYS 210A (B3) (3)	GE/Elective (3-4)
GE/Elective (3-4)	GE/Elective (3-4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (12-16 Units)</i>	<i>Spring Semester (10-15 Units)</i>
ENSP 303 (4)	GEOL 323 (3)
ENSP 308 (3) OR ENSP 307 (4)	Elective in major (2-4)
Elective in major (2-4)	(see study plan for list of eligible courses)
(see study plan for list of eligible courses)	courses)
Upper-Division GE (3-4)	Elective in major (2-4)
	(see study plan for list of eligible courses)
	Upper Division GE (3-4)

SENIOR YEAR: 30 Units

<i>Fall Semester (11-14 Units)</i>	<i>Spring Semester (11-15 Units)</i>
ENSP 404 (3)	ENSP 450 (3)
ENSP 451 (3)	ENSP 499 – Internship (4)
Upper-Division GE (3-4)	Elective (2-4)
Elective in major (2-4)	Elective (2-4)
(see study plan for list of eligible courses)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Science in ENSP-Energy Management and Design

FRESHMAN YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 115A (5)	CHEM 115B (5)
GE (A1) (3)	MATH 161 (4)
GE (A2) (3)	GE (C) (4)
GE (A3) (4)	GE (D1) (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
MATH 211S (2)	PHYS 214 (4)
PHYS 114 (4)	GE (D2) (3)
GE (B2) (4)	GE (D3) (3)
GE (C) (4)	GE (D4) (3)
	GE (D5) (3)

JUNIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
ENSP 201 (1)	ENSP 430 (2)
ENSP 330 (4)	ENSP 438 (4)
ENSP 338 (4)	GE (E) (3)
GE (C) (4)	Elective (3)
Elective (3)	Elective (3)

SENIOR YEAR: 28 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (13 Units)</i>
MATH 165 (4)	ENSP 430 (2)
ENSP 337 (4)	ENSP 437 (4)
ENSP 499 - Internship (4)	Elective (4)
Elective (3)	Elective (3)

TOTAL UNITS: 120

FILM STUDIES

PROGRAM OFFICE

Nichols Hall 214
(707) 664-2486

Program Coordinators/Faculty Advisors

Christina N. Baker / American Multicultural Studies
(707) 664-2928, bakechri@sonoma.edu
Ajay Gehlawat / Hutchins
(707) 664-3178, gehlawat@sonoma.edu

Program Offered

Minor in Film Studies

The film studies minor is an interdisciplinary and interdepartmental program that analyzes the theory, history, practice, and cultural significance of film. Students will study a broad range of film texts and learn to appreciate a variety of aesthetic and filmmaking practices. Through a critical examination of film, students will also learn to appreciate the moral and aesthetic values of various cultures, ethnicities, races, and nationalities. While exploring film's connection with several cultures, students will learn to approach film and the cinema in a critical and analytical manner. The film studies minor offers students a flexible curriculum that complements several existing major degree programs in the humanities and social sciences. The minor also constitutes excellent supplementary preparation for graduate study and media or film-related careers. In consultation with their advisor, 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 (7 units) and a choice of electives (11 or more units).

Minor Core Requirements (2 courses, 7 units)

LIBS 320C Introduction to Film Studies	3
Multicultural Representations in Film (Students choose <i>one</i> of the following courses):	
AMCS 392 Ethnic Images in Film and Media	4
CALS 393 Chicano/Latino Cinema	4
LIBS 204 Minorities in American Cinema	4
NAMS 338 Native Americans and the Cinema	4
Total units in the minor core	7

Minor Electives (a minimum of 11 units)

Students may complete the film studies minor by choosing *additional* course work that incorporates film analysis, history, imagery, or cultural representation as a critical component of the course pedagogy. Note that any course taken in the core may *not* be repeated for elective credit. The following is a list of approved electives. However, this list of electives may not be exhaustive, as course offerings may

change each semester. Students are advised to work closely with one of the faculty advisors listed above in order to ensure progress in the minor.

Note: Some of these courses are offered in departments that are impacted, and may not be open to all students.

AMCS 392 Ethnic Images in Film and Media ¹	4
AMCS 390 Independent Film Study	1-2
CALS 393 Chicano/Latino Cinema ¹	4
COMS 320 Movies and Cultures	4
COMS 320 Screenwriting for Film	4
COMS 329 "Reality" TV and Film	4
ENGL 377 Topics in Film Studies	1-4
ENGL 430 Creative Writing: Select Genres (Screenwriting)	1-4
MLL 214 French Literature and Film	4
FR 201 Third Semester French	4
GER 210 Intermediate German though Film	4
LIBS 204 Minorities in American Cinema ¹	4
LIBS 209 Bollywood and Globalization	4
LIBS 320C Documentary Ethics and Aesthetic	3
LIBS 320C Bollywood	3
LIBS 390 Independent Film Study	1-2
NAMS 338 Native Americans and the Cinema ¹	4
POLS 431 Politics and the Media	4
PSY 413 Adolescent Development Through Film	4
PSY 470 Psychology of Film	4
SOCI 434 Cinema and Society	4
WGS 285 Men and Masculinities	4
Total units in the minor electives	11
Total units in the minor	18.

1Note: This class may count as an elective if it has not been used to satisfy the core requirements.

GEOGRAPHY

DEPARTMENT OFFICE

Stevenson Hall 2070
(707) 664-2194
www.sonoma.edu/geoglobal

DEPARTMENT CHAIR

Matthew Clark

Faculty

Jeffrey Baldwin
Matthew Clark
Michelle Goman
Rheyne 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 in broad range of applications, including 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 and laboratory 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 (GTIL)

The Geography Department has a well-equipped computer laboratory that supports advanced instruction in geographic information systems (GIS), satellite image processing, digital cartography, and laboratory and field methods' data analysis. The GTIL includes 17 workstations, ArcGIS Desktop, ERDAS Imagine, IDRISI, Adobe Illustrator, and geobrowsers.

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.

Sonoma Quaternary Laboratory (SQUAL)

The Sonoma Quaternary Laboratory specializes in reconstructing ecological, climate and landscape change caused by environmental and climate forces as well as human impacts over the past several thousand years. These paleoenvironmental reconstructions provide an important context for evaluating current and future environmental and climate change. The SQUAL houses state-of-the-art equipment for micro- and macro-botanical analysis as well as other sedimentary analyses. Students working in SQUAL have the opportunity to gain unique field and laboratory research skills.

Map Library

The Map Library houses an extensive collection of digital and paper maps, and aerial photographs.

Bachelor of Arts in Geography

(See page 144 for a sample four-year program.)

Degree Requirements	Units
General education	50
Geography Courses	42
Supporting Courses	8
General Electives	11
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)

Lower Division Core	7
GEOG 201 Global Environmental Systems	4
GEOG 203 Human Geography or GEOG 202 World Regional Geography	3
Regional Synthesis	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
Geographic Research and Synthesis	5
GEOG 490A Senior Pre-Seminar	1
GEOG 490B 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 (6-7 Units)

Geospatial Techniques	3-4
GEOG 380 Environmental Remote Sensing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

Practical Experiences

GEOG 312 Geographic Conferences	1-2
GEOG 313 Field Experience Abroad	2-3
GEOG 314 Field Experience	1-2
GEOG 315 Field Methods in Geography	2
GEOG 317 Lab Methods in Physical Geography	2-3
GEOG 460 Lab Assistant in Geography	2-3
GEOG 499 Internship	2-5

Concentration Courses (19-20 Units)

Take at least 6 units from each group

Group 1

GEOG 322 Globalization and Environments	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 352 Climate Change and Society	4

Group 2

GEOG 360 Geomorphology	4
GEOG 365 Biogeography	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	3-4
GEOG 483 Environmental GIS	3-4

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 (10-11 Units)

Geospatial Techniques	3-4
GEOG 380 Environmental Remote Sensing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4
The Biophysical Environment	3-4
GEOG 360 Geomorphology	4
GEOG 365 Biogeography	4

GEOG 370 Weather and Climate	4	Concentration Courses (14 Units)	
GEOG 372 Global Climate Change: Past, Present, Future	4	GEOG 315 Field Methods in Geography	2
GEOG 375 Natural Hazards	3-4	GEOG 317 Lab Methods in Physical Geography	2-3
<i>Practical Experiences</i>	2-5	GEOG 360 Geomorphology	4
GEOG 312 Geographic Conferences	1-2	GEOG 365 Biogeography	4
GEOG 313 Field Experience Abroad	2-3	GEOG 370 Weather and Climate	4
GEOG 314 Field Experience	1-2	GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 315 Field Methods in Geography	2	GEOG 375 Natural Hazards	3-4
GEOG 317 Lab Methods in Physical Geography	2-3	GEOG 483 Environmental GIS	3-4
GEOG 460 Lab Assistant in Geography	2-3	Supporting Courses (8 Units)	
GEOG 499 Internship	2-5	Suggested courses, with substitutions possible in consultation with an advisor	
Concentration Courses (15-16 Units)		ENSP 302 Applied Ecology	4
GEOG 302 World Regions in Global Context	4	ENSP 309 Soil Science	3-4
GEOG 320 Geopolitics	4	ENSP 322 Conservation Biology	3-4
GEOG 322 Globalization and Environments	4	BIOL 330 Plant Taxonomy	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4	BIOL 333 Ecology	4
GEOG 338 Social Geography	3	BIOL 485 Biometry	4
GEOG 350 Globalization and the city	4	GEOL 303 Advanced Principals of Geology	3
Supporting Courses (8 Units)		GEOL 304 Geological Mapping and Report Writing	1
Suggested courses, with substitutions possible in consultation with an advisor		GEOL 323 Hydrology	3
ANTH 352 Global Issues	4	MATH 165 Elementary Statistics	4
ANTH 354 Quest for the Other: Tourism and Culture	4	Geospatial Techniques Concentration	
ECON 303 International Economics	4	This concentration is designed for students interested in geographic information science and its application in resource management, land-use planning, and land-change science.	
ECON 403 Seminar in Economic Development	4	Breadth Courses (9-10 Units)	
POLS 303 Introduction to Comparative Government and Global Systems	4	<i>Human Geography</i>	4
POLS 304 Introduction to International Relations	4	GEOG 320 Geopolitics	4
POLS 452 Third World Political Systems	4	GEOG 322 Globalization and Environments	4
WGS 385 Gender and Globalization	4	GEOG 335 Global Food Systems: Scarcity and Sustainability	4
Biophysical Environment Concentration		GEOG 340 Conservation of Natural Resources	4
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.		GEOG 350 Globalization and the City	4
Breadth Courses (12 Units)		GEOG 352 Climate Change and Society	4
<i>Geospatial Techniques</i>	3-4	<i>The Biophysical Environment</i>	4
GEOG 380 Environmental Remote Sensing	4	GEOG 360 Geomorphology	4
GEOG 385 Cartographic Visualization	3-4	GEOG 365 Biogeography	4
GEOG 387 Introduction to GIS	4	GEOG 370 Weather and Climate	4
<i>Human Geography</i>	4	GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 320 Geopolitics	4	GEOG 375 Natural Hazards	3-4
GEOG 322 Globalization and Environments	4	<i>Practical Experiences</i>	1-3
GEOG 335 Global Food Systems: Scarcity and Sustainability	4	GEOG 312 Geographic Conferences	1-2
GEOG 340 Conservation of Natural Resources	4	GEOG 313 Field Experience Abroad	2-3
GEOG 350 Globalization and the City	4	GEOG 314 Field Experience	1-2
GEOG 352 Climate Change and Society	4	GEOG 499 Internship	2-5
<i>Practical Experiences</i>	4-5		
GEOG 312 Geographic Conferences	1-2		
GEOG 313 Field Experience Abroad	2-3		
GEOG 314 Field Experience	1-2		
GEOG 460 Lab Assistant in Geography	2-3		
GEOG 499 Internship	2-5		

Concentration Courses (16-17 Units)

GEOG 315 Field Methods in Geography	2
GEOG 380 Environmental Remote Sensing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4
GEOG 483 Environmental GIS	3-4
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 (10-12 Units)

<i>Geospatial Techniques</i>	3-4
GEOG 380 Environmental Remote Sensing	4
GEOG 385 Cartographic Visualization	3-4
GEOG 387 Introduction to GIS	4

Human Geography

GEOG 320 Geopolitics	4
GEOG 322 Globalization and Environments	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 350 Globalization and the City	4
GEOG 352 Climate Change and Society	4

The Biophysical Environment

GEOG 360 Geomorphology	3-4
GEOG 365 Biogeography	4
GEOG 370 Weather and Climate	4
GEOG 372 Global Climate Change: Past, Present, Future	4
GEOG 375 Natural Hazards	3-4

Elective courses in Geography (14-16 Units)

Supporting courses outside Geography (8 Units)

Minor in Geography

GEOG 201 Global Environmental Systems	4
GEOG 203 Cultural Geography or GEOG 202: World Regional Geography	3
Upper-division courses chosen in consultation with advisor	13
Total units in the minor	20

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.

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

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
GE MATH (B4) (3)	GE PHIL 101 (A3) (4)
GE ENG 101 (A2) (4)	GE GEOG 203 (D2) (3)
GE (3)	GE (4)
GE (3), University Elective (3)	University Elective (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE (3)	GEOG 201 (B3) (4)
GE (3), GE (3)	GE (3), GE (3)
GE (3)	GE (3)
University Elective (3)	University Elective (2)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
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. Biophysical) (4)
Upper-Div. Supporting (4)	University Elective (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Geography 490A (1)	GEOG 490B (4)
Geography Elective (3-4)	Upper-Division Supporting (4)
Geography Elective (4)	Internship or Geography Elective (4)
Upper-Division GE (3)	University Elective (3)
University Elective (3-4)	

TOTAL UNITS: 120

GEOLOGY

DEPARTMENT OFFICE

Darwin Hall 116
(707) 664-2334
www.sonoma.edu/geology

DEPARTMENT CHAIR

Matthew J. James

ADMINISTRATIVE COORDINATOR

Elisabeth Meyers

EQUIPMENT TECHNICIAN

Phillip R. Mooney

Faculty

Matthew J. James

Matty Mookerjee

Programs Offered

- Bachelor of Science in Geology
- Bachelor of Arts in Earth Science
- 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 Science

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

(See pages 148-149 for sample four-year programs.)

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	41*
Major requirements	50
Supporting courses	22-24
General electives	5-7
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 (Senior field)	4
GEOL 427 Advanced Field Geology (Summer field)	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
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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 †	1
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.

Bachelor of Arts in Earth Science

(See page 149 for sample four-year programs.)

The Earth Science B.A. is designed to provide students with a firm foundation in the geological sciences. A diversity of elective courses allow students interested in related fields to build a supplementary minor. It provides a clear path to graduation and is ideal for students pursuing careers in earth science education, state agencies, environmental geology, and hydrogeology.

Degree Requirements	Units
General education	41
(50 units, 9 units satisfied by major requirements)	
Major requirements	51
Supporting courses	10-14
General electives	14-18
Total units needed for graduation	120

Required Major Core Courses

(I) One 100-Level Geology Course

GEOL 102+§	3
GEOL 105+	3
GEOL 107	3
GEOL 110	3
GEOL 120	3

(II) Both of the Following

GEOL 303 Advanced Principles of Geology#	4
GEOL 304 Geologic Mapping and Report Writing	1

(III) Two of the Following 300-Level Courses

GEOL 307/308 Igneous and Metamorphic Petrology and Field Course†	5
GEOL 311/312 Sedimentary Geology and Field Course	5
GEOL 313/314 Paleontology and Field Course	5
GEOL 317/318 Structural Geology and Field Course	5
Total units in the major core	18

(IV) Major Electives

Choose 33 additional units of Earth Science-related courses in consultation with a major advisor. See list of suggested courses on the following page. Major Elective courses must be approved by a major advisor. At least 20 units must be 200-level or above, and at least 15 units must be Geology courses.

Total units in major electives	33
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Required Supporting Courses

MATH 107	
or MATH 161	
or MATH 165**	4
CHEM 102*§	
or CHEM 110	
or CHEM 115A	3-5
Any 100 or 200-level Physics or Astronomy course	3-5
Total units in supporting courses	10-14
Total units in the major	61-65*

+ Also counts toward GE B1 requirement

Also counts toward GE B3 requirement

§ Satisfies GE lab requirement

† GEOL 205 is a prerequisite

** Also counts towards GE B4 requirement

Suggested Major Elective Courses

Geology

GEOL 102 Our Dynamic Earth	3
GEOL 105 The Age of Dinosaurs	3
GEOL 107 Introduction to Earth Science	3
<i>Highly recommended for students pursuing a teaching credential</i>	
GEOL 110 Natural Disasters	3
GEOL 120 Regional Field Geology	3
GEOL 205 Mineralogy	4
GEL 301 Natural History of the Hawaiian Islands	3
GEOL 302 The Geology of Climate Change	3
GEOL 306 Environmental Geology	3
GEOL 307 Igneous and Metamorphic Petrology	4
GEOL 308 Igneous and Metamorphic Petrology Field Course	1
GEOL 310 Geophysics	4
GEOL 311 Sedimentary Geology	4
GEOL 312 Sedimentary Geology Field Course	1
GEOL 313 Paleontology	4
GEOL 314 Paleontology Field Course	1
GEOL 317 Structural Geology	4
GEOL 318 Structural Geology Field Course	1
GEOL 320 Basin Analysis	4
GEOL 321 Burgess Shale Paleontology	3
GEOL 323 Hydrology	3
GEOL 326 Stratigraphy and Earth History	4
GEOL 420 Integrated Field Experience	4
GEOL 427 Advanced Field Geology	4
GEOL 422 Geochemistry	3
GEOL 425 Economic Geology	3
GEOL 495 Special Studies	1-4

Anthropology

ANTH 201 Introduction to Biological Anthropology	3
ANTH 202 Introduction to Archaeology	3
ANTH 301 Human Fossils and Evolution	4
<i>ANTH 201 or BIOL 115 prerequisite</i>	
ANTH 322 Historical Archaeology	4
ANTH 315 World Prehistory	4

Studio Art

ARTS 202 Beginning Drawing

2-4

Astronomy

ASTR 100 Descriptive Astronomy

3

ASTR 231 Introductory Observational Astronomy

3

ASTR 100 prerequisite

ASTR 350 Cosmology

3

ASTR 100 prerequisite

Biology

BIOL 312 Biological Oceanography

3

BIOL 110, 115, or 121/122 pre- or corequisite

BIOL 333 Ecology

4

BIOL 121, 122, and MATH 165 prerequisite

BIOL 335 Marine Ecology

3

BIOL 121, 122, and MATH 165 prerequisite

Environmental Studies and Planning

ENSP 200 Global Environmental Issues

3

ENGL 101 or PHIL 101 prerequisite

ENSP 302 Applied Ecology

3-4

ENSP 309 Soil Science

3-4

ENSP 322 Conservation Biology

3-4

ENSP 302 and BIOL 122 prerequisite

ENSP 330 Energy, Technology and Society

4

ENSP 451 Water Regulation

3

Geography

GEOG 201 Global Environmental Systems

4

GEOG 315 Field Methods in Geography

2

GEOG 205 and MATH 165 pre- or corequisite

GEOG 340 Conservation of Natural Resources

4

GEOG 360 Geomorphology

4

GEOG 204 and GEOL 102 prerequisite

GEOG 365 Biogeography and Landscape Ecology

4

BIOL 115, 121 or 122 prerequisite

GEOG 370 Weather and Climate

4

GEOG 204 prerequisite

GEOG 380 Remote Sensing and Image Processing

4

GEOG 205 prerequisite

GEOG 387 Geographic Information Systems

4

GEOG 205 prerequisite

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. Not available to students in the BA in Earth Sciences or the BS in Geology.

Minor in Paleontology

PROGRAM COORDINATOR

Matthew J. James / Geology Department (707) 664-2301,
james@sonoma.edu

ADVISORS

Matthew J. James / Geology Department (707) 664-2301,
james@sonoma.edu

Nicholas R. Geist / Biology Department (707) 664-3056,
geist@sonoma.edu

Karin E. Jaffe / Anthropology Department (707) 664-2944,
karin.jaffe@sonoma.edu

Alexis Boutin / Anthropology Department (707) 664-2729,
alexis.boutin@sonoma.edu

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 inter-disciplinary 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

	<i>Units</i>
GEOL 102 Our Dynamic Earth	3
GEOL 313 Paleontology	4
BIOL 130A Diversity, Structure, and Function, or BIOL 130B 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.

