

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 Studies
CES	Computers and Engineering Science
CS	Computer Science
COUN	Counseling
CCJS	Criminology and Criminal Justice
EDCT	Education: Curriculum and Teaching
EDEC	Education: Early Childhood Education
EDEL	Education: Leadership
EDMS	Education: Multiple Subject
EDRL	Education: Reading and Language
EDSS	Education: Single Subject
EDSP	Education: Special Education
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
LIBS	Hutchins School of Liberal Studies
KIN	Kinesiology
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
UNIV	University Courses
WGS	Women's and Gender Studies

AMERICAN MULTICULTURAL STUDIES

DEPARTMENT OFFICE

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www.sonoma.edu/depts/amcs

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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 160A/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 Contemporary Plays and Playwrights: New Plays, Race, and Sexuality	4
<i>*Must meet pre-requisite</i>	
<i>** Open to SOCI majors and minors only</i>	

Pathway in Film Studies

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
<i>**Open to SOCI majors/minors only</i>	

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 Contemporary Plays and Playwrights: New Plays, Race, and Sexuality	4
WGS 385 Gender and Globalization	3-4
<i>** Open to SOCI majors/minors only</i>	

Pathway in Native American Studies

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

ANTH 327: Archaeology of North America*	4
<i>*must meet pre-requisite</i>	

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
<i>* Must meet pre-requisite</i>	
<i>** Open to SOCI majors/minors only</i>	

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: Contemporary Plays and Playwrights: New Plays, Race, and Sexuality	4

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 160A/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

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

Programs Offered

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

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

Anthropology consists of four subfields:

- Biological Anthropology deals with the evolution of the human body, mind, and behavior as inferred through study of fossils and human remains and comparisons with behavior 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.

Anthropology Laboratory

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

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

Anthropology Scholarships

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

Bachelor of Arts in Anthropology

(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 sub-field 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:* 4

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:* 4

ANTH 322 Historical Archaeology 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:* 4

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:* 4

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:* 4

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, an adjunct of the State Office of Historic Preservation, manages historical records, resources, reports, and maps; supplies historical resources information to the private and public sectors; and compiles and provides a referral list of qualified historical resources consultants. In addition to archaeologists and other anthropologists, participating faculty in the CRM program include historians, geographers, soil scientists, and environmental planners.

Requirements for the Degree

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

ANTH 500 Proseminar	4
HIST 472 California History I	4
ANTH 502 Archaeology: History and Theory	3
ANTH 503 Seminar in Cultural Resources Management	3
ANTH 592 Practicum in National Register of Historic Places	2
ANTH 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 and Ethnography Lab. Off-campus agencies include the State Office of Historic Preservation, the National Park Service, the Sonoma County Museum, and many others.

Admission to the Program

Applications must be submitted separately by January 31 to the Anthropology Department 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 suggestive; please see your advisor each semester.

FRESHMAN YEAR: 32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (16 Units)</i>
GE (A2) (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) (3)
University Elective (3)	University Elective (4)

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 29 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

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

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:

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 Arts Management (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, studio art, and arts management are also available. A program for students working toward a teaching credential is included within the curriculum and available through the Education Department. Several art and film history courses meet general education requirements.

Designed specifically for the pursuit of studio art practices and the study of art history and arts management, the department facilities are located in one of the best equipped physical plants in 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 integrative investigation of art and culture using both traditional and new approaches and technologies. The curriculum provides a broad overview of Western art, Asian art, and other art outside the European tradition. Our core is enhanced by periodic offerings of specialized upper-division classes that have included in-depth studies of artists, themes, and post-modern theory, and of current issues, such as gender and multiculturalism. 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 management. Consult a department advisor for specific advice about career planning.

Advising

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

Bachelor of Arts in Art History

(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 101 or 102 or 104 Fundamentals. In addition, one course in drawing, a beginning course in any medium, or a second Fundamentals course.

Minimum total lower-division units 11

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

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

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

Ancient: 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.
 - 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	3-4
ARTH 211 Introduction to Art History	3-4
ARTH Upper-division courses (except modern)	8
ARTH Upper-division modern or non-Western course	3-4
Total units needed for the minor	20

Recommended Electives for Art History Minors

Upper-division art history or criticism courses.

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
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) (pending final approval)	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 to total a minimum of **6 units**; at least one course must be taken in a 2-D medium and a 3-D medium: **6-9**

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

Total lower-division core units 22

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

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

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

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

Total upper-division core units 11

Areas of Emphasis

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

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

Specific content of concentrations is detailed below.

Total units in major emphasis 12

Total units in the major 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

ARTS 436 parts A, B, C, D Further Sculpture

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

ARTS 335 Intermediate Bronze Foundry

ARTS 435 Advanced Bronze Foundry

ARTS 329 Intermediate Ceramics

ARTS 429 Advanced Ceramics

ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture

Ceramics Emphasis

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

ARTS 329 Intermediate Ceramics

ARTS 429 Advanced Ceramics

ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture

ARTS 432 Ceramic Materials

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

ARTS 336 Intermediate Sculpture

ARTS 436 Advanced Sculpture

ARTS 335 Intermediate Bronze Foundry

ARTS 435 Advanced Bronze Foundry

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

ARTS 440 Advanced Etching and Woodcut

ARTS 342 Intermediate Lithography

ARTS 442 Advanced Lithography

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

ARTS 382 Intermediate Monoprint

ARTS 482 Advanced Monoprint

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

ARTS 402 Advanced Drawing

ARTS 304 Intermediate Life Drawing

ARTS 404 Advanced Life Drawing

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

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. Fall semesters

& B.A. (466/492) Most 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
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) (pending final approval)	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 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