Sample Four-year Plan for Bachelor of Science in Geology

FRESHMAN YEAR: 29 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL 102 (3)	MATH 161 (4)
CHEM 115A (5)	CHEM 115B (5)
GE (6)	GE (6)

SOPHOMORE YEAR: 28 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (13 Units)</i>
GEOL 303 (4)	PHYS 114 (4)
GEOL 304 (1)	PHYS 116 (1)
GEOL 205 (4)	GEOL 311 (4)
GEOL 309 (4)	GEOL 312 (1)
GE (2)	GE (3)

JUNIOR YEAR: 29 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL 313 (4)	GEOL 307 (4)
GEOL 314 (1)	GEOL 308 (1)
GEOL 317 (4)	GEOL 310 (4)
GEOL 318 (1)	GEOL 323 (3)
GE (4)	GE (3)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
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

Sample Four-year Plan for Bachelor of Arts in Earth Science

FRESHMAN YEAR: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
Major Core I § (3)	MATH 107 § (4)
GE (13)	CHEM 110 (3)
	GE (7)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL 303 (4)*	Major Core II (5)
GEOL 304 (1)	PHYS 100 (3)
GEOL Electives (8)	PHYS 102 (1)
GE (2)	GE (6)

JUNIOR YEAR: 29 Units

<i>Fall Semester (13 Units)</i>	<i>Spring Semester (16 Units)</i>
Major Core II (5)	GEOL Electives (8)
GEOL Electives (5)	Upper Division GE (3)
Upper Division GE (3)	GE (5)

SENIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL Electives (8)	GEOL Electives (4)
GE (8)	Upper Division GE (3)
	GE (3)
	General Electives (3)

TOTAL SEMESTER UNITS: 120

* Fulfills upper division and GE B3 requirement
 § Fulfills GE B4 requirement

Sample Two-year Plan for Transfer Students Bachelor of Science in Geology

JUNIOR YEAR: 33 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL 303 (4)	GEOL 307 (4)
GEOL 304 (1)	GEOL 308 (1)
GEOL 205 (4)	GEOL 311 (4)
GEOL 309 (4)	GEOL 312 (1)
CHEM 115A (5)	CHEM 115B (5)

SENIOR YEAR: 31 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (17 Units)</i>
GEOL 317 (4)	GEOL 310 (4)
GEOL 318 (1)	GEOL 323 (3)
GEOL 313 (4)	PHYS 209A&B (4)
GEOL 314 (1)	GEOL 420 (4)
MATH 161 (4)	Geology Elective (2)

SENIOR SUMMER: 4 Units

GEOL 427 (4)

TOTAL SEMESTER UNITS: 68

Sample Two-year Plan for Transfer Students Bachelor of Arts in Earth Science

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GEOL 303 (4)*	Major Core II (5)
GEOL 304 (1)	GEOL Elective (4)
GEOL Electives (7)	MATH 165 § (4)
CHEM 110 (3)	GE (2)

SENIOR YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
Major Core II (5)	GEOL Electives (14)
GEOL Electives (8)	Upper Division GE (2)
Upper Division GE (3)	

TOTAL SEMESTER UNITS: 62

GERONTOLOGY

DEPARTMENT OFFICE

Stevenson Hall 3075/3092

(707) 664-2586/2411

www.sonoma.edu/gerontology

INTERIM PROGRAM ADVISOR

Gerryann Olson

ADMINISTRATIVE ANALYST

Cara Stevens

ADMINISTRATIVE COORDINATOR

Mary Hanson

Programs Offered

Minor in Gerontology

Certificate in Gerontology

The study of gerontology provides students with a broad, multidisciplinary perspective to examine the aging process and to understand the significance of age in biological, social, cultural, 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 or (2) a certificate in gerontology.

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/SOCI 319 Aging and Society	
GERN 499 Gerontology Practicum	4
GERN/PSY 421 Psychology of Aging	4
Total units in the minor core	14

Minor Electives

Choose courses to total a minimum of 8 units from the following list:*

BIOL 224 Human Physiology	3
BIOL 307 Human Nutrition	4
GERN/SOCI 317 Emotions and Adult Life	4
GERN/SOCI 332 Death and American Culture	4
GERN/PSY 408 Transitions in Adult Development	4
GERN/PSY 422 Living and Dying	4
KIN 410 Lifespan Motor Development	3
PSY 358 Health Psychology	4
PSY 404 Psychology of Women	4
SOC 461 Social Work and Welfare	4
SOC 365 Human Services Administration	4

** With advisor approval, substitution of an appropriate internship done through another department is allowed.*

Total units in minor electives 8

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	4
GERN 499 Gerontology Practicum	8
GERN 421 Psychology of 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 2070
(707) 664-2194

MAJOR COORDINATOR

Rheyna 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	50
Foundational requirements	15-32
Breadth Requirements	13-15
Concentration	20
Capstone requirements	14
General electives	6
Total units needed for graduation	120-130

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 (15-32 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 Human Geography (D2)	3

3. Global Environment (choose one)

ENSP 200 Global Environmental Issues (D5)	3
GEOG 201 Global Environmental Systems (B1)	4

4. Economic Perspectives

ECON 204 Macroeconomics (D5)	4
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5. Global Issues (all required)

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 Introduction 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)	4
POLS 307 Holocaust Lecture Series (D5)	4
SOC 431 Sociology of Religion (C3)	4
ENGL 304 War and Peace Lecture Series (C2)	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

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 Human 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, 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 an upper-division course in biochemistry.	
<i>English</i>	
Composition and Literature	8

<i>Physics</i>	
Two semesters with lab	8
<i>Mathematics</i>	
Some schools require a year of college mathematics and/or a calculus course or statistics.	4-8
<i>Foreign Language</i>	
A few schools recommend a modern foreign language course.	0-8
<i>Psychology</i>	
An introductory psychology course is recommended by some schools.	3

Sonoma State 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* General Chemistry and Lab	10
CHEM 335AB* and 336 A* Organic Chemistry	8
CHEM 446 Metabolic Biochemistry	3
PHYS 210AB* and 209AB* General Physics and Lab	8
ENGL 101 and 214 Expository Writing and Literature	8
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 U.S. medical school admissions committees, and few students with a grade point average below 3.40 are accepted.

In addition to the required courses, most pre-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 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. 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 faculty and admissions officers);
3. Provide a practice admissions interview for candidates applying to health professions schools;
4. Evaluate candidates and write letters supporting their admission to health professions schools.

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.

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 program 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, Viri Ruiz

Faculty

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

**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.

Bachelor of Arts in History

(See page 160 for a sample four-year program.)

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	50
Major requirements	40
General electives	30
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*

*History majors may replace HIST 201 with HIST 335, 339, 400, 401 OR replace HIST 202 with HIST 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.

HIST 251 The United States to 1877	3-4**
HIST 252 The United States Since 1865	3-4**

**History majors may replace HIST 251 with HIST 351 OR replace HIST 252 with HIST 352, 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.

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 either of these requirements). 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

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**

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

Sample Four-Year Program for Bachelor of Arts in History

FRESHMAN YEAR: 30-32 Units	
<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
GE Electives (15-16)	GE Electives (15-16)
SOPHOMORE YEAR: 30-31 Units	
<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE HIST 201 (3)#	GE HIST 251 (3)#
GE HIST 202 (3)#	GE HIST 252 (3)#
GE Electives (9)	Electives (9)
JUNIOR YEAR: 29-32 Units	
<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (14-16 Units)</i>
History Electives (8)	History Electives (8)
Upper-division GE (3-4)	Upper-division GE (6-8)
Elective (4)	
SENIOR YEAR: 32 Units	
<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
History Electives (8)	HIST 498 (4)
Electives (8)	Electives (12)
TOTAL UNITS: 120	
# Completion of either HIST 201 or HIST 202 satisfies GE requirement Area D2. Completion of either HIST 251 or HIST 252 satisfies GE requirement Area D3.	

HUMAN DEVELOPMENT

PROGRAM OFFICE

Stevenson Hall 2070
(707) 664-2312

HUMAN DEVELOPMENT COORDINATOR

Karin Enstam Jaffe
Stevenson Hall 2054 D
(707) 664-2944

email: karin.jaffe@sonoma.edu

www.sonoma.edu/humandevlopment

Students interested in earning a major in Human Development should consult the coordinator.

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

Gerryann Olson / Psychology (707) 664-2265 / email: olsong@sonoma.edu

Richard J. Senghas / Linguistics and Anthropology (707) 664-2307 / email: richard.senghas@sonoma.edu

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
 - A3
- Completion of the following GE courses:
 - Area B2
 - MATH 165 Elementary Statistics, or equivalent from another institution
 - ANTH 203 Introduction to Cultural Anthropology, PSY 250 Introduction to Psychology, or SOCI 201 Introduction to Sociology, or equivalent from another institution
 - ENGL 203 Introduction to Linguistic Studies or ANTH 200 Introduction to Linguistic Anthropology, or equivalent from another institution

Total units required for B.A. in Human Development

Degree Requirements	Units
General education	50
Major requirements*, including 22-24 units core requirements 16-18 units electives, selected from comparative, sociological, psychological, and methodology categories	40
Electives	30
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 (21-25 units)

HD 391 Seminar in Human Development (taken in the junior year)	2
ANTH 342 Organization of Societies OR	
ANTH 340 Living in Our Globalized World (GE-E) OR	3-4
WGS 358 Gender and Globalization	
ANTH/HD 318 Human Development: Sex and the Life Cycle	3
GERN/PSY 421 Psychology of Aging OR	
GERN/PSY 408 Adult Development OR	3
GERN/SOCI 317 Emotions of Adult Life (GE-E) OR	3-4
GERN 300 The Journey of Adulthood (GE-E)	3
KIN 410 Lifespan Motor Development (GE-E)	3
PSY 410 Child Development OR	
PSY 412 Adolescent Development OR	
EDEC 420 Child Development in Family, School and Community OR	3-4
EDSS 418 Learning and Development in Adolescents	
WGS 350 Gender, Sexuality and Family	3-4
HD 490 Senior Project (taken in the last semester)	1

Major Perspectives

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 + perspectives = 40 units). In addition, service learning and internship courses are strongly recommended. Classes in foreign languages commonly spoken in California are strongly recommended.

Courses that appear in the core and area perspectives or in 2 area perspectives can count in one, but not both areas. 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 our Globalized 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
WGS 375 Gender, Race, and Class (GE-D1)	3

Sociological Perspectives

EDMS 470 Multicultural Pedagogy	3
GERN/SOCI 317 Emotions and Adult Life (GE-E)	4
GERN/SOCI 319 Aging and Society (GE-E)	4
SOCI 326 Social Psychology (GE D1)	3-4
WGS 390 Gender and Work	4

Psychological Perspectives

EDEC 420 Child Development in Family, School, and Community (GE-E)	3
PSY 302 Life Span Development (GE-E)	3
PSY 325 Social Psychology	4
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

**Courses may be restricted to Psychology majors only. Please check prerequisites.*

Methodology

Choose one of the following:

ANTH 451 Applied Ethnographic Methods	4
ANTH 480 Studies of Language Use	4
EDEC 460 Studying Children in Context	4
WGS 425 Feminist Research Methods	4

INTERDISCIPLINARY STUDIES

DEPARTMENT OFFICE

Stevenson 1041
(707) 664-4208
www.sonoma.edu/itds

COORDINATOR

John Kornfeld
email: john.kornfeld@sonoma.edu

Programs Offered

The Interdisciplinary Studies (ITDS) Program is currently accepting applications for the German Cultural Studies BA special major (see p. 169). All other study plans in the ITDS Program are currently under revision. Therefore, no ITDS applications (other than those for German Cultural Studies), will be accepted at this time.

- 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 interdis-

ciplinary 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 master's 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 President 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

(See page 166 for sample four-year programs.)

Degree Requirements	Units
General education	50
Major requirements (core and supporting)	45
General electives	25
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.

For detailed guidelines and the application form for the special major, go to www.sonoma.edu/itds. 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.

Bachelor of Arts in the Special Major: German Cultural Studies

COORDINATOR

Michaela Grobbel

email: grobbel@sonoma.edu

The special major in German Cultural Studies offers students an interdisciplinary B.A. that incorporates language courses required for the German minor plus courses in other disciplines. It enriches students' academic and career opportunities by providing them with important skills to find employment in our increasingly interconnected world. The special major prepares students for international or cross-cultural careers in the USA or abroad that require a basic knowledge of the German language, history and culture as well as skills in cross-cultural communication. Recognizing the increasing interconnections in our global world, and Germany as one of the key players within the EU and in the international arena, the B.A. program prepares students for graduate school and careers in a field of their interest. Please review the Sample Four-Year-Plans that suggest two different pathways: "Plan A" suggests a pathway for students who take courses at SSU and do not study abroad; "Plan B" offers a pathway for students who study abroad for one year.

Requirements for the Special Major

As part of the core requirement, students must complete an internship (German culture or language experience in a professional setting) and a senior project. Additionally, students must pass the "Goethe-Zertifikat B1"-Proficiency Examination, the internationally recognized language certificate offered annually at SSU under the auspices of the Goethe Institute.

(See page 169 for a sample four-year program.)

Degree Requirements	Units
General education	50
Core Courses	27
Supporting Courses	19-20
Elective Courses	23-24
Total units needed for graduation	120

Note: Courses must be taken for a letter grade, except for courses that are offered Cr/NC only. Students must earn a C- or higher grade in all courses.

Prerequisites

GER 101 First Semester: The Personal World	4
GER 101L Language Laboratory	1

Core Courses (required)

GER 102 Second Semester: Contemporary Germany	4
GER 200 Intermediate German: The German-Speaking World Today	4
GER 210 Intermediate German through Film	4
GER 314 Literature of the German-Speaking World	4
GER 315 German Language and Literature	1
GER 300 Advanced German Cultural Studies	4
GER 395 German Culture/Language Experience (Community Involvement Project in the USA or abroad)	2
ITDS 499/GER 495 Senior Project	4

Supporting Courses (required)

GER 101L Language Laboratory	1
GER 102L Language Laboratory	1
GER 200L Language Laboratory	1
GER 210L Language Laboratory	1
HIST 415 Eastern Europe, 1815-1918	4
or: HIST 416 Eastern Europe: 1918-1989	4
or: HIST 418 Fall of European Communism	4
POLS 307 Perspectives on the Holocaust and Genocide	4
POLS 350 European Parliamentary Democracies	4
ARTH 464 History of Modern Art: 20th Century	3-4

Electives

Select from these courses (23-24 units):

ANTH 200 Introduction to Linguistic Anthropology	3
ANTH 203 Introduction to Cultural Anthropology	3
ANTH 480 Studies of Language Use	4
ANTH 380 Language, Culture and Society	4
ANTH 382 Language Change	4
ARTH 466 Contemporary Art	3-4
BUS 391 Cross-cultural Communication and Negotiation	4
BUS 393 Introduction to International Business	4
COMS 321 International Communication	4
ECON 204 Introduction to Macroeconomics	4
ECON 303 International Economics	4
ENG 341 Explorations in Language	4
ENG 343 Youth and Literature	4
ENG 379 Structure of English: Pedagogical Grammar	4
ENG 491 Seminar in Teaching Composition	4
ENG 492 Reading and Responding to Literature	4
GEOG 320 Geopolitics	4
HIST 202 Development of the Modern World	3
HIST 380 Twentieth-Century World	3
HIST 401 The Roman Empire	4
HIST 406 The Crusades	4
HIST 408 The Early Middle Ages	4
HIST 409 The High Middle Ages	4
HIST 410 Early Modern Europe: 1350-1789	4
HIST 412 Europe since 1914	4
MUS 250 Survey of European Music	3

MUS 251 History of Western Music: Ancient World to 1750	3
MUS 252 History of Western Music: 1750-Present	3
MUS 310 Theory III: Form and Analysis	3
MUS 316 Diction: French and German	1-2
MUS 325 SSU Chorus	1-2
MUS 410 Theory IV: 20th Century Techniques	3
MUS 343 Studies in Musical Genres	3
<i>Note: Only counts for special major if composers from the German-speaking world are taught</i>	
MUS 344 Studies-Specific Composers	3
<i>Note: Only counts for special major if composers from the German-speaking world are taught</i>	
PHIL 207 Philosophical Movements*	4
PHIL 303 Social and Political Philosophy*	4
PHIL 307 Philosophical Figures*	4
SOCI 375 Sociological Theory	4
THAR 203 Introduction to the History of Drama and Dance: 1800 to Present	4
THAR 320A Intermediate Acting Block	5
THAR 371B History of Dance B	3
THAR 420A Advanced Acting Block	2-5

* Students must check with the Department of Philosophy on a semester-by-semester basis to inquire if the course offered in that particular semester includes sufficient "German" content.

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.

For detailed guidelines and the application form for the special minor, go to www.sonoma.edu/itds

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.

For detailed guidelines and the application form for the master's degree in interdisciplinary studies, go to www.sonoma.edu/itds

Sample Four-year Program for Bachelor of Arts in the Special Major: German Cultural Studies

Plan A: Studies at SSU

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MLL 161A: GER 101 (C3) (4)	MLL 161B: GER 102 (4)
GE (A2) (4)	GE (A3) (2)
GE (A3) (2)	
GE (B1) (4)	GE (C1) (4)
GER 101L (1)	GE (B4) (4)
	GER 102L (1)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GER 200 (4)	GER 210 (4)
GER 200L (1)	GER 210L (1)
GE (B2) (3)	GE (B3) (3)
GE (D1) (4)	GE (D3) (3)
Elective (3)	Elective (4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15 Units)</i>
GER 314 (C2) (4)	GER 300 (4)
GER 315 (1)	POLS 307 (D5) (4)
ARTH 464 (C1) (3-4)	GE (E) (3)
GE (D2) (3)	Elective (4)
Electives (3-4)	

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GER 395 (2)	ITDS 499/GER 495 (Senior Project) (4)
Supporting Course (4)	Supporting Course (3)
Elective (9)	GE (D4) (4)
	Elective (4)

TOTAL UNITS: 120

Sample Four-year Program for Bachelor of Arts in the Special Major: German Cultural Studies

Plan B: Studies at SSU, including Study in a German-Speaking Country

FRESHMAN YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
MLL 161A: GER 101 (C3) (4)	MLL 161B: GER 102 (4)
GER 101L (1)	GER 102L (1)
GE (A3) (2)	GE (A3) (2)
GE (B1) (4)	GE (D5) (3)
GE (A2) (4)	GE (B4) (4)

SOPHOMORE YEAR: 30-31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14-15 Units)</i>
GER 200 (4)	GER 210 (4)
GER 200L (1)	GER 210L (1)
GE (B2) (3)	ARTH 464 (C1) (3-4)
GE (D1) (4)	GE B3 (3)
Elective (4)	GE D3 (3)

JUNIOR YEAR: 30 Units

Fall and Spring Abroad:

Intermediate German Language Courses: 6 units at 200 level (or higher)
 Upper-Division German Language Courses: 8 units at 300 level and higher
 German Culture/History (in German): 6 units at 200 level and higher
 German Literature (in German): 4 units at 200 level and higher
(counts for Core Requirement & G.E. C2)
 Other courses: 6 units (e.g. courses in concentration or covering G.E.)
Note: Courses taken abroad may count for Supporting Courses (up to 8 units) and Elective Courses (up to 14-15 units).

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GER 395 (2)	GER 300 (4)
GER 315 (1)	ITDS 499/GER 495 (Senior Project) (4)
Elective (3)	Elective (3)
Supporting Course (3)	G.E. D4 (4)
GE (D2) (3)	
GE (E) (3)	

TOTAL UNITS: 120

(Including 50 units in General Education, 27 units of Core Courses, 19-20 units of Supporting Courses, and 23-24 units of Elective Courses)

JEWISH STUDIES

PROGRAM COORDINATOR AND ADVISOR

Brian Wilson (707) 664-2468, brian.wilson@sonoma.edu

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	4
JWST 350 Jewish Religion and Biblical Values	3
Total units in the minor core	7
Elective units in the minor	14
Total units in the minor	21

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
SOCI 431 Sociology of Religion	4

2) Language

	Units
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

	Units
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

	Units
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
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

PE 14
(707) 664-2357
www.sonoma.edu/kinesiology

DEPARTMENT CHAIR

Steven V. Winter

DEPARTMENT COORDINATOR

Gina Voight

EQUIPMENT TECHNICIAN

Gloria Allen

Faculty

Wanda Boda
Ellen Carlton
*Elaine McHugh
Lauren Morimoto
Bülent Sökmen
Steven V. Winter

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Science in Kinesiology
Master of Arts in Kinesiology
Minor in Kinesiology (Currently Inactive)
Single Subject Teaching Credential Preparation
Adapted Physical Education Added Authorization 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 physical activity, 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 relationships 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 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

(See pages 174-176 for sample four-year programs.)

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	50
Major requirements	53-57
Support courses (maximum outside needed GE)	13
General electives	0-4
Total units needed for graduation	120

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

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 350 Biomechanics	4
KIN 360 Physiology of Exercise	4
KIN 410 Life Span Motor Development	3
KIN 460 Conditioning for Health and Performance	3
MATH 165 Elementary Applied Statistics	4
Total units in the major core	29

Major Concentrations

Choose one of the required concentrations below to complete the major:

I. Adapted Physical Education Concentration	26
II. Physical Education Concentration	26
III. Exercise Science Concentration	27
IV. Lifetime Physical Activity Concentration	24-28
V. Interdisciplinary Concentration (25-28)	24-28
Total units in a concentration	24-28
Total units in the major	53-57

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 added authorization in adapted physical education.