Total lower-division core units 16-18

Junior and Senior Years

Complete the following 5 courses:

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

Choose any combination of the following to total 5 units:

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

Total upper-division core units 20

Areas of Emphasis

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

Painting

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

ARTS 220 Beginning Painting	3
-----------------------------	---

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 3

ARTS 102 Art Fundamentals 3

or ARTS 103 and ARTS 104 4

ARTH 210 Introduction to Art History 3

or ARTH 211 Introduction to Art History 3

Studio courses at any level 5

Upper-division studio courses 6

Total units in the minor 21-22

Career Minor in Arts Management

The career minor in arts management provides students of the arts with education, training, and experience in the practical, business side of their fields. Art majors completing this career minor will be in much stronger positions to find work and support themselves in

fields within or closely related to their majors. The arts management career minor, combined with a minor in art history or art studio, also serves the needs of business administration majors who wish to specialize in the arts. Internships are available at local and regional art galleries, museums, nonprofit organizations, and other groups that provide services for artists. Please see the section on Career Minors for a description of the arts management minor program.

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

FRESHMAN YEAR: 29-33 Units

Fall Semester (15-18 Units)

ARTH 210 (3-4)*

ARTS 101 or 102 (3)
or ARTS 103 (1) and 104 (4)

GE courses (6)

Elective (3)

Spring Semester (14-15 Units)

ARTH 211 (3-4)*

Any beginning Art Studio Course (2)

GE courses (9)

SOPHOMORE YEAR: 32 Units

Fall Semester (16 Units)

Upper-Division ARTH Period Course (3-4)

GE courses (12)

Spring Semester (16 Units)

ARTH Non-Western (3-4)

GE courses (12)

JUNIOR YEAR: 29 Units

Fall Semester (15 Units)

Upper-Div. ARTH Period Course (3-4)*

Upper ARTH Period Course (3-4)

Upper-Division GE (4)

Upper-Division ARTH Special Topic (1-4)

Elective (2-4)

Spring Semester (14 Units)

Upper-Div. ARTH Period Course (3-4)

Upper-Division ARTH Elective (3-4)

Upper-Division GE (4)

Electives (3-4)

SENIOR YEAR: 28 Units

Fall Semester (14 Units)

ARTH 490H (3-4)

Upper-Division ARTH Elective (3-4)

Upper-Division ARTH Elective (3-4)

Other Electives (3-4)

Spring Semester (14 Units)

ARTH 491H or 492 (Advisor #1) (1-2)

ARTH 491H or 492 (Advisor #2) (1-2)

Upper-Division ARTH Elective (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

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
ARTS 104 (3)	Lower Division Studio Course (3)
ARTH 210 Art History (3)*	ARTH 211 Art History (3)
GE courses (9)	GE courses (9)

SOPHOMORE YEAR: 30 Units

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

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Upper-Div. studio emphasis (3)	Upper-Div. studio emphasis (3)
ARTS 302 Int. Drawing (3)	Upper-Div. studio elective (3)
ARTH 465 History of Mod. Art (3)*	Upper-Div. studio course (3)
ARTS 491 Upper-Division studio course (1)	GE courses (6)
GE courses (5)	

* also counts for GE requirements

SENIOR YEAR: 30 Units

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

TOTAL UNITS: 120

ASTRONOMY

DEPARTMENT OFFICE

Darwin Hall 300
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<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, in operation since 1976, houses two telescopes, a 14-inch Schmidt-Cassegrain and a 10-inch Newtonian, with auxiliary instrumentation for CCD imaging and spectroscopy. Both telescopes are computer controlled. The observatory is used by students in laboratory and lecture courses, and is also available for faculty and student research projects. A NASA-funded research observatory, which saw "first light" in 2004, is located in the darker skies of northern Sonoma County. It includes a remotely controlled and operated 14-inch telescope mounted on a computer-controlled Paramount and equipped with a high quantum efficiency CCD detector and filter wheel. Equipment available for observational work in astronomy at SSU is ideally suited for studying objects that vary in time and space. This includes objects that vary in brightness such as pulsating, eclipsing, and cataclysmic star systems. This also includes the variable nuclei of active galaxies such as quasars and blazars, Gamma-ray Bursts (GRBs), and extrasolar planetary systems that exhibit planetary transits. Our equipment is also ideally suited for follow-up observations of Near Earth Objects (NEOs), which may threaten Earth.

The department is developing a remotely operable, approximately 1-meter telescope in southern Mendocino county: the Galbreath Wildlands Preserve Observatory. This will be a sustainable and ecologically sensitive facility, making the project innovative and cross-disciplinary. The department also houses a laboratory for experimental astrophysics research, where students can test and build cameras, spectrometers, and other equipment for SSU's telescopes. The laboratory includes an Adaptive Optics testbed, which uses advanced technology to measure and sharpen images. Faculty and students have built and use an astronomical Adaptive Optics system in collaboration with partner institutions.

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

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DEPARTMENT CHAIR

Murali Pillai

ADMINISTRATIVE COORDINATOR

Jen Aaseth, Rosemary Galten

Faculty

Michael F. Cohen

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J. Hall Cushman

Nicholas R. Geist

Derek J. Girman

Joseph Lin

Karina J. Nielsen

Murali C. Pillai

Sean Place

Nathan E. Rank

Andrew Rogerson

Richard Whitkus

Programs Offered

Bachelor of Arts in Biology

General Biology

Bachelor of Science Biology

General Biology

Molecular Biology, Cell Biology, and Physiology

Concentration

Ecology and Evolutionary Biology 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 original 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 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, botany and zoology. We are nationally recognized for our programs and research in marine biology.

The Master's program is comprised of an active cohort of graduate students engaged in original 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.

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, algae and fungi (North Coast Herbarium of California), vertebrates (Jack Arnold Vertebrate Collection) and insects and other invertebrates.

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.

Preparation for Careers in the Marine Sciences

As a coastal university, we provide numerous courses that emphasize the biology of marine life or use marine organisms as models for understanding broader topics in biology. Students with interests in marine biology or other marine sciences can choose core classes and electives that emphasize this area, and they may also work on marine research projects in faculty laboratories and in the field.

Biology Degree Plans

Both the B.A. and the B.S. degree plans offer full, well rounded preparation in Biology. Students seeking the B.S. have the option to select one of two specific concentrations. The B.A. does not offer specific concentrations. B.S. degree students must complete additional physical science support courses in addition to those required by the B.A. B.S. students must also complete a research experience (minimum of three units).

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 121, 122, 123)	12	12
Upper-Division Biology Core	16	16
Upper-Division Biology Electives (as specified by concentration)	15	12-16
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	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	18-19	1-4
Total units needed for graduation	120	120

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

Upper-Division Biology Core

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

Organismal Biology (4 Units)

BIOL 322 Invertebrate Biology	4
BIOL 323 Entomology	4
BIOL 327 Vertebrate Biology	4
BIOL 329 Plant Biology	4
BIOL 340 General Bacteriology	4

Physiology (4 Units)

BIOL 328 Vertebrate Evolutionary Morphology	4
BIOL 347 Environmental Physiology	4
BIOL 348 Plant Physiology	4
BIOL 349 Animal Physiology	4

Molecular And Cell Biology (4 Units)

BIOL 342 Molecular Genetics	4
BIOL 344 Cell Biology	4
BIOL 383 Virology	4
BIOL 472 Developmental Biology	4

Ecology And Evolution (4 Units)

BIOL 333 Ecology	4
BIOL 335 Marine Ecology	4
BIOL 337 Behavioral Ecology	4
BIOL 341 Evolution	4

Upper-Division Biology Electives

Biology major electives are upper-division courses beyond those used to fulfill the upper-division core and 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 320 (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 (non-majors courses). 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.

Concentrations in Biology

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 Biology, Cell Biology, and Physiology Concentration

BIOL 341 Evolution 4

BIOL 342 Molecular Genetics 4

BIOL 344 Cell Biology 4

One course from the Organismal Biology Core Area 4

One of the following two courses: 4

BIOL 348 Plant Physiology

BIOL 349 Animal Physiology

Research Experience (minimum of 3 units) 3

BIOL 494 Independent Research (1-3)

BIOL 496A and 496B Honors Thesis (3-6)

Department approved research course

Additional upper-division major electives 8

B. S. Ecology and Evolutionary Biology Concentration

BIOL 333 Ecology 4

BIOL 341 Evolution 4

BIOL 342 Molecular Genetics 4

BIOL 485 Biometry 4

One course from the Organismal Biology Core Area 4

One course from the Physiology Core Area 4

Research Experience (minimum of 3 units) 3

BIOL 494 Independent Research (1-3)

BIOL 496A and 496B Honors Thesis (3-6)

Department approved research course

Additional upper-division major electives 8

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:

BIOL 328 Vertebrate Evolutionary Morphology

BIOL 340 General Bacteriology

BIOL 342 Molecular Genetics

BIOL 344 Cell Biology

BIOL 349 Animal Physiology

BIOL 472 Developmental Biology

BIOL 480 Immunology

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

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 of the three lower-division major's courses listed below 8

BIOL 121 Diversity, Structure, and Function (4)

BIOL 122 Genetics, Evolution, and Ecology (4)

BIOL 123 Molecular and Cell Biology (4)

Additional units in Biology 12

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.

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 1-3 (listed below) to SSU's Admissions and Records Office, and B) copies of items 1-3 and

originals of items 4 and 5 to the Department of Biology Graduate Coordinator. The application deadline in the department is January 31 for the fall semester and October 31 for the spring semester. The SSU Admissions and Records Office will notify students about the status of their applications.

1. University application obtained from the Admissions and Records Office.
2. Official copies of all undergraduate transcripts.
3. One-to-two page Statement of Purpose essay detailing your background in biology, objectives for graduate school, and career goals.
4. Two letters of recommendation from individuals familiar with 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: The complete application package must be received in the Admissions and Records Office and by the Biology Graduate Coordinator before an applicant will be considered for admission.

Admission to the program requires:

- I. Meeting California State University admissions requirements.
- II. Acceptance by a biology graduate faculty member to serve as a faculty advisor. Students 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

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 121 or 122 (4) (GE area B2)	BIOL 121 or 122 (4) (GE area B3)
CHEM 115A (5) (GE area B1)	CHEM 115B (5)
GE area A2, A3, or C3 (4)	GE area A2, A3, or C3 (4)
GE Electives (3)	GE Electives (1-3)

SOPHOMORE YEAR: 28-32 Units

<i>Fall Semester (12-16 Units)</i>	<i>Spring Semester (16 Units)</i>
BIOL 123 (4)	MATH 165 (4) (GE area B4)
CHEM 335A and/or 336A (3-5)	Support Course (4)
ENGL 101 (4) (GE area A2)	GE area A1 (4)
GE Electives (1-3)	GE Electives (4)

JUNIOR YEAR: 28-33 Units

<i>Fall Semester (14-17 Units)</i>	<i>Spring Semester (14-16 Units)</i>
Two BIOL UD Core (8)	Two BIOL UD Core (8)
BIOL UD Electives (2-4)	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

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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
Janeira 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 78 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 majors take preparatory courses and lower-division core requirements and then select concentrations based on individual interest and career plans. The fields of concentration include: accounting, finance, financial management, management, marketing, wine business strategies, and a special concentration designed by the student with the approval of the department chair. A Bachelor of Science in Business Administration with an emphasis in one or more areas of concentration prepares students for innovative and responsible citizenship and leadership in society—domestic and worldwide.