EDSP 422 AB	4
EDSP 433 Teaching Adolescents with Special Education Needs	3
KIN 241/242 Emergency Response/Principles of Musculoskeletal Injuries	3
KIN 306 Aquatics	1
KIN 325 Introduction to Adapted Physical Education	3
KIN 425 Seminar in Adapted Physical Education	3
KIN 426 Individualized Assessment and Program Design	4
KIN 427 Individuals with Disabilities in Educational/Recreational Setting	3
KIN 430C Field Experience	2
Total units in the concentration	26
Total units in the B.S.	55

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 CSET Subject Assessment Examination. Kinesiology majors interested in seeking a general elementary credential may demonstrate subject matter

competence by passing the CSET Multiple Subject Assessment for Teachers. For further information, contact the department office.

KIN 242 Principles of Musculoskeletal Injuries	3
KIN 306 Aquatics	1
KIN 308 Educational Gymnastics	1
KIN 309 Dance and Rhythms	1
KIN 310 Self Defense	1
KIN 320 Curriculum, Pedagogy, and Assessment	3
KIN 325 Introduction to Adapted Physical Education	3
KIN 400 Elementary School Physical Education	3
KIN 404 Theory of Coaching	2
KIN 420 Middle School Physical Education	3
KIN 422 High School Physical Education	4
KIN 430 Field Experience	1
Total units in the concentration	26
Total units in the major	55

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.

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

CHEM 115AB General Chemistry* 10**	
PHYS 209A/210A General Physics*	4**
KIN 241/242 Emergency Response or Principles of Musculoskeletal Injuries	3
KIN 430 Field Experience	3
PSY 425 Abnormal Psychology	4
BIOL Elective (department approval required)	3
Total in the Exercise Science Concentration	27
Total units in the major	56

* GE courses.

** Students planning to enter a master's degree or doctoral 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 Physical Activity Concentration

Fitness and Wellness Emphasis

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

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

or musculoskeletal injury. This concentration incorporates course-work in 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 241 Emergency Response	3
KIN 242 Principles of Musculoskeletal Injuries	3
KIN 426 Individualized Assessment and Program Design	4
KIN 430E 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 404/404C Theory of Coaching	2-3
KIN 427 Individuals with Disabilities in Education and Recreation	3
BIOL 318 Biology of Aging	3*
BUS 150 Business and Society	3
GERN 300 Basic Gerontology	3*
PSY 201 Human Potential	3
PSY 408 Transitions in Adult Development	4
PSY 421 Psychology of Aging	4
SOCI 317 Emotions and Adult Life	3*

Total units in the emphasis 25-28

Total units in the major 54-57

Coach Education Emphasis

The Coach Education Emphasis serves students interested in coaching sports at the recreational, youth, high school and collegiate levels. As sports have become increasingly embedded in American culture (e.g. in education, family life), there is a need for reflective, informed coaches. This program provides opportunities for students to acquire the skills required to become an effective coach in recreational, youth, high school, and collegiate competitive sports.

KIN 241 Emergency Response	3
KIN 242 Principles of Musculoskeletal Injuries	3
KIN 403 Ethics, Inclusion, and Equity in Coaching	3
KIN 404/404C Theory of Coaching	2-3
KIN 420 or 422 Middle School or High School Physical Education	3-4
KIN 426 Individualized Assessment and Program Design	4
KIN 430E Field Experience	3

Electives - choose a minimum of 1 course from the following:

KIN 427 Individuals with Disabilities in Education and Recreation	3
KIN 420 or 422 Middle School or High School Physical Education	3-4
KIN 442 Musculoskeletal Evaluation, Training, and Treatment	4
KIN 446 Exercise Instruction	3
KIN 316 Women in Sports	3
KIN 320 Curriculum, Pedagogy, and Assessment	3
KIN 308 and 309 Educational Gymnastics and Rhythms and Dance	2

Total units in the emphasis 24-27

Total units in the major 53-56

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 54-57

Careers

Lifetime Physical Activity

Careers or certifications that require a baccalaureate degree

- Strength and Conditioning Specialist
- Certified Personal Trainer
- Health Fitness Instructor
- Exercise Specialist
- Coach

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.S.)
 - 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, community colleges (M.A. required), 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

Exercise Science

- Physical Therapy
- Allied Health Therapy
- Interdisciplinary Occupational Therapy

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 (Currently Inactive)

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 14 to 15 units (required of all students) and a minimum of 7 to 8 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	3
<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	14-15

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	7-8
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 might 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/docs/applicationma.pdf>);
 - 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.

The graduate coordinator serves as advisor to all conditionally classified graduate students until the students select a major advisor and advance to classified graduate status.

Classified Graduate

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.

Advancement to Candidacy for the M.A. Degree

The Advancements to Candidacy form (GS01) 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

Sample Four-year Program for Bachelor of Science in Kinesiology, Exercise Science Concentration

LOWER-DIVISION PREPARATION

FRESHMAN YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
BIOL 110 (4)	CHEM 115A (5)
CS 101 (3)	MATH 165 (4)
GE (8)	GE (7)

SOPHOMORE YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
BIOL 220 (4)	KIN 201 (3)
CHEM 115B (5)	PHYS 209A/210A (4)
Nutrition (3)	BIOL 224 (4)
GE (3)	GE (3)

UPPER-DIVISION SPECIALIZATION

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
KIN 241/242 (3)	KIN 360 (4)
KIN 301 (4)	KIN 315 (3)
PHYS 209B/210B (4)	GE (4)
GE (4)	GE UD (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
KIN 305 (4)	KIN 430D (3)
KIN 350 (4)	KIN 460 (3)
KIN 410 (3)	PSY 425 (4)
GE UD (3)	GE UD (E) (3)
	Elective (3)

TOTAL UNITS: 120

Sample Four-year Program for Bachelor of Science in Kinesiology

Physical Education, Adapted Physical Education, Lifetime Physical Activity (both emphases)

LOWER-DIVISION PREPARATION

FRESHMAN YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
BIOL 115 (3)	CHEM 105 (5)
MATH 165 (4)	GE (11)
CS 101 (3)	
GE (4)	

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
Biol 220 (4)	KIN 201 (3)
Nutrition (3)	Biol 224 (4)
GE (8)	KIN 242 (3)
	GE (6)

UPPER-DIVISION SPECIALIZATION

(see concentration specific classes below and to the right)

JUNIOR YEAR: 17 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (10 Units)</i>
KIN 301 (4)	KIN 360 (4)
KIN 315 (3)	KIN 410 (3)
	GE UD (3)

SENIOR YEAR: 17 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (10 Units)</i>
KIN 350 (4 units)	KIN 305 (4)
GE UD (3)	KIN 460 (3)
	GE UD (3)

**IN ADDITION TO THE UPPER-DIVISION SPECIALIZATION,
CHOOSE ONE OF THE FOLLOWING OPTIONS:**

• PHYSICAL EDUCATION • (with Upper Division core)

JUNIOR YEAR: 12 Units

<i>Fall Semester (8 Units)</i>	<i>Spring Semester (4 Units)</i>
KIN 306 (1)	KIN 308 (1)
KIN 310 (1)	KIN 320 (3)
KIN 325 (3)	
KIN 400 (3)	

SENIOR YEAR: 13 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (6 Units)</i>
KIN 404 (2)	KIN 309 (1)
KIN 420 (3)	KIN 422 (4)
Elective (2)	KIN 430 (1)

• ADAPTED PHYSICAL EDUCATION • (with Upper Division core)

JUNIOR YEAR: 11 Units

<i>Fall Semester (5 Units)</i>	<i>Spring Semester (6 Units)</i>
KIN 306 (1)	KIN 325 (3)
KIN 426 (4)	KIN 427 (3)

SENIOR YEAR: 14 Units

<i>Fall Semester (9 Units)</i>	<i>Spring Semester (5 Units)</i>
KIN 425 (3)	KIN 430C (1)
KIN 430C (1)	EDSP 422 AB (4)
EDSP 433 (3)	
Elective (2)	

• LIFETIME PHYSICAL ACTIVITY • EMPHASIS: FITNESS AND WELLNESS (with Upper Division core)

JUNIOR YEAR: 13 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (6 Units)</i>
KIN 241 (3)	F&W Elective (3)
KIN 426 (4)	F&W Elective (3)

SENIOR YEAR: 12 Units

<i>Fall Semester (5 Units)</i>	<i>Spring Semester (7 Units)</i>
KIN 430E (3)	KIN 442 (4)
Elective (2)	KIN 446 (3)

• LIFETIME PHYSICAL ACTIVITY • EMPHASIS: COACH EDUCATION (with Upper Division core)

JUNIOR YEAR: 9-11 Units

<i>Fall Semester (6-7 Units)</i>	<i>Spring Semester (3-4 Units)</i>
KIN 404 (2-3)	KIN 420 or 422 (3-4)
4 Units of your choice (4)	

SENIOR YEAR: 12-14 Units

<i>Fall Semester (5-7 Units)</i>	<i>Spring Semester (7 Units)</i>
KIN 430E (3)	KIN 403 (3)
CE Elective (2-4)	KIN 426 (4)

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: 35 Units

Fall Semester (18 Units)

KIN 120 (2)
ENGL 101 (4)
Foreign Language (4) (if needed)
MATH 165 (4)
GE (3-4)

Spring Semester (17 Units)

BIOL 115 (3)
GE (14)

SOPHOMORE YEAR: 33 Units

Fall Semester (15 Units)

BIOL 220 (4)
KIN 306 or 310 (1)
KIN 320 (3)
GE (7)
Have taken CBEST.
Apply to Single-Subject Credential Program.

Spring Semester (18 Units)

KIN 242 (3)
KIN 308 or 309 (1)
KIN 315 (3)
BIOL 224 (4)
GE (7)

SUMMER SESSION: 7 Units

EDUC 417 (3)
Foreign Language (if needed) (4)

JUNIOR YEAR: 34 Units

Fall Semester (19 Units)

KIN 301 (4)
KIN 306 or 310 (1)
KIN 350 (4)
KIN 410 (3)
GE (7)

Spring Semester (15 Units)

KIN 308 or 309 (1)
KIN 325 (3)
KIN 360 (4)
Nutrition (3)
EDSS 442 (4)

SUMMER SESSION: 9 Units

KIN 400 (3)
EDSS 418 (3)
EDSP 433 (3)

SENIOR YEAR: 34 Units

Fall Semester (17 Units)

KIN 305 (4)
KIN 460 (3)
EDSS 443A (1)
EDSS 443B (2)
EDSS 444 (3)
EDSS 446 (4)

Spring Semester (17 Units)

EDSS 458 (12)
EDSS 459 (3)
KIN 404 (2)

LATIN AMERICAN STUDIES

Advisors

Theresa Alfaro-Velcamp / History Department, 707-664-2278
Robert McNamara / Political Science Department, 707 664-2676

Program Offered

Minor in Latin American Studies

Latin American Studies Minor

The minor in Latin American Studies offers a cross-disciplinary concentration on an important region of the world for students preparing for careers in or focusing on Latin America. Through a combination of courses in different disciplines, it provides a general background in Latin American culture, history, politics, economics, literature, social structures, and foreign relations. Although study of a language (other than English) is not required, it is highly recommended.

The minor consists of 20 semester units, which include courses:

- In at least two different disciplines;
- At least one from the Regional courses; and
- No more than 12 units from any one discipline.

Students interested in the minor can contact Theresa Alfaro-Velcamp, Department of History or Robert McNamara, Department of Political Science.

Regional Courses

HIST 241 History of the America Part I	3
HIST 242 History of the Americas Part II	3
GEOG 392 Geography of Latin America and the Caribbean	4
HIST 339 Ancient and Colonial Latin America	4
HIST 342 Modern Latin America	4
POLS 453 Politics of Latin America	4
SPAN 307 Cultures of Latin America (Taught in Spanish)	4
FR 314 French Caribbean Literatures (Taught in English)	4
CALS 480 Latin American Migration to the United States	4

Specialized Courses

CALS 314 Latin American Literature and Translation	4
BUS 396W The Global Wine Industry	4
ECON 403 Seminar in International Development	4
HIST 433 History of Mexico	4
HIST 449 Gender and Sexuality in Latin America	4
SPAN 402 Latin American Literature (Taught in Spanish)	4

Supporting Electives

Any courses focusing on Latin America and the Caribbean and chosen in consultation with and approved by an advisor for the minor in Latin American Studies.

Total units for minor 20

LIBERAL STUDIES - HUTCHINS SCHOOL OF LIBERAL STUDIES

HUTCHINS SCHOOL OF LIBERAL STUDIES DEPARTMENT OFFICE

Rachel Carson Hall 44
(707) 664-2491
www.sonoma.edu/hutchins

DIRECTOR

Stephanie Dyer

ADMINISTRATIVE COORDINATOR

Kathryn Atwood

PROGRAM ADVISOR

Donna Garbesi

Faculty

Stephanie Dyer

Ben Frymer

Ajay Gehlawat

Debora Hammond

Janet Hess

Heidi LaMoreaux

Eric McGuckin

Mutombo M'Panya

Hilda Mercedes Romero

Francisco H. Vázquez

Programs Offered

Interdisciplinary Lower- Division General Education Program

Bachelor of Arts in Liberal Studies

Track I: Interdisciplinary Studies Major

Track II: Multiple Subject (Pre-credential elementary teaching) Preparation Program

Track III: Blended Program (4 year accelerated plan B.A. Plus Multiple Subject Credential)

Minor in Integrative Studies

Degree Completion 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 CSU articulated and approved General Education program that integrates material from the humanities, the social sciences, and the natural sciences. It also 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 offered, as well.

The Hutchins School has several distinctive features:

- An emphasis on active participation in one's own education, on self-motivation, and on learning to learn
- Small, seminar classes
- Close cooperation and a feeling of community among students and professors
- A diverse faculty, each member trained in more than one field of study, to help students learn how to approach a problem from several points of view
- Courses organized around themes or questions, rather than according to the traditional division of subject matter into disciplines
- Encouragement to engage in independent study projects and study abroad programs
- Internship/field study to bridge academic studies with career placements and community service
- 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 freshmen 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.

Students applying as freshmen must test into college level English. 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 undergo a separate application process by February 28 for the fall semester and October 15 for the spring semester. Students can begin this application process by contacting the Hutchins Main Office.

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.

BIOL 110: Biological Inquiry (or equivalent)

Chemistry, physics, or astronomy course

Geology or physical geography

MATH 150: Geometry (General Education math may fulfill this requirement for off-campus transfers)

A course in the history of the visual arts, focused on drawing, painting, or sculpture

A survey or history course in the performing arts: dance, music, or theatre

When entering the Track III Blended Program as freshmen students must file a separate application available at:

<http://www.sonoma.edu/hutchins/student/student-forms.html>.

Degree Requirements	Units
General Education Lower-Division (May include 48 units in LIBS Integrative GE)	50
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)	21
Total units needed for graduation	120

Interdisciplinary General Education Program Lower-Division

The CSU approved and articulated 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 in the Modern World (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. 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 or credit/no credit. LIBS 101 is only available credit/no credit. In LIBS 102, 201, and 202 students may choose a letter grade or the credit/no credit option. The student

is also given a copy of a detailed evaluation of his or her work, which is placed in the student's Hutchins file. 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 if students choose to take the courses credit/no credit. Students choosing the graded option will have their letter grade included as part of their Sonoma State G.P.A.

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

(See pages 183-185 for sample four-year programs.)

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 seminar 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 204/304/205 and 208/308/209.)

Requirements for the Major

First Semester	Units
LIBS 302 Introduction to Liberal Studies, and	3
LIBS 304 We Hold These Truths (Fall) or LIBS 204 or LIBS 205	3-4
LIBS 308 The Practice of Culture (Spring) or LIBS 208 or LIBS 209	3-4
Subsequent Semesters	
LIBS 304 or 204 or LIBS 205 and LIBS 308 or 208 or LIBS 209 (2 semester sequence)	6-8

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

Additional requirements and electives (per track described below) 15

Final Semester

LIBS 402 Senior Synthesis	4
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

Students who would prefer 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 programs 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 410 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.

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.

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 this path, a liberal studies major may complete the requirements to enter a Master of Business Administration program upon graduation.

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	
ENGL 379 English Language	3-4
LIBS 330 The Child in Question	3
MATH 300A Elementary Number Systems	3
MATH 300B Probability and Statistics	3

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. See sample four year plan for Bachelor Arts in Liberal Studies with teaching credential, Track III on page 187.

Minor in Integrative Studies

The Hutchins minor is designed to help the student in a traditional discipline understand the relation that his or her major field of study bears to a number of other areas of inquiry and expertise. The minor consists of 20 units, taken in the Hutchins School, and is distributed as follows:

LIBS 302 Introduction to Liberal Studies (3) (exempt for students continuing from the LIBS lower division)

LIBS 402 or 403 Senior Synthesis (4)

Choice of courses from the following (13 units total):

LIBS 304 We Hold These Truths (3) or LIBS 204 or LIBS 205

LIBS 308 Practice of Culture (3) or LIBS 208 or LIBS 209

LIBS 320 (A, B, C, or D): Core Seminars (3)

LIBS 310/410: Directed Study (1-4)

LIBS 399: Student-Taught Courses (2)

Total units 20

Students must complete LIBS 202 or 302 before they will be allowed to take a seminar (LIBS 320). In consultation with an advisor, students select interdisciplinary core seminars and other courses offered in the major, and then complete LIBS 402 or 403 during their final semester, examining the student’s major field of study in relation to other disciplinary perspectives.

Saturday Degree Completion Program

The Saturday BA Degree Completion Program is designed for those who have completed junior transfer requirements. It offers an alternative route to a bachelor of arts degree for working adults or others whose schedules do not permit them to attend regular campus classes. Instruction is organized around one on-campus meeting for a full Saturday each month, combined with weekly online discussions and ongoing reading and writing assignments.

Coursework in the program is designed to investigate current issues and to allow students to explore their own interests. Students stay with their cohort throughout the program as different professors guide the seminars each semester.

Requirements for the Major

LIBS 380 Identity and Society	10
LIBS 381 Technology and the Environment	10
LIBS 382 Work and the Global Future	10
LIBS 470 Senior Project (independent study)	10

The first course in the program, LIBS 380, must be completed with a C or better; a student who does not work well within the Hutchins program may receive credit for the course with a terminal C but not be allowed to continue in the program. Continuing students must earn a C average for all courses in the major; no course with a grade lower than C- will be accepted.

General education courses and electives may be required in addition to transfer units to complete University graduation requirements. Students completing all four courses may waive up to 9 units of upper-division general education.

For individual preadmissions counseling, contact Susie McFeeters, Program Advisor, at (707) 664-2601, or email at susan.mcfeeters@sonoma.edu

Website: www.sonoma.edu/exed/libs

M.A. Program in Organization Development

The M.A. Program in Organization Development provides professional preparation for individuals interested in learning how to develop more effective and sane organizations. In four semesters, participants gain the practical skills, conceptual knowledge, and field-tested experience to successfully lead organization improvement efforts. The academic experience involves seminar discussions, skill-building activities, and extensive field projects under the guidance and supervision of practitioner faculty.

Students are admitted each fall and work together as one cohort group through the 40-unit program. Interaction processes among students and instructors are an important source of learning. Both the coursework and field supervision emphasize the acquisition of personal awareness, interpersonal competence, and conceptual understanding required for effective practice in organization development.

Classes are scheduling in the evenings to meet the needs of currently employed students. Some courses schedule all-day sessions on Saturdays, generally meeting not more than once each month. For employed students, work schedule flexibility is highly desirable.

Program of Study

Each cohort group participates together in an integrated sequence of courses over the four-semester program. These courses address the theory and practice of group facilitation, design and presentation of training experiences, arranging and carrying out organizational client engagements, and leading whole-system change projects. Case reports and conceptual frameworks provide a solid foundation to guide professional practice.

Students take all courses together as a cohort group. The course list is as follows:

OD 513 Facilitation and Training	4
OD 554 Organization Systems Inquiry	4
OD 533A,B Group Dynamics in Organization Development	2
OD 514 Organization and Team Development	4
OD 556 Socio-Technic Systems Redesign	4
OD 557 Human Systems Redesign	1-2
OD 572A,B Internship and Professional Practice in OD	4
OD 544A,B Qualitative Research in Organizations	1-2
OD 518A,B Advanced Intervention Methods in OD	2
OD 598 Culminating Paper Tutorial	2

The culminating experience requirement consists of two parts:

- An analytical case study demonstrating competence in the design and implementation of an organization development project with an actual organization; and
- A publishable article on a topic relevant to professional practice in organizations.