Degree Requirements

General Education (freshmen)	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-major status should consult on matters regarding general education, University requirements, the pre-major program, and routine major issues. When students move from pre-major to the business administration major they are assigned a faculty advisor. Every full-time faculty member actively advises students, especially on matters relating to the major and careers.

Pre-Business Administration Program

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

Computer Competency

All business majors must demonstrate computer competency prior to taking any upper-division business core class. 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 major)

BUS 211 Business Statistics (4) or MATH 165 Elementary Statistics (4)
or ECON 217

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 these core requirements (coursework in the selected area of concentration usually may be taken concurrently):

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

* BUS 334 is required for accounting concentration students.

** BUS 491 is the capstone course in the business administration major designed to be taken in the student's final semester. Prerequisite: all business core requirements 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

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, Karen Thompson, Armand Gilinsky, Duane Dove, Sandra Newton, John Urbanski, Janeira 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. This prepares students for management-level accounting positions in business and government or public accounting. Specialized courses are offered in financial accounting, cost accounting, auditing, and taxation. Students who intend to sit for the CPA exam should take all upper-division accounting courses listed below.

Required Courses:

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

Select at least three of the following courses:

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 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 473 International Finance	4
BUS 476 Risk Management and Insurance	4

Group B

BUS 330A Intermediate Accounting	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 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 391 Cross Cultural Communication and Negotiation	4
BUS 393 Introduction to International Business	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 462 Marketing Research	4
BUS 469 Marketing Management	4

Select at least two courses:

BUS 366 Retail Management	4
BUS 368 International Marketing	4
BUS 396W The Global Wine Industry	3
BUS 451 Entrepreneurship	4
BUS 453 Small Business Analysis	4
BUS 461 Promotion Management	4
BUS 463 Sales Management and Personal Selling	4
BUS 464W Production, Operations, and Distribution (Wine)	4
BUS 465W Wine Marketing	4
BUS 468 Marketing Decision Making	4
BUS 499MK Internship in Marketing	3-4

Wine Business Strategies: 5 Courses

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

Required Courses:

BUS 305W Introduction to Wine Business Strategy	4
BUS 464W Production, Operations, and Distribution (Wine)	4

BUS 465W Wine Marketing	4
BUS 499W Internship in Business (Wine)	3-4

Select at least one of the following courses:

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

Special Concentration: 5 Courses

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

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

Second, it is for those students who wish, with the approval of the department chair, to design a concentration in an area not covered sufficiently within the department, using courses outside of the department. To complete this concentration, five upper-division courses, at least three-unit, should be selected with approval from 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 Principles of Accounting	4
BUS 230B Principles of Accounting	4

BUS 344 Organizational Behavior	4
BUS 360 Introduction to Marketing	4
BUS 370 Introduction to Managerial Finance	4

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

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 Principles of Accounting	4
BUS 360 Intro to Marketing	4
BUS 463 Sales Management and Personal Selling	4
BUS 493 Advanced Topics in Professional Sales	2
(offered through School of Extended and International Education)	

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 working student. Students seeking a full-time day program are advised to apply to one of the other CSU schools. The M.B.A. degree program has two concentrations: classic 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, you will be advised as to your next steps in the admission process. You 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
- Applicants who have not spent at least three years of school at the secondary level (or beyond) where English is the principal language of instruction must have earned a minimum score of 550 on the paper version or 80 on the computerized version of the Test of English as a Foreign Language (TOEFL).

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 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 you have been advised by the M.B.A. Coordinator, (707) 664-3501, 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 GMAT score.

Graduate Student Status

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

- **Conditionally Classified Graduate Status.** A student admitted to the M.B.A. program as a Conditionally Classified Graduate Student can take only foundation courses. This student may not take M.B.A. required or elective courses without permission of the Director of M.B.A. Programs. A student who begins as a Conditionally Classified Graduate Student will be eligible for advancement to Classified Graduate Status upon successful completion of the foundation courses. Such a request should be submitted to the Director of M.B.A. Programs.
- **Classified Graduate Status.** A student admitted to the M.B.A. program as a Classified Graduate Student will have completed the foundation courses at the time of admission. This student 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 may be transferred to meet part of the 30 units for the M.B.A.. Graduate courses equivalent to our foundation courses will not be accepted to meet elective or required M.B.A. courses. Transfer credits will normally be accepted only from AACSB accredited universities. Transfer courses must be approved by the Director of M.B.A. Programs. Be sure 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.

For current students who started the part-time M.B.A. program PRIOR to Fall 2012, see M.B.A. Program Curriculum with a General Concentration below.

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

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 you with business tools and strategies to deliver results in today's transformational economy. Newly re-designed, it will teach you not just how to read financial statements, but how to apply that informa-

tion to make decisions and shape strategy. Not just the principles of marketing, but how to develop a brand, deliver transformational customer experiences, and integrate marketing communication across numerous outlets. Not just business strategies, but 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 you to choose your career emphasis.

Inside and outside of the classroom, students gain access to the deep knowledge of our regional business partners, to the activities of the North Bay iHub to cultivate innovation and entrepreneurship, and to career support services.

Evening classes are designed to easily fit into your busy schedule, small class sizes allow for you to make personal connections with your classmates, and professional instructors are driven to help you reach your future business goals.