Both reports are planned with, and approved by, the student's faculty advisor.

Prerequisites for Admission

The Organization Development Program has the following admissions requirements:

1. B.A. degree from an accredited college or university;
2. A 3.00 GPA for the last 60 units of academic work;
3. At least two years of relevant work experience in or with organizations;
4. Applicants should have a foundational understanding of issues and concepts encountered in organizations, as well as those pertaining to human behavior and experience. Generally, this may mean that applicants with a B.A. in psychology may need courses in business administration, while those with a degree in business may need courses in psychology. Prerequisite coursework in one or more of the following may be used to satisfy these requirements. Note: For applicants who are unable to take courses in these areas prior to enrollment in the program, a directed reading option is available:
 - Organization behavior or organizational psychology; and/or
 - Psychological foundations, personality, development, or group process.
5. It is advisable to consult with the Organization Development Program Coordinator before taking prerequisite courses; and
6. Applicants must demonstrate an acceptable level of competence in oral and written communication, which will be demonstrated by a written statement about the student's background, relevant work experience, and specific goals to be achieved in the program; a writing sample from the applicant's recent academic or professional work; and interviews during the admissions process.

Fees

Fees are set by the School of Extended and International Education. Refer to the Organization Development website for additional information: <http://www.sonoma.edu/exed/orgdev/>

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies, Track I (upper division transfer students)

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (A2) (4)	BIOL 110 (B2) (4)
Math GE (B4) (4)	Ethnic Studies (D1) (4)
Humanities GE (C1) (4)	PHIL 101 or 102 (A3) (4)
Physical Science GE (B1) (3)	World History GE (D2) (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
Humanities GE (C2) (4)	Humanities GE (C3) (4)
POLS 200 (D4) (3)	Specific Emphasis Science (B3) (3)
Physical Science GE (B1) (3)	U.S. History GE (D3) (3)
Electives (6)	GE Area D2 (4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 302 (3)	LIBS 308 (3) or LIBS 208 (4) or LIBS 209 (4)
LIBS 304 (3) or LIBS 204 (4) or LIBS 205 (4)	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

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 204 (4)	ECON 205 (4)
Declare Business Minor	

JUNIOR YEAR: 31 Units

<i>Fall Semester (16 units)</i>	<i>Spring Semester (15 units)</i>
LIBS 304 (3) or LIBS 204 (4) or LIBS 205 (4)	LIBS 308 (3) or LIBS 208 (4) or LIBS 209 (4)
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

Sample Four-Year Plan for Track II Pre-Credential Elementary Teacher Preparation (Including Hutchins Lower Division GE program)

FRESHMAN YEAR: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
LIBS 101 Human Enigma (12)(A2)(C1)	
MATH 150 Geometry (3)(B4)	LIBS 102 In Search of Self (12)(B2)(D3)(E) Chemistry, Physics, or Astronomy (3)

SOPHOMORE YEAR: 29-32 Units

Fall Semester (15-16 Units)	Spring Semester (14-16 Units)
LIBS 201 Exploring the Unknown (12)(A1)(A3)(B1)(C3)(D1)	
LIBS 202 Challenge & Response (B3)(C3)(D2)(D4)(D5)*	
Geology or Physical Geography (3-4)	in the Modern World (12)
	Performing Arts Elective: Music, Theater, or Dance survey or history (2-4)

JUNIOR YEAR: 30-32 Units

Take the WEPT during academic year.
Take CSET: Multiple Subjects summer junior year. Visit www.cset.nesinc.com for testing information.

Fall Semester (15-16 Units)	Spring Semester (15-16 Units)
LIBS 304 or 204 or 205 (3-4)	LIBS 308 or 208 or 209 (3-4)
LIBS 320 Core Seminar (3)	LIBS 330 The Child in Question (3)
MATH 300A Elem. Number Systems (3)	KIN 400 Elementary PE (3)
Concentration Course (3)	MATH 300B Data, Chance & Algebra (3)
EDMS 470 Multicultural Pedagogy (3)	Concentration Course (3)

SENIOR YEAR: 28-32 Units

Fall Semester (15-16 Units)	Spring Semester (13-16 Units)
LIBS 312 Schools and Society (3)	LIBS 320 Core Seminar (3)
LIBS 320 Core Seminar (3)	LIBS 320 Core Seminar (3)
LIBS 327 Literacy, Language, & Pedagogy (3)	LIBS 402 Senior Synthesis (4)
Concentration Course (3)	Concentration Course (3-4) or electives to reach 120 units total if needed
Electives (3-4)	

TOTAL UNITS: 120

All courses (except LIBS 101-202) must be taken for a letter grade unless offered CR/NC only. You must earn a "C-" or higher in all courses used for the major. LIBS 312, LIBS 330, and EDMS 470 must be a "C" or higher to meet credential requirements. This plan is a suggestion only and may require students to vary their plan according to courses available and individual needs. Please seek advising if you have questions regarding your four year plan.

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies, Track II (Without Hutchins Lower Division GE program) (upper division transfer students)

FRESHMAN YEAR: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
ENGL 101 (A2) (4)	CHEM, Physics, or Astronomy (B1) (3)
MATH 150 (B4) (3)	Ethnic Studies (D1) (3)
ARTH, THAR, or MUS (C1) (4)	PHIL 101 or 102 (A3) (4)
BIOL 110 (B2) (4)	World History GE (D2) (3)
	Elective (2)

SOPHOMORE YEAR: 30 Units

Fall Semester (16 Units)	Spring Semester (14 Units)
GE Area E (3)	Humanities GE (C3) (4)
Humanities GE (C2) (4)	GE Area D5 (4)
POLS 200 (D4) (3)	U.S. History GE (D3) (3)
Concentration Course (3)	Concentration Course (3)
GEOL or Physical GEOG (B1 or B3) (3)	

JUNIOR YEAR: 30 Units

Fall Semester (15 Units)	Spring Semester (15 Units)
LIBS 302 (3)	LIBS 308 or 208 or 209 (3-4)
LIBS 304 or 204 or 205 (3-4)	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

Fall Semester (15 Units)	Spring Semester (15 Units)
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

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)	Performing Arts Elective:
Take CBEST or CSET: Writing Skills Exam spring/summer.	Music, Theater or Dance survey or history (2-3)

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)	CHEM, Physics, or Astronomy (3)
Certificate of clearance - Apply For Live Scan and Clear TB test.	Interviews April
Apply to Education Program (Nov.- Jan).	

JUNIOR YEAR: 36 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (18 Units)</i>
LIBS 304 or 204 or 205 (3-4)	LIBS 327 (3)
LIBS 320 (3)	LIBS 320 (3)
MATH 300A (3)	KIN 400 (3)
EDMS 470 (3)	MATH 300B (3)
EDMS 411 (3)	EDMS 463 (3)
Take the WEPT during academic year.	EDMS 475 (3)
Apply for fall graduation by audit deadline.	Re-apply to SSU as post- 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)
LIBS 320 (3)	EDMS 471 (2)
EDMS 474 (3)	EDMS 464S (2)*
EDMS 476F (3)	

*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

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.

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

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 AMCS, theater arts, art history, English, philosophy, NAMS, CALS	16
Behavioral / Social sciences economics, geography, political science, psychology, sociology, anthropology, women's and gender studies, history, criminal justice	16
Natural / Physical sciences astronomy, biology, chemistry, environmental studies, geology, physics	6
Electives drawn from above disciplines or in consultation with advisor	12
Total units in the major	50

* 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 70 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: 24 Units

<i>Fall Semester (12 Units)</i>	<i>Spring Semester (12 Units)</i>
Natural Science (3)	Natural Science (3)
Behavioral Science (3)	Humanities (3)
Humanities (3)	Behavioral Science (3)
Behavioral Science (3)	Humanities (3)

SENIOR YEAR: 26 Units

<i>Fall Semester (12 Units)</i>	<i>Spring Semester (14 Units)</i>
Behavioral Science (3)	Major Elective (4)
Humanities (3)	Major Elective (4)
Behavioral Science (3)	Major Elective (3)
Humanities (3)	Major Elective (3)

TOTAL UNITS: 120

LINGUISTICS

PROGRAM OFFICE

Nichols 334
(707) 664-2504

LINGUISTICS PROGRAM COORDINATOR

Contact Department of English, (707) 664-2140, or
Greta Vollmer, Professor, English, (707) 664-2504

LINGUISTICS PROGRAM ADVISORS

Richard J. Senghas, Professor, Anthropology
Mira Katz, Professor, English
Jeffrey Reeder, Professor, Modern Languages (Spanish)
Robert Train, Professor English
Elenita Strobel, Professor, AMCS
Patricia Kim-Rajal, Assoc. Professor, Chicano and Latino Studies

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 Fall 2010, the Teaching English as a Second Language program will 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>	3-4
ANTH 200 Introduction to Linguistic Anthropology	3
ENGL 203 Introduction to Linguistic Studies	4
ENGL 341 Explorations in Language	4
SPAN 304 Introduction to Spanish Linguistics	4
<i>One of the following courses in linguistic methods:</i>	4
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

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
 email: math@sonoma.edu
 www.sonoma.edu/math

DEPARTMENT CHAIR

Brigitte Lahme

ADMINISTRATIVE COORDINATORS

Whitney Sparks
 Marissa McDonald

Faculty

Sam Brannen
 *Jean Bee Chan
 Ben Ford
 Susan Herring
 Izabela Kanaana
 Brigitte Lahme
 Elaine Newman
 Jerry Morris
 Martha Shott
 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
- Minor in 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, economics, 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 has a concentration in applied mathematics. This program prepares 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 (50, 8 in major)	42
Major	46-55
Electives	23-26
Total units needed for graduation	120

Core Curriculum

MATH 161 Differential and Integral Calculus I (GE B4)	4
MATH 180 Computing for Mathematics and Science	2
MATH 211 Differential and Integral Calculus II	4
MATH 220 Reasoning and Proof (GE A3)	4
MATH 241 Linear Algebra with Applications in Differential Equations	4
MATH 340 Real Analysis I	4
Total units in core curriculum	22

B.A. Program (Pure Mathematics)

(See page 191 for a sample four-year program.)

Core Curriculum 22 Plus

MATH 261 Multivariable Calculus	4
MATH 306 Number Theory or	
MATH 308 Geometry	4
MATH 320 Modern Algebra I	4
MATH 322 Linear Algebra	4
Two of:	
MATH 418 Topology	
MATH 420 Modern Algebra II	
MATH 440 Real Analysis II	
MATH 460 Complex Analysis	4+4

Total units in B.A. program 46

B.A. Program (Secondary Teaching)

(See page 192 for sample four-year programs.)

This B.A. program satisfies state requirements for subject matter preparation in mathematics for the Single Subject Teaching Credential.

Core Curriculum

	22 Plus
MATH 250 Probability and Statistics	2
MATH 306 Number Theory	4
MATH 308 College Geometry	4
MATH 310 History of Mathematics	4
MATH 316 Graph Theory and Combinatorics or	
MATH 416 Graph Theory and Combinatorics	4
MATH 320 Modern Algebra I	4
MATH 470 Mathematical and Statistical Modeling	4
MATH 390 Fieldwork and Seminar:	
Secondary Mathematics Teaching	2
MATH 490 Capstone Seminar:	
Secondary Mathematics Teaching	1

Supporting Courses

PHYS 114 Introduction to Physics	4
Total units in secondary teaching program	55

Note: Students considering graduate school in mathematics are advised to also take MATH 322 and Math 261.

B.A. Program (Bi-disciplinary Mathematics)

This B.A. concentration allows a student to combine mathematics with another discipline.

MATH 161 Differential and Integral Calculus I (GE B4)	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
or MATH 250 Probability and Statistics	2
MATH 180 Computing for Mathematics and Science	2
MATH 220 Higher Mathematics: An Introduction	4
or MATH 210 Introduction 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	4
MATH 308 College Geometry	4
MATH 310 History of Mathematics	4
MATH 316 Graph Theory and Combinatorics	4
or MATH 416 Graph Theory and Combinatorics	4
MATH 320 Modern Algebra I	4
MATH 322 Linear Algebra	4
MATH 330 Techniques of Problem Solving	1
MATH 340 Real Analysis I	4
MATH 441 Operations Research	3

MATH 445 Mathematical Statistics and Operations Research	4
MATH 460 Introduction to Complex Variables	4
MATH 470 Mathematical and Statistical Modeling	4
MATH 485 Selected Topics	1-3
MATH 490 Capstone Seminar	1

A minimum of 22 additional units in another program (outside of the Department of Mathematics and Statistics), at least 12 at the upper-division level, chosen in consultation with and approved by the Mathematics and Statistics Department Chair.

Total units in Bi-disciplinary Mathematics program	52
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B.S. Program (Applied Mathematics)

This B.S. concentration prepares students for employment in industry and graduate schools in scientific fields.

Core Curriculum

	22 Plus
MATH 261 Multivariable Calculus	4
MATH 316 Graph Theory and Combinatorics	
or MATH 416 Graph Theory and Combinatorics	4
or MATH 445 Mathematical Statistics and Operations Research	4
MATH 322 Linear Algebra	4
MATH 345 Probability Theory	4
MATH 352 Numerical Analysis	4
MATH 431 Applied Partial Differential Equations	4
MATH 470 Mathematical and Statistical Modeling	4

Supporting Courses

PHYS 114 Introduction to Physics	4
Total units in applied mathematics program	54

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 and Statistics 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 some course work in residence at Sonoma State University. Students interested in this cooperative program should contact the chair of the Mathematics and Statistics 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 and middle school levels. Twenty-three units are required. These must include MATH 300A, MATH 103 or 150, MATH 142 or 200 or 220, MATH 160 or 161, MATH 250 or 300B, and two courses chosen from MATH 306, MATH 310, MATH 316, and MATH 470. Students pursuing this minor are also strongly advised to take MATH 390.

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 and Statistics 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. In particular, Math 390 should be taken in the Fall semester of a student's sophomore or junior year.

Elementary

The Department of Mathematics and Statistics 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.

Additionally, the California Commission on Teacher Credentialing has approved a Foundational Level Mathematics Credential Waiver program, and the Bi-Disciplinary concentration can be used to simultaneously earn a B.A. in Mathematics and satisfy the Foundational Level Mathematics Credential Waiver program.

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, 111, 131, 141, 150, 160, 161, and 165. Please consult the Schedule of Classes or contact 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 courses except MATH 35, 45, 103, 104, 105, 111, 131, 141, 150, 160, 161, and 165 are available in the Cr/NC grading mode to non-mathematics majors.

All Students

MATH 160W, 161W, 175, 210, 211W, 295, 330, 390, 395, and 499 are available only as Cr/NC.

Mathematics and Statistics Majors

A mathematics and statistics 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 and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog).

Sample Four-Year Program for Bachelor of Arts in Mathematics-Pure Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 161 (B4) (4)	MATH 211 (4)
Freshman Learning Community (GE) (6) GE (4)	GE (11)
Math 175 (elective) (1)	

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 241 (4)	MATH 261 (4)
PHYS 114 (B1) (4)	MATH 220 (A3) (4)
MATH 180 (2)	GE (3)
GE (5)	Elective (4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH Elective (E.g. MATH 345) (4)	MATH 306 or 308 (4)
MATH 375 (1)	MATH 322 (4)
UD GE (3)	UD GE (3)
Elective (7)	Elective (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 320 (4)	MATH 420 or MATH 440 (4)
MATH 340 (4)	MATH 460 or MATH 418 (4)
UD GE (3)	Elective (7)
Elective (4)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Science in Mathematics-Applied Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 161 (B4) (4)	MATH 211 (4)
Freshman Learning Community (GE) (6) GE (4)	GE (11)
Math 175 (elective) (1)	

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 241 (4)	MATH 261 (4)
PHYS 114 (B1) (4)	MATH 220 (A3) (4)
MATH 180 (2)	GE (3)
GE (5)	Elective (4)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 470 (4)	MATH 316 or 416 (4)
MATH 345 (4)	MATH 322 (4)
UD GE (3)	MATH 375 (1)
Elective (4)	UD GE (3)
	Elective (3)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 352 (4)	MATH 431 (4)
MATH 340 (4)	Elective (11)
MATH 445 (4)	
UD GE (3)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in Mathematics-Secondary Teaching Concentration

FRESHMAN YEAR: 30 Units

Fall Semester (15 Units)

MATH 161 (B4) (4)
 Freshman Learning Community (GE) (6)
 GE (4)
 Math 175 (elective) (1)

Spring Semester (15 Units)

MATH 211 (4)
 GE (11)

SOPHOMORE YEAR: 30 Units

Fall Semester (15 Units)

MATH 241 (4)
 PHYS 114 (B1) (4)
 MATH 180 (2)
 MATH 390 (2)
 GE (3)

Spring Semester (15 Units)

MATH 250 (4)
 MATH 220 (A3) (4)
 GE (3)
 Elective (4)

JUNIOR YEAR: 30 Units

Fall Semester (15 Units)

MATH 310 (4)
 MATH 470 (4)
 MATH 375 (1)
 UD GE (3)
 Elective (3)

Spring Semester (15 Units)

MATH 306 (4)
 MATH 316 (4)
 UD GE (3)
 Elective (4)

SENIOR YEAR: 30 Units

Fall Semester (15 Units)

MATH 320 (4)
 MATH 340 (4)
 UD GE (3)
 Elective (4)

Spring Semester (15 Units)

MATH 308 (4)
 MATH 490 (1)
 Elective (10)

TOTAL UNITS: 120

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

Jeffrey Reeder / Spanish, Applied Linguistics, Portuguese

Christine Renaudin / French, French Literature, Culture, Francophone Studies

Parissa Tadrissi / Spanish, Peninsular and Latin American Literatures and Cultures

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

Bachelor of Arts in the Special Major: German Cultural Studies

Minor in German

Minor in Spanish

Courses in World Literatures in English

Humanities Learning Communities (A3 C3)

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 the German-speaking countries, 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 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. 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 Global 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 1070.

Language and Culture Learning Center

The Language and Culture Learning Center is dedicated to enhancing the language-learning experience of students at Sonoma State University. In keeping with Sonoma State's focus on liberal arts

education, the Center strives to integrate various learning modalities into students' educational experiences in meaningful, personal, and individual ways. The Center's Peer Language Facilitator 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 Center at Sonoma State, please consult our website at www.sonoma.edu/modlang/learning_center.

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 Modern Languages Programs:

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 programs. The student may repeat the course if she/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

(See page 197 for a sample four-year program.)

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	50
Major requirements	32
General electives	38
Total units needed for graduation	120

Note: Students should note the prerequisites for upper-division courses.

Major Requirements

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

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 groups of courses:</i>	8
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 21 required units must be taken at SSU.

Requirements for the Minor

The German minor program consists of a minimum of 21 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 6 courses:

GER 102 (4 units)—Fall, Spring Second Semester: Contemporary Germany <i>Prerequisite: GER 101 or consent of instructor.</i> <i>Requires concurrent enrollment in GER 102L (1 Unit)</i>	4
GER 200 (4 units)—Fall Intermediate German: The German-Speaking World Today <i>Prerequisite: GER 102 or consent of instructor.</i> <i>Requires concurrent enrollment in GER 200L (1 Unit)</i>	4
GER 210 (4 units)—Spring Intermediate German through Film <i>Prerequisite: GER 102 or consent of instructor.</i> <i>Requires concurrent enrollment in GER 210L</i>	4
GER 314 (4 units)—Fall Literature and Culture of the German-Speaking World <i>Note: Taught in English. Requires concurrent enrollment for German minor students in GER 315.</i> <i>Prerequisite for German minor students: GER 102 or consent of instructor. Course may be repeated for credit if topic changes.</i>	4
GER 315 (1 unit)—Fall German Language and Literature <i>Note: Requires concurrent enrollment for German minor students in GER 314.</i>	1
GER 300 (4 units)—Spring Advanced German Studies <i>Prerequisites: GER 200 and GER 210, or consent of instructor. Course may be repeated for credit if topic changes.</i>	4
Total units in the minor	21

Bachelor of Arts in the Special Major: German Cultural Studies

For information about the Bachelor of Arts in the Special Major: German Cultural Studies, see Interdisciplinary Studies, p. 169. You may also contact the coordinator Michaela Grobbel (grobbel@sonoma.edu; 707.664.2673), or visit www.sonoma.edu/modlang/german.

Bachelor of Arts in Spanish

(See page 197 for a sample four-year program.)

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	50
Major requirements	36-56
Electives/Other	14-34
Total units needed for graduation	120

Plus, either:

SPAN 306 Cultures of Spain or	
SPAN 307 Cultures of Latin America	4
Total minor units	20

Spanish Placement Evaluation

Students are encouraged to have a placement evaluation. Please see a program advisor for proper course placement.

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

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	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 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 38 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

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
FR 101 (*2) (4)	FR 102 (*2) (4)
FR 101L (1)	FR 102L (1)
GE A2 (4)	GE C1 (4)
GE A3 (4)	GE B1 (*1) (3)
GE B4 (3)	Elective or Minor (2)

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
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 (4)	GE D5(*4) (3)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
FR 300 (C3) (UD) (4)	FR 411 (C3) (UD) (4)
FR 321 (C3) (UD) (4)	FR 415 (C3) (UD) (4)
GE D1 (UD) (3)	GE E1 (UD) (3)
Elective or Minor (4)	Elective or Minor (4)

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
FR 320 (C3) (UD) (4)	FR 410 (C3) (UD) (4)
Elective or Minor (3)	FR 475 (C3) (UD) (4)
Elective or Minor (3)	Elective or Minor (3)
Elective or Minor (3)	Elective or Minor (3)
Elective or Minor (2)	

TOTAL UNITS: 120

(*1) Either B1 or B3 must have a lab.

(*2) Counts as C3.

(*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.

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: 28 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (12 Units)</i>
SPAN 101 (4)	SPAN 102 (4)
SPAN 101L (1)	SPAN 102L (1)
GE Electives (A2, A3, B4) (11)	GE Electives (C1, B1) (7)

SOPHOMORE YEAR: 32 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (14 Units)</i>
SPAN 201 (4)	SPAN 202 (4)
SPAN 201L (1)	SPAN 202L (1)
GE Electives (B3, D2, C2, D5) (13)	GE Electives (D3, D4, B2) (9)

JUNIOR YEAR: 30 Units

<i>Fall Semester (12 Units)</i>	<i>Spring Semester (18 Units)</i>
SPAN 300 (C3) (UD) (4)	SPAN 304 (4)
SPAN 301 (C3) (UD) (4)	SPAN 305 (C3)(UD)(4)
GE UD (E) (4)	SPAN 307 (C3) (UD) (4)
	GE UD (C3, D1) (6)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
SPAN 306 (C3)(UD)(4)	One SPAN class at the 400 level (4)
Two SPAN classes at the 400 level (8)	Electives/Minor (11)
Electives/Minor (3)	

TOTAL UNITS: 120

MUSIC

DEPARTMENT OFFICE
Green Music Center 2040
(707) 664-2324

DEPARTMENT CHAIR
Brian S. Wilson

ADMINISTRATIVE COORDINATOR
Dolores Bainter

Faculty

Brass and Percussion

Dave Scott, Trumpet
Ruth Wilson, Horn
Anthony Collins, Trombone and Low Brass
Jennifer Wilsey, Timpani, Percussion

Jazz

Doug Leibinger, Program Director
Myles Ellis, Vibes
Dave Scott, Trumpet
Kasey Knudsen, Saxophone
Cliff Hugo, Bass
George Marsh, Drum Set
Randy Vincent, Guitar

Keyboard

Marilyn Thompson, Piano, Chamber Music, Classical Instrumental Repertoire
Ken Cook Jazz Piano
Richard Riccardi, Staff Accompanist
Yvonne Wormer, Staff Accompanist

Music Education

Andy Collinsworth, Program Director, Instrumental Conducting and Methods
Jenny Bent, Choral Conducting
John Stanley, Elementary Methods
Lynne Morrow, Vocal Pedagogy
Roy Zajac, Woodwind Pedagogy
Dave Len Scott, Brass Pedagogy
String Pedagogy
Julia Harrell, Percussion Pedagogy
Eric Cabalo, Guitar Pedagogy

Musicology And Ethnomusicology

John Palmer, Musicology
Dave Len Scott, American Music History, and Jazz
Laxmi G. Tewari, Ethnomusicology

Performing Ensembles - Vocal

Laxmi G. Tewari, Indian Singing Ensemble
Lynne Morrow, Opera and Music Theatre
Jenny Bent, Symphonic Chorus, Chamber Singers

Performing Ensembles - Instrumental

Andy Collinsworth, Symphonic and Chamber Wind Ensembles
Doug Leibinger, Jazz Orchestra and Jazz Ensembles
Marilyn Thompson, Chamber Music
Kendrick Freeman, Latin Jazz Band
Ruth Wilson, Brass Ensemble
Jennifer Wilsey, Percussion Ensemble
Eric Cabalo, Guitar Ensemble
Judiyaba, String Orchestra

Strings

Joe Edelberg, Violin, Viola
Judiyaba, Cello
Eric Cabalo, Classical Guitar

Theory/Composition and Musicianship

Brian Wilson, Theory, Analysis and Composition
William Johnson (Emeritus), Composition
John Palmer and Jenny Bent, Ear Training
Doug Leibinger, Jazz Theory and Arranging
Marcia Bauman, Composition

Voice

Lynne Morrow, Mezzo Soprano, Diction
Jane Hammett, Soprano
David Burnakus, Baritone
Marie Plette, Soprano
Bonnie Brooks, Mezzo Soprano
Ruth Ann Swenson, Soprano
Susan Witt-Butler, Soprano

Woodwinds

Kathleen Reynolds, Flute
Laura Reynolds, Oboe
Roy Zajac, Clarinet
Rufus Olivier, Bassoon

Ensemble in Residence

Faculty Jazz Ensemble
Doug Leibinger and George Marsh, Directors
Sonoma Musica Viva
Brian S. Wilson, Director
Navarro Chamber Players
Victor Romasevich, Violin
Jill Rachuy Brindel, Cello
Marilyn Thompson, Piano and Director

Programs Offered

Bachelor of Music

- Applied Music Concentration
- Jazz Studies Concentration
- Music Education Concentration

Bachelor of Arts: Liberal Arts 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.

The liberal arts music concentration provides a broad basis from which a student may pursue graduate studies or a variety of careers. Three concentrations exist within the bachelor of music. 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 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 420, 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

In semesters where students' production/performance are completed prior to mid-semester, they are expected to participate in one of the Major Ensembles above.

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

In semesters where students' production/performance are completed prior to mid-semester, they are expected to participate in one of the Major Ensembles above.

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)

Juries

Each semester, enrolled music majors perform a jury before the assembled Music Department faculty members. Juries typically take place during the last week of classes and are intended to monitor a student's applied progress. Some of the repertoire is from a list of standard, graded works, compiled by the applied faculty. Adjudicators assess among other things, the performers' musicality, technique, interpretation, and professionalism; expectations will be based on each student's level in the program. Students are responsible for signing up for jury times and arranging accompanists as necessary. Students in the Bachelor of Music degree program must receive a jury score of 75% or better in order to pass. Students in the Bachelor of Arts degree program must receive a jury score of 65% or better in order to pass.

Probation

Students who fall below jury performance level expectations (below 75% for B.M.; below 65% for B.A.) will be placed on Probationary status the following semester. Students on probation may, at the discretion of the faculty, be ineligible for state-supported lessons and will be required to remediate deficiencies at their own expense. At the end of the probation semester, the student must sign up for a jury and successfully pass all deficient material.

Continuation Jury

If at the end of the sophomore year two or more consecutive juries have not been passed the student can be dismissed or reassigned from the music major degree program. Bachelor of Music students can become Bachelor of Arts students, Bachelor of Arts students can become Music Minors.

Bachelor of Music Applied Music Concentration

(See pages 205-207 for sample four-year programs.)

Degree Requirements	Units
General education	46
Major requirements	68
Preparatory and/or general electives	8
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 of Music Theory
 MUS 109 Intensive Keyboard Lab I
 MUS 209 Intensive Keyboard Lab II

Theory/Musicianship (20)

MUS 110 Theory I: Diatonicism
 MUS 210 Theory II: Chromaticism
 MUS 310 Theory III: Form and Analysis
 MUS 410 Theory IV: 20th - Century Techniques
 MUS 120 Ear Training I
 MUS 220 Ear Training II
 MUS 320 Ear Training III
 MUS 420 Ear Training IV

History/Literature (16)

MUS 150 Survey of U.S. Music (satisfies GE Area C1)
 MUS 251 History of Western Music - Ancient World to 1750
 MUS 252 History of Western Music - 1750 to the Present
 MUS 300 Seminar (various topics)
 MUS 350 Survey of World Music or Mus 160 A/B (satisfies GE Area C3)

Applied Skills (5)

Two of the following four courses: (2 units)
 MUS 292 Jazz Piano I
 MUS 392 Jazz Piano II
 MUS 309A Keyboard Proficiency Lab
 MUS 309B Keyboard Proficiency Lab
 MUS 491 Senior Recital

Private instruction (each semester in residence)

Transfer students must take lessons for every semester in residence.

Music Electives (minimum of 3 units)

Courses will vary according to area(s) of interest - see department advisor.

Major Ensemble (each semester in residence)*(See section on performance ensemble requirement. Credit applicable toward graduation, but not the major.)***Repertory Class or Forum**

	3	2	2	
Total units in the major	3	2	2	68

Bachelor of Music Jazz Studies Concentration*(See pages 205-207 for sample four-year programs.)*

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	2
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)

MUS 150 Survey of U.S. Music (satisfies GE Area C1)	3
MUS 251 History of Western Music - Ancient World to 1750	3
MUS 300 Seminar (various topics)	3
MUS 350 Survey of World Music or Music 160 A/B (satisfies GE Area C3)	4

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.)*

	8	8	
Total units in the major	8	8	68

Bachelor of Music, Music Education Concentration

(See pages 205-207 for sample four-year programs.)

Degree Requirements	Units
General education (including 7 units in music)	50
Major requirements (86 units minus 7 units)	80
Preparatory	1-8
Total units needed for graduation	131-137

Requirements for the major

The music education concentration is a B.M. 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 or Music 160 A/B (GE Area C3)	4

Applied Skills (19)

MUS 259 Music Technology: Tools and Applications	2
MUS 189 Jazz Improvisation I	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
<i>And two of the following four courses (2 units)</i>	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 8

(see specific ensemble for music education majors)

Each semester in residence

Additional ensembles—One Choral/Instrumental/Jazz 2

Repertory Class or Forum 8

Total units in the major (7 included in GE) 85

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.

Six units of prerequisites are needed to enter the credential program: EDUC 417, EDSS 418.

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.

Bachelor of Arts Liberal Arts Music Concentration

(See pages 205-207 for sample four-year programs.)

Degree Requirements	Units
General education	46
Major requirements	68
Preparatory and/or Electives	8
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 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 (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 or Mus160 A/B (GE Area C3)	4

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)

Transfer students must take lessons for every semester in residence.

Music Electives (minimum of 4 units)

Courses will vary according to area(s) of interest—see department advisor.

Ensembles (each semester in residence)

See section on performance ensemble requirement.

Repertory Class or Forum

Total units in the major 68

Upper-division lecture course	3
And one of the following courses: (3 units)	3
MUS 150 Survey of U.S. Music	
MUS 250 Survey of European Music (3)	
Ancient World to 1750	
MUS 251	

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:

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

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

Sample Four-Year Program for Bachelor of Music — Applied Music Concentration

FRESHMAN YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
ENGL 101 (GE area A2) (4)	PHIL 101 (GE area A3) (4)
GE Mathematics (GE area B4) (3)	MUS 110 (3)
MUS 106 (3)	MUS 120 (2)
MUS 109 (2)	MUS 209 (2)
Music 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: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE (area D3) (3)	GE (area D2) (3)
MUS 210 (3)	MUS 310 (3)
MUS 220 (2)	MUS 320 (2)
MUS 251 (3)	MUS 252 (3)
MUS 309A (1)	MUS 309B (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: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (area B2) (3)	GE (area B3) (3)
GE (area D5) (3)	GE (area C2) (4)
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 Electives (2)	Music Elective (1)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Music — Jazz Studies Concentration

FRESHMAN YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (GE area A2) (4)	PHIL 101 (GE area A3) (4)
Major Performing Ensemble (1)	Private Instruction (1)
MUS 109 (2)	MUS 389 (3)
MUS 342 (3)	MUS 209 (2)
Music Elective (1)	Major Performing Ensemble (1)
Private Instruction (1)	Music 120 (2)
Music 106 (3)	Music 189 (2)
Jazz Forum (1)	Jazz Forum (1)

SOPHOMORE YEAR: 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (17 Units)</i>
MUS 212 (3)	GE (area D3) (3)
MUS 220 (2)	GE (area C2) (4)
MUS 292 (1)	MUS 320 (2)
Major Performing Ensemble (1)	MUS 392 (1)
MUS 489 (3)	Major Performing Ensemble (1)
Private Instruction (1)	Private Instruction (1)
Jazz Forum (1)	Music Elective (1)
GE Math (GE Area B4) (3)	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: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (area D5) (3)	GE (area B3) (3)
MUS 350 (GE area C3) (4)	GE (area C3) (3)
Major Performing Ensemble (1)	MUS 490 (2)
Private Instruction (1)	Major Performing Ensemble (1)
Jazz Forum (1)	Private Instruction (1)
Music Elective (1)	Jazz Forum (1)
Music 312 (3)	GE (area B2) (3)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Music — Music Education Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (GE area A2) (4)	PHIL 101 (GE area A3) (4)
GE Mathematics (GE area B4) (3)	GE (area D2) (3)
MUS 150 (GE area C1) (3)	MUS 118 (1)
MUS 115 (1)	MUS 110 (3)
Private Lessons (1)	MUS 120 (2)
Major Performing Ensemble (1)	Private Lessons (1)
Repertory Class (1)	Major Performing Ensemble (1)
	Repertory Class (1)

SOPHOMORE YEAR: 35 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (17 Units)</i>
MUS 210 (3)	GE (area D3) (3)
MUS 220 (2)	MUS 310 (3)
MUS 251 (3)	MUS 320 (2)
MUS 259 (3)	MUS 423 (1)
MUS 289 (2)	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 314 (2), MUS 422 (1)	MUS 400 (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: 37 Units

<i>Fall Semester (19 Units)</i>	<i>Spring Semester (18 Units)</i>
GE (area B2) (3), GE (area D5) (3)	GE (area B3) (3), GE (area C2) (4)
GE (area E) (3)	MUS 403 (3), MUS 491 (1)
MUS 402 (3)	Private Lessons (1)
Private Lessons (1)	Major Performing Ensemble (1)
Major Performing Ensemble (1)	Repertory Class (1)
*EDSS 418 (3)	
MUS 440 (1)	
Repertory Class (1)	

TOTAL UNITS: 135

* 6 Units are prerequisites for admission to the Single Subject program, not counted in major.

Sample Four-Year Integrated Program for Bachelor of Music (Music Education Concentration) and Teaching Credential

FRESHMAN YEAR: 34 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (17 Units)</i>
ENGL 101 (GE area A2) (4)	PHIL 101 (GE area A3) (4)
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: 3 Units

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: 7 Units

GE (area B3) (3)

GE (area C2) (4)

SENIOR YEAR: 36 Units

<i>Fall Semester (18 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) (4)	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: 150

Sample Four-Year Program for Bachelor of Arts Music — Liberal Arts Music Concentration

FRESHMAN YEAR: 31 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (17 Units)</i>
ENGL 101 (GE area A2) (4)	PHIL 101 (GE area A3) (4)
MUS 106 (3)	GE MATH (GE area B4) (3)
MUS 109 (2)	MUS 110 (3)
Major Performing Ensemble (1)	MUS 120 (2)
MUS 209 (2)	Major Performing Ensemble (1)
Private Instruction (1)	Private Instruction (1)
Repertory Class (1)	Music 209 (2)
	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: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (area D4) (3)	GE (area D1) (3)
MUS 350 (GE area C3) (4)	GE (area B1) (3)
Major Performing Ensemble (1)	MUS 300 (3)
Music 410 (3)	Music Elective (2)
Private Instruction (1)	Major Performing Ensemble (1)
Music 420 (2)	Private Instruction (1)
Repertory Class (1)	Repertory Class (1)

SENIOR YEAR: 27 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (12 Units)</i>
GE (area B2) (3)	GE (area B3) (3)
GE (area D5) (3)	GE (area C2) (4)
GE (area E) (3)	MUS 490 (2)
Major Performing Ensemble (1)	Major Performing Ensemble (1)
Music Elective (3)	Repertory Class (1)
Private Instruction (1)	Private Instruction (1)
Repertory Class (1)	

TOTAL UNITS: 120

NATIVE AMERICAN STUDIES

PROGRAM OFFICE

Nichols Hall 214
(707) 664-2486

COORDINATOR

Elenita Strobel (707) 664-2826

ADMINISTRATIVE COORDINATOR

Linnea Mullins (707) 664-2486

Faculty

Gregory Sarris / Native American Literature; Endowed Chair Native American Studies
Ashley Hall, Adjunct Faculty

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 the NAMS minor are also encouraged to apply for internships to gain direct experience in working with tribal organizations and communities.

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

Requirements: Choose 20 units from the following:

NAMS 160 A/B Learning Community (C3)	4
NAMS 165 Native Cultures of Northern CA (C2)	4
NAMS 200 Introduction of Native Americans (D1)	3
NAMS 205 Introduction of Native American Arts (C1)	4
NAMS 354 Native American Literature (C2)	4
NAMS 338 Native Americans and the Cinema (C1)	4
NAMS 346 Philosophical Systems and Sacred Movements in Native North America (C2)	4

Requirement:

NAMS 495 Special Studies or Internship at a local Native American agency or organization 4

Total units in minor 24

Minor Electives

Select 12 units from the following courses:

NAMS 300 Experimental	1-5
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

NURSING

(707) 664-2465
Fax: (707) 664-2653
www.sonoma.edu/nursing

DEPARTMENT CHAIR

Deborah A. Roberts

ADMINISTRATIVE STAFF

Ana Munoz

Kristi Nellman

Faculty

*Liz Close

Michelle Kelly

Deborah Kindy

Wendy Smith

Mary Ellen Wilkosz

*Faculty Early Retirement Program

Programs Offered

Fully accredited by the Accreditation Commission for Education in Nursing

Bachelor of Science in Nursing

Pre-Licensure B.S.N.

Post-Licensure B.S.N.

Master of Science in Nursing

Family Nurse Practitioner

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 Accreditation Commission for Education in Nursing, from which information about tuition, fees, and length of program may be obtained, either in writing or by telephone at Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326.

Bachelor of Science in Nursing

(See page 212-213 for sample four-year programs.)

The undergraduate nursing program provides two program options to obtain a baccalaureate degree in nursing:

1. A pre-licensure program option that prepares the student to become a licensed Registered Nurse (R.N.); and
2. A post-licensure 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 pre-licensure program option also prepares the graduate for the R.N. licensure examination.

Eligible applicants should visit www.sonoma.edu/nursing for further information.

Pre-Licensure B.S.N. Program

The pre-licensure program consists of two components: the pre-nursing curriculum in which the student enrolls in the prerequisite courses for the nursing program and required GE; and the pre-licensure curriculum ("nursing program"), 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 (B.S.N.).

The prerequisite and lower division 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 December 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 grade of B or better in all semesters;
3. Overall high school GPA of 3.5 or better; and
4. Eligibility Index of 3800 or higher.
5. Students who do not meet the criteria listed above will automatically be listed as “undeclared” if a second major choice is not selected.

**Admission to the Pre-Licensure Program / Nursing Major
(final two 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 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. Grade of “B” or better in all the following prerequisite courses at SSU or equivalent:

Course	SSU Offering
Anatomy	Biology 220
Critical Thinking	Category A3
Integrated Chemistry	Chemistry 105
English Composition	Category A2
Oral Communication	Category A2 + A3
Physiology	Biology 224
Microbiology	Biology 240

4. Results of the Test of Essential Academic Skills (TEAS); and
5. Essay (criteria are included in the application packet).

Requirements for the Pre-Licensure B.S.N.	Units
General education	*50
Major requirements	57
Support courses	10
General electives (BIO 115)	3
Total units needed for graduation	120

*3 units of area E will be satisfied upon completion of the nursing major to meet the 50-unit GE requirement.

Community college transfer students must meet the following criteria:

1. Standard SSU transfer criteria;
2. B or better in all nursing prerequisite science courses; and
3. Overall college GPA of 3.00 or higher.
4. SSU only accepts transfers into the nursing major

Post-Licensure Program

Sonoma State University’s baccalaureate program also offers an upper-division option designed to articulate with community college Associate Degree Nursing (A.D.N.) programs. The SSU program provides upper-division education for registered nurses fostering expanded, evidence-based practice and function with increased independence and leadership in a variety of settings.

R.N.s who have attended a hospital (diploma) program should contact a community college with an 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./A.S. degree.

Admission to the Post-Licensure B.S.N. Program

Applicants must meet the following minimum criteria. Under impactation stats additional criteria may apply. See SSU Nursing website for details.

1. Current California licensure as a Registered Nurse. (Recent A.D.N. 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;
3. Minimum of 3 semester units of college-transferable credit in 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 Post-Licensure B.S.N. Program

Requirements for the Post-Licensure B.S.N. Program	Units
General Education and Nursing Prerequisites	54
Upper-Division GE at SSU	6
Major Requirements	
Lower-division nursing prerequisites and nursing at community college or university	16
Upper-division at SSU (Up to 20 units of Upper Division nursing for NCLEX based on transcript review) E.O. 1084	44
Total units needed for graduation	120

*3 units of area E will be satisfied upon completion of the nursing major to meet the 48-unit GE requirement (for transfer students).