The Classic 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

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

eMBArk Weekend

Your 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 your first year, you 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 570 Managerial Finance (Fall)	3
BUS 540 Managing Human Capital (Fall)	3
BUS 580 Business Intelligence (Spring)	3
BUS 535 Cost Analysis Control (Spring)	3

3 Theme Areas (9 Units)

Breadth of exposure and relevance to today's workplace is ensured by requiring you 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 courses in each theme areas include:

- Leadership and Ethics
 - BUS 552 Leadership
 - BUS 554 Social Entrepreneurship
- International Business and Global Issues
 - BUS 516 Global Supply Chain Management
 - BUS 593 International Business
- Contemporary Business Issues
 - BUS 519 Information Management
 - BUS 563 Strategic Branding

2 Elective Courses (6 Units)

You 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 (5 Units)

You put it all together in a final business strategy course (BUS 591) that requires you to develop a comprehensive strategic plan for an existing business or a business plan for a new venture, and conclude with a final weekend immersion experience (2 units). To enroll in the capstone course, it must be your last semester in the program and you must have completed your 4 core and 3 theme area courses. Exceptions require the approval of the Director of M.B.A. Programs.

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

Accelerate your career and network with professionals in the local wine industry.

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, professional connections to alumni in the industry, and more!

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 your busy schedule, small class sizes allow for you to make personal connections with your classmates, and professional instructors are driven to help you reach your 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

Note: 3 of the 5 Theme Area 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

Your 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 your first year, you 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 570 Managerial Finance (Fall)	3
BUS 540 Managing Human Capital (Fall)	3
BUS 580 Business Intelligence (Spring)	3
BUS 535 Cost Analysis Control (Spring)	3

3 Theme Areas (9 Units)

Breadth of exposure and relevance to today's workplace is ensured by requiring you 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 courses in each theme areas include:

- Leadership and Ethics
 - BUS 552 Leadership
 - BUS 555W Sustainability in the Wine and Hospitality Industry
 - BUS 593 Business Ethics
- International Business and Global Issues
 - BUS 516 Global Supply Chain Management
 - BUS 545W Global Wine Business
 - BUS 597W Country Intensive Wine Business Analysis
- Contemporary Business Issues
 - BUS 525W A/B Wine Business Experience
 - BUS 535 Strategic Branding
 - BUS 565W Marketing and Sales Strategies for Wine

2 Elective Courses (6 Units)

You 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 (5 Units)

You put it all together in a final business strategy course (BUS 591) that requires you to develop a comprehensive strategic plan for an existing business or a business plan for a new venture, and conclude with a final weekend immersion experience (2 units). To enroll in the capstone course, it must be your last semester in the program and

you must have completed your 4 core and 3 theme area courses. Exceptions require the approval of the Director of M.B.A. Programs.

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 Principles of Accounting	8
BUS 334 Organizational Behavior	4
or BUS 504	2
BUS 360 Introduction to Marketing	4
or BUS 506	2
BUS 370 Introduction to Managerial Finance	4
or BUS 507	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

The M.B.A. Foundation Course Series is only offered in the spring semester each year.

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

The main benefits of the series of courses are:

- **Time Savings.** You will be able to complete your 300-level foundation courses more quickly.
- **Lower Cost.** The courses are two-unit, versus four-unit, so the cost is substantially less.
- **M.B.A. Class Environment.** You will be in smaller, evening classes with other conditionally classified M.B.A. students.

The series is held on two evenings per week. The courses may be taken individually if you do not need all three of the courses, however, to be eligible for financial aid a student requires six units. The courses are offered sequentially, each lasting approximately five weeks. The class method 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.

For current students who started the part-time M.B.A. program PRIOR to Fall 2012.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Analytical Writing Requirement

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

Grades

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

Culminating Project

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

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

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

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

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

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

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

BUS 230A and 230B Principles of Accounting	8
BUS 344 Organizational Behavior	4
BUS 360 Introduction to Marketing	4

BUS 370 Introduction to Managerial Finance	4
BUS 211 Business Statistics	4
ECON 204 and 205 Introduction to Economics	8

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

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

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

BUS 516 Seminar in Operations Management	3
BUS 519 Management Information Systems	3
BUS 530 Financial Statement Analysis	3
BUS 540 Strategic Human Resource Management	3
BUS 545W Global Wine Business	3
BUS 560 Seminar in Marketing Management	3
BUS 570 Seminar in Managerial Finance	3
BUS 591 Seminar in Strategic Management	3
or BUS 592 Entrepreneurship and New Venture Creation	3

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

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

BUS 555W Sustainability in the Wine and Hospitality Industry	3
BUS 565W Marketing and Sales Strategies for Wine	3
BUS 595 Special Studies in Business Administration	1-3
BUS 596 Graduate Internship	1-3
BUS 599 Master's Degree Directed Research	1-3

Wine M.B.A. Program Special Requirements

Analytical Writing Requirement

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

Transfer Credits

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

Grades

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

Wine Industry Experience

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

Culminating Project

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

Executive Master of Business Administration

The EMBA, designed for professionals already advanced or poised for advancement in their career, consists of fourteen courses in a cohort-style, modular curriculum, beginning and ending with assessing students as leaders, not just managers. The program begins with a skills-driven set of courses, starting with financial statement analysis, marketing, and 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 Northbay
 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 Arts Management

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

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

Program Advisor

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

Requirements for the Career Minor in Arts Management

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

ARTH 210 Introduction to Digital Imaging	2
ARTH 312 Principles of Arts Management	3
ARTH 466 Contemporary Art	3
ARTH 480 Selected Topics: Curatorial Practice	3
ARTH 494 Gallery and Museum Methods	3
ARTH 499 Internship	4
Business, computer, or other related courses to be determined by the program advisor	3
Total units in the minor core	21