Post-Licensure and Pre-Licensure B.S.N. applicants should consult the SSU Nursing Website for detailed current information related to the program of study.

L.V.N. 30-Unit Option

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-

R.N., 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. Only two courses in the nursing major may be repeated once.

Master of Science in Nursing-Family Nurse Practitioner

(See page 213 for a sample four-year program.)

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.

SSU offers specialization as a family nurse practitioner (F.N.P.), with emphasis on advanced clinical primary care practice.

The department website (www.sonoma.edu/nursing) contains in-depth information about the graduate program curriculum.

Application Procedures

The standard CSU application form must be submitted for admission to SSU. In addition, applicants must:

1. Meet the minimum admissions requirements;
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.

Family Nurse Practitioner Program

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 assessment, diagnosis, and manage-

ment 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 A.D.N.-M.S.N. 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 in college career;
5. Completion of course(s) in community health nursing; and
6. One year full-time experience as a R.N. required.

Curriculum Features

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 professional issues pertinent to nurse practitioners. Content taken concurrently with the clinical sequences includes advanced health assessment and 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.

The M.S.N. F.N.P. curriculum is 46 units, students progress from basic advanced practice skills to more complex skills. Each semester has a clinical skills component.

Post-Master's Family Nurse Practitioner Certificate Option

The certificate option is a 36-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).

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.

Pre-licensure Bachelor of Science in Nursing Curriculum Plan

Freshman Year : 30 Units

Fall Semester (15 Units)

BIOL 115 (3)
CHEM 105 (5)
GE A2 (4)
GE D2 (3)

Spring Semester (15 Units)

BIOL 220 (4)
MATH 165 (4)
GE C1 (4)
GE D3 (3)

Sophomore Year : 29-30 Units

Fall Semester (15 Units)

BIOL 224 (4)
GE C2 (4)
GE D1 (3-4)
GE A3 (4)

Spring Semester (14-15 Units)

BIOL 240 (4)
PSY 302 (UD GE) (3)
GE C3 (4)
GE D4 (3-4)

Junior Year : 30 Units

Fall Semester (15 Units)

NURS 301 (9)
NURS 303 (6)

Spring Semester (15 Units)

NURS 302 (4)
NURS 304 (6)
NURS 310 (3)

Senior Year : 30 Units

Fall Semester (15 Units)

NURS 407 (6)
NURS 409 (6)
GE D5 (3-4)

Spring Semester (15 Units)

NURS 410 (5)
NURS 412 (5)
NURS 414 (5)

TOTAL UNITS: 120

Note: 3 of the 9 required units of UD GE is satisfied upon completion of the nursing program.

Post-Licensure Bachelor of Science in Nursing Curriculum Plan

Senior Year : 32 Units

Fall Semester (15 Units)

NURS 310 (3)
NURS 312 (4)
NURS 313 (4)
UD GE C1 (4)

Spring Semester (17 Units)

NURS 410 (5)
NURS 412 (5)
NURS 416 (3)
UD GE C2 (4)

TOTAL UNITS: 120

Note: 3 of the 9 required units of UD GE is satisfied upon completion of the nursing program.

Master of Science in Nursing - Family Nurse Practitioner (Full-time Curriculum Plan)

The sequence below is for full-time students. A part-time sequence that can be completed in six semesters follows below.

YEAR 1: 21 Units

<i>Fall Semester (11 Units)</i>	<i>Spring Semester (10 Units)</i>
N 501 (4)	N 540A (3)
N 509 (4)	N 550A (4)
N 549 (3)	N 552 (3)

YEAR 2: 25 Units

<i>Fall Semester (11 Units)</i>	<i>Spring Semester (14 Units)</i>
N 540B (3)	N 550C (4)
N 550B (4)	N 562 (4)
N 560 (4)	N 564 (4)
	N 566 (2)

TOTAL UNITS: 46

Master of Science in Nursing - Family Nurse Practitioner (Part-time Curriculum Plan)

YEAR 1: 16 Units

<i>Fall Semester (8 Units)</i>	<i>Spring Semester (8 Units)</i>
N 501 (4)	N 509 (4)
N 560 (4)	N 564 (4)

YEAR 2: 16-17 Units

<i>Fall Semester (6-7 Units)</i>	<i>Spring Semester (10 Units)</i>
N 549 (3)	N 540A (3)
Optional Elective (3-4)	N 552 (3)

YEAR 3: 17 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (10 Units)</i>
N 540B (3)	N 562 (4)
N 550B (4)	N 550C (4)
	N 566 (2)

TOTAL UNITS: 46

Family Nurse Practitioner Post Master's Certificate Curriculum Plan

YEAR 1: 21 Units

<i>Fall Semester (11 Units)</i>	<i>Spring Semester (10 Units)</i>
N 501 (4)	N 540A (3)
N 509 (4)	N 550A (4)
N 549 (3)	N 552 (3)

YEAR 2: 15 Units

<i>Fall Semester (7 Units)</i>	<i>Spring Semester (8 Units)</i>
N 540B (3)	N 550C (4)
N 550B (4)	N 562 (4)

TOTAL UNITS: 36

PHILOSOPHY

DEPARTMENT OFFICE

Nichols Hall 363
(707) 664-2163
www.sonoma.edu/philosophy/

DEPARTMENT CHAIR

John Sullins

ADMINISTRATIVE COORDINATOR

Bron Anderson

Faculty

Roger Bell
Joshua Glasgow
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 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. See department Administrative Coordinator at department office for details.

Bachelor of Arts in Philosophy

(See page 215 for sample four-year programs.)

A major in philosophy involves completing ten required courses. The content of these courses might vary from semester to semester; however, in sum they will provide the student with a broad and interesting body of knowledge of contemporary and historical issues in philosophy.

Degree Requirements	Units
General education	50
Major requirements	36
General electives	34
Total units needed for graduation	120

Major Core Requirements

PHIL 120 Introduction to Philosophy	4
PHIL 202 Proseminar	4
PHIL 204 Applied Ethics	4
PHIL 207 Philosophical Movements	4
PHIL 301 Philosophy of Science and Technology	4
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	4
PHIL 306 Contemporary Topics	4
PHIL 307 Philosophical Figures	4
PHIL 400 Senior Seminar	4
Total units in the major core	36

Students planning on attending graduate school are strongly encouraged to complete a senior thesis in the department. This two semester option is open to all students too.

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.

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. 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 four-year plan below.

Major Core Requirements

PHIL 102 Introduction to Logic	4
PHIL 120 Introduction to Philosophy	4
PHIL 202 Proseminar	4
PHIL 204 Applied Ethics	4
PHIL 302 Ethics and Value Theory	0

PHIL 303 Social and Political Philosophy	4
PHIL 306 Contemporary Topics or 307 Philosophical Figures	4
PHIL 375 Philosophy of Law	4
PHIL 400 Senior Seminar	4
PHIL 499 Law Internship	4
Total units in the (pre-law) core	36

Minor in Philosophy

To obtain a minor in Philosophy, the student must complete 16 units (4 courses) in the Philosophy Department at Sonoma State University. The student can choose any combination of Philosophy courses to obtain the minor, but no more than three GE courses in philosophy can be included in this combination and at least two of the four courses must be upper division.

Sample Four-Year Program for Bachelor of Arts in Philosophy

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHIL 120 (A3) (4)	GE (8)
GE (8)	University Electives (7)
(7)	
University Electives (3)	

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHIL 202 (4)	PHIL 204 (4)
PHIL 207 (4)	GE (8)
GE (4)	University Electives (3)
University Electives (3)	

JUNIOR YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
PHIL 302 (4)	PHIL 306 (4)
PHIL 303 (4)	GE (6)
GE (4)	University Electives (6)
University Electives (3)	

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
PHIL 301 (4)	PHIL 307 (4)
GE (8)	PHIL 400 (4)
University Electives (3)	University Electives (6)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in Philosophy Pre-Law/Applied Ethics Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHIL 120 (4)	PHIL 102 (4)
GE (8)	GE(8)
University Electives (3)	University Electives (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHIL 202 (4)	PHIL 204 (4)
GE (4)	GE (8)
University Electives (7)	University Electives (3)

JUNIOR YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
PHIL 302 (4)	PHIL 306 or PHIL 307 (4)
GE (6)	PHIL 375 (4)
University Electives (5)	GE (4)
	University Electives (4)

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
PHIL 303 (4)	PHIL 400 (4)
GE (8)	PHIL 499 (4)
University Electives (3)	University Electives (6)

TOTAL UNITS: 120

Courses may be interchanged fall and spring semester depending on course offering each semester.

PHYSICAL SCIENCES FOR ELEMENTARY SCHOOL TEACHERS

Program Advisors and Offices

Jennifer Whiles-Lillig / Chemistry Department
 Darwin Hall 315
 (707) 664-2331, whilesli@sonoma.edu

Lynn Cominsky / Physics and Astronomy Department
 Darwin Hall 300M
 (707) 664-2655, lynnc@universe.sonoma.edu

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
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**

PHYSICS

DEPARTMENT OFFICE

Darwin Hall 300
(707) 664-2119
<http://phys-astro.sonoma.edu>

DEPARTMENT CHAIR

Lynn R. Cominsky

ADMINISTRATIVE COORDINATOR

Andrea Cullinen

Faculty

Lynn R. Cominsky

Jeremy S. Qualls

*Saeid Rahimi

Scott A. Severson

Hongtao Shi

*Faculty Early Retirement Program

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, electricity and 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 thermal evaporation and electrodeposition; a Hall measurement system, a 17-Tesla superconducting magnet system, an adaptive optics and astronomical instrumentation development laboratory, a 3D-printer, water sustainability experiments, and laboratories for building and testing small satellites (CubeSats). 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. Students and faculty also have access to time on an adaptive optics-equipped 1-m telescope in Southern California. 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

(See pages 220-222 for sample four-year programs.)

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	50
Major requirements (may include 5 units in GE)	46
Supporting courses (may include 4 units in GE)	26
Electives	7
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 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 major electives	6
Total units in the major	46

Required Supporting Courses

MATH 161 Differential and Integral Calculus I (3 units may be applied in GE)	4
MATH 211 Differential and Integral 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

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	50
Major requirements (may include 5 in GE)	48
Supporting courses (may include 4 in GE)	17
Electives	14
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 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 Differential and Integral Calculus I (3 units may be applied in GE)	4
MATH 211 Differential and Integral 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

Bachelor of Arts in Physics

(See pages 220-222 for sample four-year programs.)

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 (up to 9 in GE)	34-38
Required area of concentration	12
Supporting courses (may include 3 in GE)	12
General education	50
General electives	12-20
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
<i>Choose one of the following two programming courses:</i>	<i>2-4</i>
PHYS 381 Computer Applications for Scientists	2
CS 115 Programming I	4
<i>Capstone course; One of the following:</i>	<i>2</i>
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.

13-15

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 Differential and Integral Calculus I (3 units may be applied in GE)	4
MATH 211 Differential and Integral Calculus II	4
MATH 261 Multivariable Calculus	4
Total units in supporting courses	12

**Total units in the major and supporting courses
(up to 9 may be applied in GE) 58 - 62**

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 (up to 9 in GE)	32-36
Required area of concentration	12
Supporting course (may include 3 in GE)	4
General education	50
General electives	18-31
Total units needed for the degree	120

Major Core Requirements

PHYS 209AB General Physics Laboratory	2
PHYS 210AB General Physics	6

Choose one of the following two courses in modern physics or astronomy:

ASTR 305 Frontiers in Astronomy	3
PHYS 314 Introduction to Physics III	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):

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 160 Pre-calculus Mathematics (3 units may be applied in GE): 4

Total units in supporting course 4

Total units in the major
(up to 9 may be applied in GE) 48-52

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.

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: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 115A (5)	CHEM 115B (5)
MATH 161 (4)	MATH 211 (4)
GE (3)	PHYS 114 (4)
PHYS 100 (3) (Recommended)	PHYS 116 (1)
	PHYS 494 (1) (Recommended)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 261 (4)	MATH 241 (4)
PHYS 214 (4)	PHYS 313 (3)
PHYS 216 (1)	PHYS 313L (1)
GE (6)	PHYS 314 (4)
	GE (3)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 325 (3)	PHYS 320 (3)
PHYS 381 (2)	PHYS 340 (3)
GE (6)	PHYS 366 (3)
Elective (4)	GE (6)

SENIOR YEAR: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
PHYS 450 (2)	PHYS 430 (3)
PHYS 460 (3)	PHYS Capstone (2)
GE (8)	GE (9)
Elective (3)	

TOTAL UNITS: 120

See your advisor to discuss acceptable physics electives and when they will be offered. Nine of the 50 units of GE are met by required courses listed here (3 each in areas B1, B3 and B4).

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: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
CHEM 115A (5)	MATH 211 (4)
MATH 161 (4)	PHYS 114 (4)
GE (4)	PHYS 116 (1)
PHYS 100 (3) (recommended)	GE (4)
	PHYS 494 (1) (recommended)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 261 (4)	PHYS 313 (3)
PHYS 214 (4)	PHYS 313L (1)
PHYS 216 (1)	PHYS 314 (4)
GE (6)	GE (7)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 325 (3)	PHYS 340 (3)
PHYS 381 (2)	PHYS 366 (3)
GE (6)	GE (5)
Elective (4)	Elective (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
PHYS 450 (2)	PHYS 430 (3)
PHYS 460 (3)	PHYS 475 (3)
PHYS Elective (2)	PHYS Capstone (2)
GE (3)	GE (6)
Elective (6)	

TOTAL UNITS: 120

See your advisor to discuss acceptable physics electives and when they will be offered. Nine of the 50 units of GE are met by required courses listed here (3 each in areas B1, B3, and B4).

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: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 161 (4)	MATH 211 (4)
GE (7)	PHYS 114 (4)
PHYS 100 (3) (recommended)	PHYS 116 (1)
PHYS 494 (1) (recommended)	GE (6)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 261 (4)	PHYS 314 (4)
PHYS 214 (4)	Elective (4)
PHYS 216 (1)	GE (7)
GE (6)	

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 381 (2)	PHYS 340 (3)
Area of Concentration* (3)	PHYS Elective (3)
GE (8)	Area of Concentration* (3)
Elective (2)	GE (3)
	Elective (3)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS Elective (3)	PHYS Capstone (2)
Area of Concentration* (3)	Area of Concentration* (3)
GE (4)	PHYS Elective (3)
Electives (5)	Electives (7)

TOTAL UNITS: 120

*Area of Concentration = 12 units in one other subject. Nine of the 50 units of GE are met by required courses listed here (3 each in areas B1, B3, and B4).

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

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 160 (4)	PHYS 209A (1)
GE (7)	PHYS 210A (3)
PHYS 100 (3) (recommended)	GE (8)
PHYS 494 (1) (recommended)	Elective (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS 209B (1)	PHYS Elective (4)
PHYS 210B (3)	Elective (3)
GE (9)	GE (8)
Elective (2)	

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ASTR 305 (3)	PHYS 342 (3)
PHYS 381 (2)	PHYS Elective (3)
Area of Concentration* (3)	Area of Concentration* (3)
GE (3)	GE (3)
Elective (4)	Elective (3)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
PHYS Electives (6)	PHYS Capstone (2)
Area of Concentration* (3)	Area of Concentration* (3)
Electives (6)	Electives (10)

TOTAL UNITS: 120

**Area of concentration = 12 units in one other subject. Nine of the 50 units of GE may be met by required courses listed here (3 each in areas B1, B3, and B4).*

POLITICAL SCIENCE

DEPARTMENT OFFICE

Stevenson Hall 2070
(707) 664-2179
www.sonoma.edu/polisci

DEPARTMENT CHAIR

Catherine Nelson

ADMINISTRATIVE STAFF

Jill Martin, Viri Ruiz

Faculty

Ruben Armiñana

Cynthia Boaz

David McCuan

Robert McNamara

*Andy Merrifield

Catherine Nelson

Diane Parness

*David Ziblatt

**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, politics and the exercise of political power. More than 40 courses cover all the major aspects of the discipline. Students develop an understanding of broad, philosophical questions as they relate to politics. They learn to discuss and analyze critically U.S. political institutions and the many public policy issues facing the United States and the world. They are taught how to analyze and understand world affairs and international relations. They are taught how to evaluate and compare political phenomena across different countries. They are trained in appropriate research techniques for the study of political actors, institutions and processes in a complex, interdependent and diverse world.

The political science major allows students to choose from a wide range of courses and subjects within the political science discipline. A common core of courses provides students with the foundational knowledge and research skills needed to pursue more advanced work at the upper division level. In core courses students study the relationship among 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.

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, on an election campaign, or for an advocacy group or nonprofit organization. Interns have served with state assembly members, state senators, members of Congress, and in a number of campaigns for local, state, and national office. Students have also worked with advocacy groups and nonprofit organizations to effect change at the local, state, national and international levels. 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, 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

Each student is assigned a faculty advisor to help plan and carry out an individualized academic program. The department expects students to seek faculty advice every semester, especially prior to registering for their next semester's courses.

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 advising office, the Sonoma State University Political Science Department or consult the ASSIST.org website 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 and meet the department core requirement in American Political Systems. 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. Please insert the following: The Pols 200/202 requirement can be met by a combination of AP American Government credit and Pols 151. The department will waive the Pols 201 Ideas and Institutions core requirement if students take both Introduction to Political Theory and Introduction to Comparative Government at a community college.

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

A bachelor's degree in political science offers excellent preparation for a wide range of careers in the public, private and non profit sectors. In particular, political science majors acquire the broad based knowledge and research, analytical and communications skills desirable to twenty-first century employers. A major in political science prepares students for the study and practice of law. The department offers a number of specialized courses in the field of constitutional law and civil liberties. The degree also provides a foundation for public service careers at the national, state and local levels, including teaching, research, administration, planning, policy analysis and public office holder. Political science is also an appropriate major for students interested in positions in the overseas agencies of the U.S. government or in international organizations. The major can lead to opportunities in campaign management, speech writing, polling, public relations, lobbying, and voting analysis. Political Science students have also entered journalism careers in television, and social and print media. A political science degree also offers excellent preparation for a degree in the private sector, such as labor relations, information analyst, governmental relations or budget analyst.

Bachelor of Arts in Political Science

(See page 226 for a sample four-year program.)

Degree Requirements	Units
General education	50
*Major requirements	40
General electives	30
Total units needed for graduation	120

* Major requirement units (except internships) must be taken for a letter grade

Major Core Requirements

Passage of all major core requirements requires a grade of 'C' or better. Pols 302 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 Comparative Political Analysis	4
POLS 304 Theory and Analysis of International Relations	4
POLS 498 Senior Seminar	4

*POLS 202 is strongly recommended for POLS majors.

Major Electives

One course must be taken from each of the following areas: Political Theory, International Relations, Comparative Politics, and American Government and Politics.

Political Theory

Choose one of the following six courses:

POLS 310 Classical Political Thought	4
POLS 311 Development of Modern Political Thought	4
POLS 312 American Political Thought	4
POLS 313 Critical Theory: Race and Gender	4
POLS 315 Modern Political Ideologies	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 Politics of the Developing World	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 Introduction 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

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/masters/

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 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;
- Prerequisites:** To ensure adequate background, a candidate for admission should have experience or course preparation in the following areas:

- State and local government,
- Federalism and intergovernmental relations,
- Influences on domestic policy making.

- Recommended:** One year experience working in a non-profit 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;

- Completion of **both** University and departmental applications. Included in the departmental application are three letters of recommendation. Only three letters will be considered; and
- Recommendation of the program by the graduate coordinator for entrance to the program.

Graduation Requirements for the Master's Degree

- A grade point average of at least 3.00;
- 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;
- 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 Nonprofits	2
POLS 504B Personnel for Nonprofits	2
POLS 581 Nonprofit Governance and Legal Issues	2
POLS 582 Planning and Nonprofit Agencies	2
POLS 583 Resource Development	4
POLS 585 Marketing and PR for Nonprofits	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 Nonprofit 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.

Sample Four-Year Program for Bachelor of Arts in Political Science

FRESHMAN YEAR: 30 Units

POLS 201 (GE D5) (4)
 POLS 202 (GE D4) (4)
 GE (22)

SOPHOMORE YEAR: 30 Units

POLS 302 (4)
 POLS 303 (4)
 POLS 304 (4)
 GE (18)

JUNIOR YEAR: 29 Units

Comparative Government (4)*
 International Relations (4)*
 GE (19)

SENIOR YEAR: 31 Units

Political Theory (4)*
 American Government (4)*
 Senior Seminar (4)
 Electives (19)

TOTAL UNITS: 120

* Distribute these upper-division area courses across Junior/Senior years, according to Department offerings and/or your own personal schedule.

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 attained. POLS 315 (Democracy, Capitalism, & Socialism) counts as both an upper-division GE course (D5) as well as an upper-division political theory course for the major.

PSYCHOLOGY

DEPARTMENT OFFICE

Stevenson Hall 3092
(707) 664-2411
Fax: (707) 664-3113
www.sonoma.edu/psychology/

DEPARTMENT CHAIR

Elisa Velásquez-Andrade

ADMINISTRATIVE ANALYST

Cara Stevens

DEPARTMENT SUPPORT COORDINATOR

Mary Hanson

GRADUATE PROGRAM

www.sonoma.edu/depth
Laurel McCabe,
Coordinator
Stevenson Hall 3092
(707) 664-2130

Faculty

Glenn Brassington
Melissa Garvin
Mary Gomes
Maria Hess
Laurel McCabe
Gerryann Olson
Matthew Paolucci-Callahan
Heather Smith
Elisa Velásquez-Andrade

Programs Offered

Bachelor of Arts in Psychology
Minor in Psychology (Inquire within the Psychology Dept.)
Master of Arts in Psychology with an emphasis in Depth Psychology, through Special Sessions

What is Psychology?

In its most essential form, psychology is the study of mind, behavior and experience. From this foundation, psychologists have developed sub-disciplines that address many diverse aspects of human experience. Psychology is a field that requires one to apply focused knowledge, 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.

The Psychology Department

From its founding in 1960, the department was allied with the humanistic and existential traditions in psychology. The department offered the first graduate program in humanistic psychology and also helped to pioneer that field, with four faculty having served as president of the Association for Humanistic Psychology. The department has been distinctive for its pioneering work in such areas as somatics, client-centered therapy, expressive arts, biofeedback, health psychology, organization development, ecopsychology, Jungian and archetypal psychology, transpersonal psychology, interdisciplinary learning, student-directed learning, experiential learning, and learning-community approaches. This distinctiveness has led to widespread recognition.

We currently offer a diverse array of traditional and contemporary approaches to studying human experience. Faculty teach, conduct research, author books and articles, pioneer community projects, and consult with organizations and groups. Current faculty interests include social justice, multi-cultural psychology, health psychology, depth psychology, clinical practice and mental health counseling, spirituality and mindfulness, community-based learning, ecopsychology, creativity, and child development. Our goal is to empower students with psychological knowledge and practical skills that will enable them to be effective agents of change in the world.

The department's five Breadth areas address central subfields in the discipline of psychology. These subfields are: *holistic, clinical / counseling, developmental, social / personality, and cognitive / physiological*.

Holistic: focuses on the essential wholeness of persons by developing knowledge and skills integral to health and growth, such as self-reflection, self-awareness and creativity.

Clinical / Counseling: develops knowledge and skills in understanding and helping others, and in health-promoting behaviors.

Developmental: investigates changes in persons over the life span, and explores how this knowledge may be used in applied settings such as in parenting, education, and community life.

Social / Personality: focuses on how individual differences among people and the social context in which they live shape their emotions, thoughts and behavior.

Cognitive / Physiological: explores the physiological foundations of human experience, as well as the mental processes involved in learning, memory, perception, and problem solving.

The department strongly recommends that students take courses in psychology and other disciplines to gain competence in diversity areas of culture, race and ethnicity, gender, sexual orientation, disability, age, religion, and social class. While all psychology faculty are committed to including diversity in their courses, specific courses focus on diversity issues and students' development of multicultural competence. These courses are identified in the course descriptions and the semester course schedule.

The department offers a master of arts in psychology with an emphasis in depth psychology. Depth psychology cultivates specific methods and skills designed to explore the inner life, give form to it, understand it, and apply it to persons, groups, art forms, and cultures. Therapists, counselors, psychologists, teachers—anyone who works closely with people—may apply the knowledge of depth psychology to their work.

Department Learning Goals and Objectives

The Psychology Department curriculum is designed to develop the following skills in each student by graduation time. The courses are devised to enable each student to:

- Understand the major concepts, theories, and perspectives in psychology;
- Apply psychological theories, concepts, and principles to individual experience as well as to social issues and social systems;
- Reflect on personal experience in light of psychological knowledge;
- Recognize and understand the complexity of cultural diversity, in light of psychological knowledge;
- Understand and apply basic research methods in psychology and the social sciences; and
- Demonstrate skills that promote behavioral change at the individual, organizational, and community levels.

Careers in Psychology

A career in psychology gives opportunities to break new ground in science, to better understand yourself and others, to help people live richer and more productive lives, and to establish ongoing personal and intellectual growth in school and throughout your career.

Many people with Psychology training 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.

Traditionally, with a psychology degree, people 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. Psychological training also supports work helping people to individuate and resolve conflicts. Psychology graduates 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, with training in psychology, many work as administrators, functioning as managers in hospitals, mental health clinics, nonprofit organizations, government agencies, schools, universities, and businesses. Psychology graduates 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 or organizing mental health outpatient services.

Careers: Bachelor's Degree in Psychology

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
- Behavioral Specialist
- Childhood Education
- Counseling
- Editing
- Health services
- Marketing and public relations
- Human Resources
- Research Assistant
- Not-for-Profit Organizations
- Organizational consulting
- Probation and parole
- Psychiatric assisting
- Social service casework and advocacy
- Teaching

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 study 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 discover graduate prerequisites. Students should consult the psychology department website which has extensive career information and web links to graduate schools and programs. Certain psychology courses and non-psychology electives should be chosen with regard to career objectives.

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.

Bachelor of Arts in Psychology Degree Requirements

For first-time freshmen	Units
General education	50
Major requirements	44*
Electives	26

For transfer students	Units
General education	48
Major requirements	40*
Electives	32
Total units needed for graduation:	120

*(40 units in Psychology major and 4 units in statistics.)

Major Requirements

The Psychology major consists of 40 units in the major, plus a 4-unit course in statistics. Most psychology majors take more than the minimum number of major units, and many majors add a second major or a minor in another discipline. Students are encouraged to work in community internships and to expand their knowledge of diversity issues with coursework within the department and the university.

Lower Division Courses

PSY 250, Introduction to Psychology or equivalent (GE Area D1)	3
MATH 165, Statistics or equivalent (GE Area B4)	4
PSY 270, Psychology of Self-Discovery	4
PSY 280, Introduction to Research Methods (or equivalent)	4

Upper Division Courses:

Complete one course from 4 out of 5 Breadth Areas	15-16
Electives drawn from Breadth Areas or Electives	13-14
Total	44

In addition to statistics, no more than 11 units in the major may be lower-division psychology units. At least 29 units must be upper-division psychology (SSU courses numbered 300 or higher). All courses for the major must be taken for a grade if this is offered, and must be passed with **a grade of C or better**. A maximum of 8 units may be taken credit / no credit in the major—this includes internships and special studies courses. Psychology GE courses count for the major as well as for GE. (Psy 250, 302, 303 and 325. Transfer students from community colleges, however, can only transfer Psych 250 and Psy 280 for the major.)

Required Courses for the Major

Psy 250, Introduction to Psychology, gives students a broad overview of the diverse theories and methods that psychologists use to investigate questions about human behavior and experience. An equivalent course may be taken at other colleges and universities. An AP exam score of 3 or a pass in the CLEP test of introductory psychology meets this course requirement.

Math 165, Statistics, provides the foundation to understand how psychologists and social scientists evaluate the evidence obtained in empirical studies. An equivalent course in Math or Psychology may be taken at other colleges or universities. Most students use this course to meet the GE Area B4 requirement.

Psy 270, Psychology of Self-Discovery, develops skills characteristic of healthy, engaged, growth-oriented persons in areas such as mindfulness, emotional intelligence, interpersonal relationships, dreamwork, and self-reflection.

Psy 280, Introduction to Research Methods, provides foundational knowledge and skills in psychological research methods, data collection and data interpretation. An equivalent course may be taken at other colleges and universities.

Upper-Division Breadth Areas

Students complete one upper-division course from 4 out of 5 Breadth areas: Holistic, Clinical / Counseling, Developmental, Social / Personality, and Cognitive / Physiological. Courses marked with (Diversity) represent courses that focus on Diversity issues.

Holistic

- 307 Humanistic, Existential & Transpersonal Psychology
- 322 Myth, Dream & Symbol
- 335 Memoir & Autobiography
- 338 Psychology of Creativity
- 342 Psychology of Meditation
- 352 Psychology of Yoga
- 358 Health Psychology
- 360 Peak Performance Psychology
- 462 Seminar in Humanistic & Transpersonal Psychology
- 466 Jungian Psychology
- 471 Psychology of Religion
- 472 Transpersonal Psychology
- 485 Ecopsychology
- 490 Seminar: Holistic

Clinical / Counseling

- 329 Group Process
- 411 Behavioral & Emotional Problems of Children
- 425 Psychopathology
- 428 Introduction to Counseling
- 429 Gestalt Process
- 430 Depth-Oriented Psychotherapies
- 431 Introduction to Art Therapy
- 490 Seminar: Clinical / Counseling

Developmental

- 302 Life Span Development (GE Area E)
- 408 Transitions in Adult Development
- 409 Social & Emotional Development
- 410 Child Development
- 412 Adolescent Development
- 418 Psychology of Family
- 421 Psychology of Aging
- 422 Seminar in Living & Dying

- 448 Cognitive Development
- 490 Seminar: Developmental

Social / Personality

- 325 Social Psychology (GE Area D1)
- 327 Psychology of Organizations
- 328 Cross-Cultural Psychology (Diversity)
- 404 Psychology of Women (Diversity)
- 405 Psychology of Gender (Diversity)
- 423 Community Psychology (Diversity)
- 438 Psychological Aspects of Disability (Diversity)
- 440 Community-Based Research (Diversity) (Research)
- 444 Social Justice & Intergroup Relations
- 461 Personality
- 490 Seminar: Social / Personality

Cognitive / Physiological

- 362 Human Sexuality
- 446 Cognitive Psychology
- 447 Learning & Behavior
- 450 Physiological Psychology
- 454 Biofeedback, Somatics & Stress Management
- 456 Biofeedback Practicum
- 490 Seminar: Cognitive / Physiological

Upper-Division Breadth Electives

Students complete 13-14 upper-division Psychology units that may be drawn from the Breadth areas or from the Elective courses. A maximum of 8 C/NC units may count toward the major.

- 303 Person in Society (GE Area D1)
- 306 History of Modern Psychology
- 311 Dialogue Series (C/NC)
- 313 Careers in Psychology
- 399 Graduate-Student Instructed Course
- 441 Qualitative Research
- 445 Advanced Research Design & Analysis
- 481 Research Internship (C/NC)
- 482 Teaching Internship (C/NC)
- 483 Advanced Teaching Internship (C/NC)
- 493 Narrative: Theories & Methods
- 494 Counseling Experience (C/NC)
- 495 Special Studies (C/NC)
- 499 Internship (C/NC)
- 490 Seminar: Elective

Advising

During the first two years at SSU, students take the lower-division major requirements and the lower-division GE courses. The School of Social Sciences GE peer advisor provides information on GE course selection. Psychology department faculty advisors answer questions about the major, provide information about specific psychology courses, and provide information about graduate study in psychology. Students choose an advisor based on their interest areas, and may change advisors at any time. Students are encouraged to come in for advising before the registration period; faculty are more likely to be readily available earlier in the semester. Students

should meet with an advisor no later than the second semester of the sophomore year, or if a transfer student, during the first semester at SSU.

To make the most of their education, students are encouraged to consult the psychology department website which has extensive career information and web links to graduate schools and programs. Students are encouraged to do their own research on graduate programs and course prerequisites.

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. Students planning on graduate work in clinical or counseling psychology are encouraged to gain internship experience well before applying to graduate school. A maximum of 8 units of Credit/No Credit classes may be applied to the major, including internship units.

Some Psychology Department instructors offer teaching internships to advanced students who have taken and excelled in a course. Duties include working with the classroom instructor in class preparation and classroom tasks, and facilitating small group work. Teaching Assistants register for Psy 482, or 483 (Advanced) Teaching Internship (C/NC). A maximum of 8 credit/no credit units may count toward the psychology major.

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 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.

Minor in Psychology

Consult with the Psychology office for current information and application procedures for the minor. 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. Courses must be taken for a letter grade unless Credit / No Credit is the only option. A maximum of 4 units may be taken Credit / No Credit.
3. GE PSY 302, PSY 303, PSY 325 do not count towards units for the minor.

Master of Arts in Psychology, Depth Psychology Emphasis

The Psychology Department, working in conjunction with the School of Extended Education, offers a Master of Arts in Psychology with a depth psychology emphasis. The M.A. program is a self-support program administered through Special Sessions and funded entirely through student fees.

Curriculum in Depth Psychology

The curriculum offers a strong, supportive small-group learning environment within a structured 36-unit two-year curriculum. In the first year, the 12-15 students take three year-long foundational courses. The Theories course explores the basic concepts of Jungian psychology, which is an in-depth language for understanding psychological development and creative expression. The Methods course teaches the techniques of depth inquiry, which are methods for accessing, exploring and understanding the hidden parts of the self, through intensive work with different art forms, dreams, myth, meditation, active imagination, sandplay, nature, and the body. The Cross-Cultural Mythology and Symbolism course focuses on common archetypal motifs across cultures as expressed in image, myth, fairy tale, ritual, rites of passage, and indigenous practices.

In the second year, students explore depth inquiry with a research methods class and develop a research proposal for their culminating Master's requirement. Students have a choice of completing an article of publishable quality or a Master's thesis focused on an area of passionate interest. Students take an interpersonal process class and choose seminars oriented around student interests. Past seminars have explored individuation; earth-based rites of passage; expressive arts; trauma; transformational teaching; neuropsychology; typology; and object relations.

The second year internship offers students community work experience in their field of interest, such as teaching, the arts, mental health, ecopsychology, rites of passage, and sandplay. Students may apply to teach an undergraduate course in their field of expertise in the SSU Psychology Department as an internship. Past student-taught courses include cross-cultural rites of passage; myth and

narrative; and indigenous wisdom. The Program coordinator assists students in developing curriculum and supervises the teaching internship.

Students also have the option, at additional expense, of enrolling in University courses that meet their specific learning needs. After completion of coursework, university policy requires students in master's programs to maintain continuous enrolment until completion of the M.A. program. A maximum of 10 academic units may be taken as post-course work program units. There is a 7-year limit on coursework for the M.A.

The Master's program sponsors a monthly Saturday lecture series open to the public that invites noted authors, therapists, and practitioners to come and discuss their work. Past presentations have included discussions of emotion and the archetypal imagination; spirituality; archetypal masculine and feminine; sandplay case studies; images of enlightenment; and psychological initiation.

Program of Study

Year One

PSY 511A,B Theories of Depth Psychology	3,3
PSY 542A,B Methods and Applications of Depth Psychology	3,3
PSY 543A,B Cross-Cultural Mythology and Symbolism	3,3

Year Two

PSY 530 Seminar in Interpersonal Process	2
PSY 575 Research Methods	3
PSY 576 Seminar in Depth Psychology (topics vary)	7
PSY 581 Internship	3
PSY 597 Culminating Paper Tutorial	3
PSY 582 Teaching College Psychology (optional)	3-4
PSY 584 Graduate Teaching Assistant (optional)	3-4

Year Three and Post-Coursework (*optional)

PSY 578 Project Continuation (3 semester limit)	1,1
PSY 599 Master's Thesis (following 3 semesters of PSY 578)	3

*Students have the option to register for 1-3 semesters of Project Continuation following their two years of coursework in order to complete their article or master's thesis.

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 exploration. The criteria for application and acceptance into the program are the following:

1. B.A. or B.S. from an accredited institution;
2. Minimum GPA of 3.0 in the last 60 units of coursework;
3. Competency in written and oral expression, as demonstrated by the coherence of the personal statement and oral interview;
4. Emotional maturity, as demonstrated in the personal written statement, life experiences, and oral interview;
5. Four area prerequisites: child, adult or lifespan development; abnormal/psychopathology; personality; and research methods. A maximum of 9 units may be lower division courses completed at a Community College; and

6. Minimum semester-long symbolic exploration (for example, in art, dreams, nature, poetry, writing) and reflection on the meaning for one's life.

Fees and Financial Aid

Fees are set in consultation with the School of Extended Education. Because of the self-support nature of the program, students are eligible for University and federal financial aid in the shape of scholarships, grants and loans, but are not eligible for state-funded financial awards.

Program Information

For information about the program, visit the website www.sonoma.edu/depth. Applications may be downloaded on the website www.sonoma.edu/depth/forms, or contact the program Coordinator at laurel.mccabe@sonoma.edu, (707) 664-2130. You may also write to:

Psychology M.A.
 Department of Psychology
 Sonoma State University
 1801 E. Cotati Ave.
 Rohnert Park, CA 94928-3609

Sample Four-Year Program for Bachelor of Arts in Psychology

FRESHMAN YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
PSY 250 (3)	Elective (4)
GE (11)	GE (10)

SOPHOMORE YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
PSY 270 (4)	PSY 280 (4)
MATH 165 (4)	GE (10)
GE (3)	
Elective (3)	

JUNIOR YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
PSY Breadth Area Requirement (4)	PSY Breadth Area Requirement (4)
PSY Breadth Area Requirement (4)	PSY Elective (4)
PSY Breadth Area Requirement (4)	PSY Elective (4)
PSY Elective (4)	Upper-Division GE (4)

SENIOR YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
PSY Elective (4)	Elective (4)
Elective (4)	Elective (4)
Upper-Division GE (4)	Upper-Division GE (4)
PSY 499 (4)	PSY Elective (4)

TOTAL UNITS: 120

SOCIOLOGY

DEPARTMENT OFFICE

Stevenson Hall 2084
(707) 664-2561
www.sonoma.edu/sociology

DEPARTMENT CHAIR

James Joseph Dean

ADMINISTRATIVE ANALYST

Lisa Kelley

ADMINISTRATIVE COORDINATOR

Elsa Thompson

Faculty

*Noel Byrne

*Kathleen Charmaz

James Joseph Dean

Brian Gillespie

*Elaine Leeder

Melinda Milligan

Debora Paterniti

Peter Phillips

Cindy Stearns

**Faculty Early Retirement Program*

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, 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 Robert Holzapfel Scholarship is awarded to a student majoring in sociology or counseling.

Bachelor of Arts in Sociology

(See page 234 for a sample four-year program.)

Degree Requirements	Units
General education	50
Sociology courses	43
General electives	27
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 2015. 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.

Required Core Courses

SOCI 201 Introduction to Sociology (GE D1)	3
SOCI 300 Sociological Research Methods	4
SOCI 375 Sociological Theory (GE D1)	4
Math 165 (GE B4) or SOCI 301	4
Sociological Experience Course (see below)	2-5
SOCI 498 Senior Seminar	4
Total core units	21-24
SOCI Electives to reach min. 43 units	19-22
Total units in the Major	43

A student must take SOCI 201 before proceeding to any other required sociology course. SOCI 300, SOCI 375, 16 additional units of sociology, and senior standing are required before a student will be allowed to enroll in SOCI 498.

Students must earn a minimum grade of C- or better in each of the six required courses. See a faculty advisor in the department for details on these minimum grade requirements.

Statistics Requirement

The statistics course requirement provides an opportunity for students to strengthen their quantitative data analysis abilities and to enhance related job skills. Majors must take one of the following courses or another course designated by a sociology advisor as meeting the statistics requirement.

Math 165 (GE B4) (or its equivalent)
SOCI 301 Statistics for Sociologists

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 482 Sociology of the Environment
SOCI 488 Selected Topics in Service Learning
SOCI 496 Internship Practicum (concurrent with SOCI 499)

Lower and Upper Division Units

Majors may apply up to 8 units of lower division coursework towards the requirements. Of these 8 units, no more than 4 units may be non-SSU transfer credit.

Minor in Sociology

SOCI 201 Introduction to Sociology	3
Elective courses in sociology chosen in consultation with an advisor	17
Total units in the minor	20

Minors may apply up to 8 units of lower division coursework towards the requirements. Of these 8 units, no more than 4 may be non-SSU transfer credit.