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

Career Minor in Health Systems Organizations

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

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

Program Advisor

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

Total units in the minor core 9-10

Electives

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

Suggested Electives

AMCS 432 Health and Culture	4
ANTH 370 Cultures, Illness, and Healing	3
ANTH 372 Talk About Feeling Sick	3
GEOG 396 Medical Geography	3
GERN 300 Basic Gerontology	3
NURS 340 Health and Illness in the Expanding Family	4
NURS 360 Community Health Nursing	3
PSY 404/WGS 330 Psychology of Women	4
PSY 408 Transitions in Adult Development	4
PSY 454 Biofeedback and Somatic Psychology	4
SOCI 452 Health Care and Illness (cross-listed as GERN 452)	4
WGS 301 Women's Health Lecture Series	1-2
WGS 440/SOCI 440 Sociology of Reproduction	4
WGS/NURS 495 Special Study Research on Women's Health	1-4

Total units 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 84 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*	4
10 units, 4 in the major core, 6 in GE (B1 and B3)	
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 125AB	6
MATH 161	3
Others	41
Total units in GE courses	50

Electives

Total units to graduate **120**

**see four-year plan on page 86*

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

(See page 84 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	43
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*	4
10 units, 4 in the major core, 6 in GE (B1 and B3)	
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 340 General Bacteriology	4
BIOL 342 Molecular Genetics	4
BIOL 343 Molecular Microbiology	4
BIOL 344 Cell Biology	4
BIOL 348 Plant Physiology	4
BIOL 349 Animal Physiology	4
BIOL 382 Parasitology	4
BIOL 383 Virology	4
BIOL 480 Immunology	4
BIOL 544 Advanced Cell Biology	4

or other courses approved by the Chemistry Department

Total units in Biology/Chemistry Courses **7-9**

Supporting Courses

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

Total units in Supporting Courses 13-15

Strongly recommended:

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

CHEM 125 AB	6
MATH 161	3
BIOL 123	3
Others	38

Total units in GE courses 50

Electives

3-7

Total units to graduate 120

** See four-year plan on page 86*

Bachelor of Arts in Chemistry

(See page 85 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*	4
10 units, 4 in the major core, 6 in GE (B1 and B3)	
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
CHEM 401 Senior Integrated Lab	3
CHEM (315, 316, 336B, 402, 441, 445, 446, or 496)	3
CHEM 497 Research Seminar	1

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

GE Courses

CHEM 125 AB	6
MATH 161	3
Others	41

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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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 (8)
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: 28-29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (13 or 14 Units)</i>
CHEM 125A (5)	CHEM 125B (5)
MATH 161 (4)	MATH 211 (4)
GE (6)	PHYS 210 A (3) or PHYS 114 (4)
	PHYS 209A (1) or PHYS 116 (1)

SOPHOMORE YEAR: 28-31 Units

<i>Fall Semester (13-16 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 335A/336A (5)	CHEM 335B (3)
PHYS 210B (3) or PHYS 214 (4)	CHEM 336B (2) (Elective units)
PHYS 209B (1) or PHYS 216 (1)	CHEM 255 (4) *
GE (3)	GE (6)
Elective (1-4)	

JUNIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
CHEM 310A (3)	CHEM 310B (3)
GE (10)	GE (12)
Elective (3)	

SENIOR YEAR: 31 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (16 Units)</i>
CHEM 275 (2)	CHEM 497 (1)
CHEM 401 (3)	CHEM 325 (3)
Chemistry Elective (3)	Elective (12)
GE (4)	
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.

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 88 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 160B 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**

Electives Courses**Two of the Following Courses:**

CALS 225 Spanish for Bilinguals (GE C3)	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:

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 88 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	36
Multiple subjects concentration	26
Credential prerequisites	9
Total units needed for graduation	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 160B 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 **36**

Multiple Subjects Concentration

Mathematics: MATH 300A and Math 300B	6
Human Development: CALS 403	4
Language: CALS 426 or LING 441	4
Science: Chemistry, Physics or Astronomy	3
Visual & Performing Arts	3
Physical Education and Health Education: KIN 400	3
Geography: Geology or Physical Geography	3

Total units **26**

Credential Prerequisites

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	11-16
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Total units required **20**

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 Calarita

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 Litle / Film, Video, Criticism

Emily Acosta Lewis / Public Relations, New Media

Paul Gullixson / Newspaper Writing and Editing

Programs Offered

Bachelor of Arts in Communication Studies

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

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

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

- General areas such as journalism, media criticism, or public relations;
- Media such as radio, television, 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 studies classes. On-campus media offer a variety of opportunities for students. They include the *Star*, the student newspaper; KSUN, an Internet radio station that can be heard at www.sonoma.edu/ksun; SSU-TV, the campus television station that provides news, information, and entertainment; and Primitivo PR.

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

Careers in Communication Studies

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

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

Bachelor of Arts in Communication Studies

(See page 90 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 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 Mass 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 Mass 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 (Screenwriting for Film)	4
COMS 322 Broadcast Journalism	4
COMS 323 Helath, 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
<i>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 Electice 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.</i>	
Total units in major	44

Four-Year Plan for Bachelor of Arts in Communications and Media 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

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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 92 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, Computer Game Development, Parallel and Distributed Computing, Wireless Networks, Mobile Application Development, and other current topics in computer science.

Total units in major electives 9

CS Capstone Requirement

One of the following courses:

CS 470 Advanced Software Design Project	3
CS 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

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

SOPHOMORE YEAR: 29-31 Units

Fall Semester (15-16 Units)	Spring Semester (14-15 Units)
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

Fall Semester (15 Units)	Spring Semester (15 Units)
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

Fall Semester (15 Units)	Spring Semester (14 Units)
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

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www.sonoma.edu/counseling

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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, college-level counseling services, and the on-campus Practicum and Internship Facility. For the school counseling program, field placements are at a minimum of two of the three K-12 levels: elementary school, middle school, and high school.

Special characteristics of the program include the following:

1. Early observation of and involvement in actual counseling settings;
2. Development of a core of knowledge and experience in both individual and group counseling theory and practice;
3. Encouragement in the development and maintenance of individual counseling styles;
4. Commitment to self-exploration and personal growth through participation in peer counseling, individual counseling, and

group experiences. This aspect of the program is seen as crucial to the development of adequate counseling skills and is given special consideration by the faculty as part of its evaluation of student readiness to undertake internship responsibilities; and

5. Strong emphasis on acknowledging and appreciating diversity.

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

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

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

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

The Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council 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 96 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 and an undergraduate or graduate level statistics course that includes analysis of variance is required; in addition, a course in abnormal psychology is required for 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 strongly encouraged to have acquired an undergraduate-level of understanding of human development, family/educational systems, cognitive-behavioral applications, and client-centered therapy. This introductory knowledge base may be acquired by enrolling in relevant coursework or by undertaking thoughtful reading on these topics.
4. A 3.00 (B) grade point average. 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.

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

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

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

Application Procedures

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

General Information Meetings

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

Major Core Requirements

COUN 501 Theory and Practice of the Professional Counselor	4
COUN 510A Applied Counseling Techniques and Assessment	4
COUN 513 Research, Evaluation and Assessment in Counseling	4
COUN 514A School Counseling (only) / Field Experience I	4
COUN 514B School Counseling (only) / Field Experience II	4
COUN 515A (CMHC) only Supervised Field Experience I	4
COUN 515B (CMHC) only Supervised Field Experience II	4
COUN 570 Multicultural Counseling	4

Total units in M.A. core 24

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 of Lifespan and Development	3
COUN 512 Theory and Practice of Group Counseling	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	36
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 of Lifespan and Development	3
COUN 511G Academic/Career Planning and Counseling Issues of K-12 Populations	1
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 (16 Units)</i>
COUN 515A (4)	COUN 514A (4)
COUN 540 (4)	COUN 528A/B (4)
COUN 570 (4)	COUN 513 (4)
COUN 511F (3)	COUN 570 (4)
<i>Spring Semester (16 Units)</i>	<i>Spring Semester (12 Units)</i>
COUN 513 (4)	COUN 514B (4)
COUN 515B (4)	COUN 521 (4)
COUN 512 (4)	COUN 523 (4)
COUN 580 (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 **Sherri 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

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Lisa Kelley

ADMINISTRATIVE COORDINATOR

Cara Stevens

Faculty

*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 98 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
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www.sonoma.edu/sbe

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Steven Cueller

ADMINISTRATIVE COORDINATOR

Tracy Navas

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Florence Bouvet
Steven Cuellar
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Merlin Hanauer
Chong-Uk Kim
Michael Visser
*Richard West

**Faculty Early Retirement Program*

Programs Offered

Bachelor of Arts in Economics

Minor in Economics

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

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

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

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

Careers in Economics

The curriculum and teaching program of the department are designed for students who seek employment in the public or private sector upon graduation and those who wish to pursue graduate studies in economics, business, public administration, law, and other fields.

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

Learning Objectives

Objectives Specific to Economics

Students are required to:

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

General Skills

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

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

Relating Knowledge to Values

Students are expected to acquire and demonstrate:

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

Bachelor of Arts in Economics

(See page 100 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 not used in a field concentration or advisory study plan	8
Total units in the major core	26-28
Field concentration or advisory study plan	15-16
Total units in the major	41-44

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 Economics	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) or BUS 211 (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)
Field Concentration or Advisory	Field Concentration or Advisory
Study Plan Courses (8)	Study Plan Courses (8)
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/grants/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 pay for their registration fees for CBEST and CSETs and credentialing filing fees. 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 <http://www.sonoma.edu/users/f/filp/ece/-permit.htm>.

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

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

Foundational Authorizations

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

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

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

Procedures for Admission to Basic Teaching Credential Preparation Programs

The 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.

- 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/Masters.htm

Prerequisites for the M.A. in Education Program

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

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

- Apply to the University as a graduate student;
- Apply to the School of Education; and
- Submit the following:
 - A professional goals statement;
 - One set of official or unofficial transcripts;
 - One photocopy of a valid basic teaching credential, when required; and
 - 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

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**Faculty Early Retirement Program*

Programs Offered

Basic Credential: Single Subject (Secondary Schools) Teaching Credential

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

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

The Department of Curriculum Studies and Secondary Education is dedicated to the advancement of excellence in education. CSSE offers an exemplary single subject teacher education preparation program based on sound educational practice, extensive research knowledge, and 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, and the corporate sector. The Master of Arts in Curriculum, Teaching, and Learning allows students to design their own program of study (area of emphasis), or select an area of emphasis in educational technology, specifically designed for students interested in technology applications in the public or private sector.

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

Single Subject (Secondary Schools) Teaching Credential

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

English
Social Studies
World Language
Music
Physical Education
Art
Mathematics
Science
Adapted Physical Education

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) 664-3320.