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 (15 Units)</i>	<i>Spring Semester (16 Units)</i>
ENGL 101 (4)	PHIL 101 (4)
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 (2)	CS 101 (3)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (16 Units)</i>
GE Comparative Perspectives & Foreign Languages (3)	GE Social Sciences (6)
GE History/Political Science (6)	History of the Fine Arts (4)
Electives (5)	GE World Literature (3)
	Electives (3)

JUNIOR YEAR: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
SOCI 300 (4)	SOCI 375 (4)
Sociology Electives Area (4)	Sociology Electives (4)
Sociology Electives (4)	UD GE Integrated Person (4)
UD GE Philosophy and Values (4)	Electives (2)

SENIOR YEAR: 29 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (13 Units)</i>
Statistics Course (4)	SOCI 498 (4)
Sociology Electives (4)	SOCI Experience Course(4)
UD GE Contemporary International Perspectives (4)	Electives (5)
Electives (4)	

TOTAL UNITS: 120

STATISTICS

DEPARTMENT OF MATHEMATICS AND STATISTICS

Darwin Hall 114
phone: (707) 664-2368
email: math@sonoma.edu
www.sonoma.edu/math

DEPARTMENT CHAIR

Brigitte Lahme

STATISTICS PROGRAM ADVISORS

Susan Herring
Elaine Newman

ADMINISTRATIVE COORDINATORS

Whitney Sparks
Marissa McDonald

Faculty

Sam Brannen
*Jean Bee Chan
Ben Ford
Susan Herring
Izabela Kanaana
Brigitte Lahme
Elaine Newman
Jerry Morris
Martha Shott
Sunil Tiwari

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Science in Statistics
Bachelor of Arts in Applied Statistics
Minor in Applied Statistics
Minor in 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 B.A. and B.S. 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

(See page 237 for a sample four-year program.)

Degree Requirements	Units
General education (50 units, 8 units covered by major requirements)	42
Major (includes 8 units in GE)	52
Electives	26
Total units needed for graduation	120

MATH 161 Differential and Integral Calculus I (B4)	4
MATH 165 Elementary Applied Statistics	4
MATH 211 Differential and Integral Calculus II	4
MATH 220 Reasoning and Proof (A3)	4
MATH 241 Linear Algebra with Applications in Differential Equations	4
MATH 261 Multivariable Calculus	4
MATH 265 Intermediate Applied Statistics with SPSS	4
MATH 322 Linear Algebra	4
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
Total units in B.S. program	52

B.A. in Applied Statistics

(See page 238 for a sample four-year program.)

Degree Requirements	Units
General education (50 units, 4 units covered by major requirements)	46
Major (includes 4 units in GE)	38
Required Area of Concentration	12
Electives	24
Total units needed for graduation	120

MATH 161 Differential and Integral Calculus I (B4)	4
MATH 165 Elementary Applied Statistics	4
MATH 211 Differential and Integral Calculus II	4
MATH 241 Linear Algebra with Applications in Differential Equations	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

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.

Minor in Statistics

Twenty units of mathematics or statistics are required, at least 6 of which must be at the upper-division level, not including MATH 300A, 300B, 330, 375, 395, or 399. Courses required for the minor are MATH 165, MATH 265, either MATH 367 or MATH 381, and either MATH 445 or MATH 465. Note that both MATH 445 and MATH 465 have multiple semesters of calculus as pre-requisites. Also note that students pursuing more than one minor offered by the Department of Mathematics and Statistics may not apply the units earned in a given course towards satisfying the requirements of more than one minor. Anyone who plans to pursue the Minor in Statistics should consult with an advisor no later than the end of the sophomore year in order to plan properly.

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, 111, 131, 141, 150, 160, 161, and 165. Please consult the Schedule of Classes or contact 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, 111, 131, 141, 150, 160, 161, and 165 are available in the Cr/NC grading mode to non-mathematics majors.

All Students

MATH 160w, 161w, 175, 210, 211w, 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 and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog).

Statistics Courses

Please see course titles and descriptions under the Mathematics section of this catalog.

Sample Four-Year Program for Bachelor of Science in Statistics

FRESHMAN YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 161 (B4) (4)	MATH 211 (4)
MATH 165 (4)	MATH 265 (4)
Freshman Learning Community (GE) (5)	Freshman Learning Community (GE) (4)
GE (3)	GE (3)

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 241 (4)	MATH 261 (4)
MATH 367 (2)	MATH 322 (4)
MATH 220 (A3) (4)	GE (4)
GE (6)	Elective (3)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
MATH 345 (4)	MATH 381 (2)
Elective (4)	MATH 445 (4)
GE (4)	Elective (6)
UD GE (3)	UD GE (3)

SENIOR YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
MATH 340 (4)	MATH 465 (4)
UD GE (3)	Elective (6)
Elective (7)	GE (4)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in Applied Statistics

FRESHMAN YEAR: 28 Units

Fall Semester (13 Units)

MATH 161 (B4) (4)
MATH 165 (4)
Freshman Learning
Community (GE) (5)

Spring Semester (15 Units)

MATH 211 (4)
MATH 265 (4)
Freshman Learning
Community (GE) (4)
GE (3)

SOPHOMORE YEAR: 31 Units

Fall Semester (15 Units)

MATH 241 (4)
MATH 367 (2)
GE (6)
Elective (3)

Spring Semester (16 Units)

MATH 261 (4)
GE (9)
Elective (3)

JUNIOR YEAR: 31 Units

Fall Semester (16 Units)

MATH 345 (4)
Area of Concentration (3)
Elective (6)
UD GE (3)

Spring Semester (15 Units)

MATH 381 (2)
MATH 465 (3)
Area of concentration (3)
GE (3)
UD GE (4)

SENIOR YEAR: 30 Units

Fall Semester (15 Units)

MATH 467 (4)
Area of Concentration (3)
UD GE (3)
Elective (5)

Spring Semester (15 Units)

Area of Concentration (3)
GE (7)
Elective (5)

TOTAL UNITS: 120

THEATRE ARTS & DANCE

Acting / Dance / Technical Theatre / Theatre Studies

DEPARTMENT OFFICE

Ives Hall 207
(707) 664-2474
www.sonoma.edu/theatreanddance/

DEPARTMENT CHAIR

Kristen Daley

PERFORMING ARTS PROGRAM SPECIALIST

Alyssa Corona

Faculty

Acting: Paul Draper, Danielle Cain, Stephanie Hunt, Brent Lindsay, Doyle Ott, Jody Banks

Dance: Kristen Daley, Christine Cali, Jennifer Jaffe, *Nancy Lyons, Scott Wells, Raul Duenas, Rebecca Chun, Tanya Bello

Theatre Studies: Scott Horstein, Judy Navas

Technical Theatre: Anthony Bish, Peter Crompton

**Professor Emeritus*

Guest Artists

Theo Bridant, Christine Cali, Danielle Cain, John Connole, Adam Chanzit, Alex de Grassi, Adrian Elfenbaum, Doug Elkins, Mark Haim, Rob Brent Hamilton, Pamela Johnson, Julia Kwitchoff, Liz Lerman, Cassie Meador, Matthew Cumbie, Brent Lindsay, Will McCandless, Amanda McTigue, Jesse Olsen Bay, Maureen O'Sullivan, Doyle Ott, Liam Robertson, John Ross, Greg Sarris, Tori Truss, Mark Valdez, Sylvia Waters and Ana Marie Forsythe (The Ailey Legacy Residency), Scott Wells, Russ Wigglesworth, Chris Littman, Jennifer King, Sonia Alvarez, Risa Jaroslow, Rogelio Lopez, Jorge Vasquez, Dario Tongelson, Nancy Lyons, Ken Sonkin, Jane Hammett, Nichole VanPortfleet

Programs Offered

Bachelor of Arts in Theatre Arts with a
Concentration in Acting
Concentration in Dance
Concentration in Technical Theatre
Concentration in Theatre Studies

Minor in Theatre Arts (with acting, dance, theatre studies, technical emphases)

The Department of Theatre Arts & 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 & Dance program is closely associated with SSU's Music Department, especially in the area of voice and music theatre. Together, the Department of Theatre Arts & 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

(See page 243 for a sample four-year program.)

The 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, playwrighting, contemporary and modern plays, Shakespeare and other classics, and music theatre.

Degree Requirements	Units
General Education	50
Theatre Arts requirements	48
Additional Acting Core Courses	7
Electives	15
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 Introduction to the History of Drama and Dance: Origins to 1800	4
THAR 203 Introduction 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

Any two 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 145A Voice for the Actor (strongly recommended; Pre-requisite for Block)	1
THAR 145B Speech for the Actor (strongly recommended; Pre-requisite for Block)	1

Total units 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; Pre-requisite for Block)	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	1
Recommended Electives	
THAR 275 Contemporary Plays and Playwrights	3
THAR 379 Research Practice for Theatre and Dance	3

Total units in Phase II 36

Total units in the acting concentration 48

Bachelor of Arts in Theatre Arts with Concentration in Dance

(See page 243 for a sample four-year program.)

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	50
Theatre Arts requirements	37-49
Electives	21-33
Total units needed for graduation	120

Students must complete Phase I before Phase II.

Phase I, Required (freshman and sophomore years)

THAR 202 Introduction to the History of Drama and Dance Origins to 1800 or THAR 203 Introduction to History of Drama and Dance: 1800 to present	4
THAR 210 Contemporary Dance I	2
THAR 211 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

Total units in Phase I 14

Phase II, Required (junior and senior years)

THAR 300 Theatre in Action	3
THAR 310A Intermediate Dance Block A	5
THAR 310B Intermediate Dance Block B	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	5
THAR 410B Advanced Dance Block B	5
Elective - Dance	1

Total units in Phase II 35

Total units in the dance concentration 49

Bachelor of Arts in Theatre Arts with Concentration in Technical Theatre

(See page 244 for a sample four-year program.)

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	50
Theatre Arts requirements	64
Electives	6
Total units needed for graduation	120

Students must complete Phase I before Phase II.

Phase I, Required (freshman and sophomore years)

THAR 202 Introduction to the History of Drama and Dance: Origins to 1800 or THAR 203 Introduction to the History of Drama and Dance: 1800 to Present (strongly recommended)	4
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** Prerequisite or concurrent enrollment in THAR 143A.*

THAR 143B* Costumes	2
THAR 144A* Scenery	2
THAR 144B* Lighting	2
THAR 230 Stage Management	2

THAR 231	1
ART 101 Art Fundamentals (strongly recommended)	3
ART 102 Art Fundamentals (strongly recommended)	3
<i>Choose 3 units from the following dance/drama courses:</i>	
THAR 120A or B Acting: Fundamentals	3
THAR 110 Dance Fundamentals	2
THAR 210A Contemporary Dance I	1
THAR 116 Comedy and Improvisation	2
Total units in Phase I	16

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	4
Total units in Phase II	32
Total units in the technical theatre concentration	48

Bachelor of Arts in Theatre Arts with Concentration in Theatre Studies

(See page 244 for a sample four-year program.)

The Theatre Studies concentration in the Theatre Arts & Dance program provides equal parts professional theatre training and liberal arts education. Students prepare to pursue theatre careers in directing, playwriting, criticism, teaching, scholarship, arts management, dramaturgy, and other careers that may not have performance or theatre technology at their centers. Regardless of eventual profession, the concentration provides the intellectual rigor and imaginative excitement necessary to any liberal arts degree. Students learn to make theatre as a fundamentally collaborative story told among artists and community. We believe that this kind of training prepares the students to become the ideal global good citizen, engages with theatre as a means of ritual and democratic conversation focused on full inclusion of all cultures and identities.

Degree Requirements	Units
General Education	50
Theatre Arts Requirements	52
Electives	18
Total units needed for graduation	120

THAR 160 *Seeing Theatre Today* is one **strongly recommended** First-year Learning Community (FLC) through which Theatre Arts & Dance majors receive 8 units in the General Education (GE) requirements. GE areas covered are A3 (Critical Thinking) and C3 (Comparative Perspectives).

Phase I, Required (freshman and sophomore years)

Students must complete Phase I before Phase II.

All of the following requirements:

THAR 120B Acting Fundamentals	2
THAR 202 Introduction to the History of Drama and Dance: Origins to 1800	4
THAR 203 Introduction to the History of Drama and Dance: 1800 to the Present	4
THAR 230 Stage Management	2
THAR 231 Stage Management Practicum	1
THAR 275 Contemporary Plays and Playwrights	3
Subtotal	16

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
Subtotal	2
Total units in Phase I	18

Phase II, Required Upper-Division Core (junior and senior years)

THAR 370A Early Plays: Evolution and Innovation	3
THAR 370B Modern Plays: Evolution and Innovation	3
THAR 374 World Theatre	4
THAR 375 Race, Gender, and Performance	3
THAR 379 Research Practice for Theatre Arts & Dance	3
THAR 400 Theatre of Today	1
Subtotal	17

Phase II, Required Theatre Arts Electives (junior and senior years)

At least 17 total credits from the following electives, which may include one of the Mini-Blocks listed below. Students may also propose other mini blocks that reflect their own goals.

THAR 110 Dance Fundamentals	1
THAR 115 Dance Styles	1
THAR 145A Voice for the Actor	1
THAR 145B Speech for the Actor	1
THAR 210 Contemporary Dance	2
THAR 220A Acting: Text and Scene Study	2
THAR 220B Acting: Characterization	2
THAR 300 Theatre in Action (UD GE C1)	3
THAR 301, 302, 303, or 304 Production Workshops	3
THAR 350 Directing	2
THAR 371A or 371B History of Dance or THAR 373 Dances of the World (UD GE C3)	3-4
THAR 376 Playwriting I	3
THAR 377 Playwriting II	3
THAR 378 Story Analysis	3
THAR 460 Drama for Children or THAR 470 Dance for Children	2
ENGL 339 Introduction to Shakespeare or ENGL 439 Studies in Shakespeare	4
CALS 365/THAR 365 Chicano/Latino Theatre	1-2
THAR 455 Mission and Collaboration	1

Production Mini-Block*(for students interested in directing, playwriting, dramaturgy, arts management, and scholarship)*

THAR 220A Acting: Text and Scene Study	2
THAR 350 Directing	2
THAR 301, 302, 303, or 304 Production Workshops	3
Subtotal	7

Teaching Mini-Block*(for students interested in primary education, secondary education, and scholarship)*

THAR 301, 302, 303, or 304 Production Workshops	3
THAR 460 Drama for Children	2
THAR 470 Dance for Children	2
Subtotal	7

Dance Mini-Block*(for students interested in an added dance emphasis in education and scholarship)*

THAR 210 Contemporary Dance	2
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One of the following two dance classes:

THAR 110 Dance Fundamentals	1
THAR 115 Dance Styles	1

Any **one** of the following three dance classes:

THAR 371A History of Dance	3
THAR 371B History of Dance	3
THAR 373 Dances of the World	4

Subtotal	6-7
Phase II electives subtotal	17
Total units in Phase I	18
Total units in Phase II	34
Total units in theatre studies degree	52

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 Introduction 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 203 Introduction to History of Drama and Dance, or THAR 371A or 371B History of Dance. THAR 240 Choreography I is a core requirement for a dance emphasis.)

Total units in the minor electives	14
Total units in the minor	24

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Acting Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 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)
THAR 160A/ PHIL 101A (GE A3, C3) (4)	THAR 160B/PHIL 101B (GE A3, C3) (4)
Additional GE (6)	Additional GE (6)

SOPHOMORE YEAR: 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (17 Units)</i>
THAR 202 (C1 GE) (4)	THAR 203 (C1 GE) (4)
THAR 143B (2)	THAR 220B (2)
THAR 220A (2)	THAR 275 (3)
THAR 302 (3) Elective	ENGL 339 (4)
GE (4)	GE (4)

JUNIOR YEAR: 28 Units

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 320A (5)	THAR 320B (5)
THAR 350 (2)	THAR 300 (GE UD C1) (3)
THAR 370A (3)	THAR 325 (2)
GE UD (4)	GE (4)

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 420A (5)	THAR 420B (5)
THAR 302 (3)	THAR 371B (3)
THAR 400 (1)	GE UD (3)
GE UD (3)	Electives (4)
Electives (3)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Dance Concentration

FRESHMAN YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 210 (2)	THAR 211 (2)
THAR 143A (2)	THAR 144 (2)
THAR 240 (2)	THAR 340 (2)
GE (9)	GE (9)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 212 (2)	THAR 213 (2)
THAR 143B (2)	THAR 203 (4) (GE C1)
THAR 202 (4) (GE C1)	GE (4)
GE (4)	Electives (5)
Electives (3)	

JUNIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
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 (4)

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 410A (2 or 5)	THAR 410B (2 or 5)
GE (4)	THAR 371B (3)
THAR 400 (1)	Electives (3)
Electives (5)	GE (3)

TOTAL UNITS: 120

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)	GE (12)
GE (12)	

SOPHOMORE YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 110 or 116 (1)	THAR 110 (1)
THAR 144B (2)	THAR 120 (2)
THAR 202 (GE C1) (4)	GE (9)
THAR 230 (2)	Electives (4)
THAR 231 (1)	
GE (6)	

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 321A (2)	THAR 300 (UD GE) (3)
THAR 344A (3)	THAR 321B (2)
THAR 350 (2)	THAR 344B (3)
THAR 370A (3)	GE UD (4)
GE UD (3)	Electives (3)
Electives (2)	

SENIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
THAR 400 (1)	THAR 370B (3)
THAR 421A (2)	THAR 421B (2)
THAR 444 (2)	GE (4)
GE (4)	Electives (6)
Theatre Electives (2)	
Electives (4)	

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in Theatre Arts — Theatre Studies Concentration

FRESHMAN YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 120B (2)	THAR 144B (2)
THAR 143A (2)	THAR 160B (GE A3 2 units, C3 2 units) (4)
THAR 160A (GE A3 2 units, C3 2 units) (4)	THAR 301/302/303/304 (3)
THAR 230 (2)	GE (7)
THAR 231 (1)	
GE (4)	

SOPHOMORE YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
THAR 110 (1)	THAR 203 (GE C1) (4)
THAR 202 (GE C1) (4)	THAR 275 (3)
THAR 220A (2)	GE (9)
THAR 376 (3)	
GE (5)	

JUNIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 350 (2)	THAR 365 (1)
THAR 370A (3)	THAR 370B (1)
THAR 379 (3)	THAR 375 (3)
ENGL 339 (4)	THAR 301/302/303/304 Elective (3)
GE UD (3)	GE UD (6)

SENIOR YEAR: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
THAR 300 (GE UD C1) (3)	THAR 371A (3)
THAR 378 (3)	THAR 374 (3)
THAR 400 (1)	THAR 455 (1)
GE UD (3)	THAR 460 or 470 (2)
Electives (5)	Electives (5)

TOTAL UNITS: 120

WOMEN'S AND GENDER STUDIES

DEPARTMENT OFFICE

Rachel Carson Hall 18
(707) 664-2840
www.sonoma.edu/wgs

DEPARTMENT CHAIR

Don Romesburg

ADMINISTRATIVE COORDINATOR

Jo-Ann Smith

FACULTY

Lena McQuade
Don Romesburg
Charlene Tung

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 constructions 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

(See pages 247-248 for sample four-year programs.)

Degree Requirements	Units
General education	50
Major core requirements	44
Electives	26
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: Verity, Circle of Sisters after-school program, and The Living Room (drop-in center for at-risk women and children).

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

WGS 280 Women's Bodies: Health and Image	3
NURS 480 Sexuality, Health, and Society or	
WGS 350 Gender, Sexuality and Family	3-4
Practical Application	
WGS 499 Internship in Women's Health Setting	4
Prerequisite: senior standing or	
NURS 497(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

ANTH 318 Human Development: Sex and Life Cycle	3
BIOL 311 Sexually Transmitted Diseases	3
BIOL 318 Biology of Aging	3
GERN 300 The Journey of Adulthood	3
GERN 319/SOCI 319 Aging and Society	4
KIN 316 Women in Sports: Issues, Images, Identities	3
NURS 303 Maternity & Women's Health Care (NURS only)	6
PSY 454 Biofeedback and Somatic Psychology	4
PSY 358 Health Psychology	3-4
PSY 362 Human Sexuality (Summer)	4
PSY 405 The Psychology of Gender	4
PSY 408/GERN 408 Transitions of Adult Development	4
PSY 454 Biofeedback Somatics & Stress Management	4
SCI 150 Intro to Careers in Health Professions	1
WGS 301 Feminist Lecture Series	1-2
WGS 440/SOCI 440 Sociology of Reproduction	4

Total units in electives 10-11

Total units required in the 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)	3-4
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
PSY 362 Human Sexuality	4
PSY 405 Psychology of Gender	4
SOCI 360 Sociology of Sexualities	4
WGS 285 Men and Masculinity (GE E)	4

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 (17 Units)</i>	<i>Spring Semester (15-16 Units)</i>
WGS 280 (GE) (4) or WGS 285 (4)	WGS Elective (3-4)
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 (13-14 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 (3-4)	Upper-Division GE (4)
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

Fall Semester (14 Units)

WGS 350 (3)

WGS Elective (3)

Gender course in disciplinary concentration (4)

Course in disciplinary concentration (4)

Spring Semester (15 Units)

WGS 375 (3)

WGS 390 (4) and WGS 499 (2)

Disciplinary course (4)

Upper-Division GE (3)

SENIOR YEAR: 30-32 Units

Fall Semester (16 Units)

WGS 425 (4)

WGS 475 (4)

Disciplinary course (4)

Course to complete the minor in a discipline (4)

Spring Semester (15 Units)

WGS 485 (4)

WGS 499 (2)

WGS elective (3)

Upper-Division GE (3)

Electives (3)

TOTAL UNITS: 120