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

Program Prerequisite Courses

EDUC 417 School and Society	3
EDSS 418 Learning and Development in Adolescents	3

Program Corequisite Course

EDSP 433 Teaching Adolescents with Special Needs	3
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Total Corequisite and Prerequisite courses	9
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Program Requirements

Phase I

EDSS 442 Middle/Secondary Teaching in Multicultural Settings	4
EDSS 443A Observation and Participation in Multicultural Settings	2
EDSS 443B Seminar: Classroom Management and Field Experience	3
EDSS 444 Teaching in the Content Areas	4
EDSS 446 Language and Literacy Across the Curriculum: Middle and Secondary Schools	4
Total units Phase I	17

Phase II

EDSS 458 Student Teaching in Multicultural Settings	12
EDSS 459 Seminar for Secondary Student Teachers	4
Successful completion of Performance Assessment of California Teachers (PACT)	
Total units Phase II	16
Total units for program (including Corequisites and Prerequisites)	42

Teaching Performance Assessment

A teaching performance assessment (TPA) is required for all those seeking a single subject teaching credential 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. Karen Grady (664-3328).

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.

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

Curriculum, Teaching and Learning Recommended Course Advising Pathway

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

If You Begin Fall Semester:

Fall
EDUC 570
EDCT 585

If You Begin Spring Semester:

Spring
EDUC 570
AREM

Spring
EDCT 586
AREM

Fall
EDUC 571 or AREM
AREM

Spring
AREM
AREM or EDUC 571

Fall**

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

Spring
EDUC 599

Fall
EDCT 585
AREM
Spring
EDCT 586
EDUC 571 or AREM

Fall
EDUC 571 or AREM
AREM

Spring**

Fall
EDUC 599

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

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

A master of arts in education with a concentration in TESOL provides advanced education in the theories, research, and practices for teaching English 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:

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

Courses in Concentration (18 units):

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

MA Core Requirements (6 units)

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

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

*If you begin Fall Semester
you may take:*

Fall

EDUC 570

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

One course must be taken from each of the following areas: Political Theory, International Relations, Comparative Politics, and American Government and Politics.

EDUCATION: EARLY CHILDHOOD STUDIES (ECS)

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Faculty

Chiara Bacigalupa
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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)

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/lee/early-childhood/

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
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/lee/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
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/leee/early-childhood/

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 Bahalf of Families and Children	3
EDEC 538 The Development of Language and Thinking in Infancy through Middle Childhood offered spring of even numbered years	3

PLUS

Electives (6 units)

At least two courses in the areas of special education, curriculum teaching and learning, reading and language, and/or special topics ECE-M.A. courses as offered will be chosen in consultation with the ECE advisor and the graduate advisors of the above mentioned areas. Some examples of course options are:

Special Education

EDSP 422 Collaborative Partnerships in Special Education	4
EDSP 423 Assessment, Curriculum and Instructional Strategies	3
EDSP 432 Designing Inclusive Environments in Early Childhood Education	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)

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Department Overview

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

The faculty is comprised of teachers, administrators, scholars, researchers, and program developers who possess wide and varied experience. The faculty, having won wide recognition and numerous educational awards and honors, are dedicated to preparing educators with the knowledge, skills, and ethical commitment to improve society through powerful and effective schools.

The credential and M.A. programs, described below, offer a full complement of courses and fieldwork for students to achieve a Preliminary 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 and Intern: 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

DOCTORATE OF EDUCATION (Ed.D.) PROGRAM

Educational Leadership (jointly with UC Davis)

For information call 530-754-6664

The Education Specialist (special education) credentials are offered in the area of mild/moderate and moderate/severe disabilities and authorize the holder to provide services in K-12 inclusion programs, resource specialist program classes (RSP), special day classes (SDC), or other related fields, including work with adults with disabilities. At the completion of the educational specialist credential programs, candidates will have met the requirements to teach students who have autism or are English learners.

The Administrative Service Credentials, Preliminary Administrative Services, and Clear Administrative Services prepare graduates for positions of leadership in K-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
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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, Curriculum and Instructional Strategies for Students with Disabilities	3
EDSP 424 Positive Behavior Support for Students with Disabilities	3
EDUC 490 Healthy Learners and School Environments	1

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 <http://www.sonoma.edu/education/programs.html#esinternship> or in the School of Education.

Interns are bound by the same program requirements, policies and procedures as all ES 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.

Master of Arts with a Concentration in Special Education

The Master of Arts in Education (M.A.) with a concentration in Special Education provides advanced academic study for persons working with or on behalf of individuals with disabilities. Candidates who possess a valid Education Specialist Credential may pursue this degree. Candidates from related disciplines may pursue this advanced degree with consent from the Department of Educational Leadership and Special Education.

Candidates must apply and be admitted both to the University and to the M.A. in Education-Special Education Concentration program in order to pursue this degree. The course of study (described below) includes the M.A. core curriculum (12-19 units) and relevant elective course work (units vary). Candidates will select one of the following pathway options for completing their M.A. course of study:

- Thesis/Project option (30 units)
- Cognate option (36 units)
- Individualized Examination option (33 units)

Special Education Concentration

The Special Education coursework, taken in addition to the M.A. core curriculum, includes six 3-unit courses.

EDSP 512 Advanced Issues in Assessment, Curriculum, and Instruction of Students with Disabilities	3
EDSP 513 Current and Emerging Research and Practice in Special Education	3
EDSP 514 Advanced Communication, Collaboration, and Consultation in Special Education	3
EDSP 515 Advanced Legal Issues in Special Education	3
EDSP 590 Critical Issues in Special Education	4
EDSP 595 Special Topics in Special Education	3

Electives

Candidates have the opportunity to seek breadth or depth in a related area of study through completion of elective courses. The number of elective units needed to complete the M.A. requirements varies depending upon the culminating option selected. Elective coursework may be drawn from other graduate programs in the School of Education or other departments at Sonoma State University, such as psychology, counseling, kinesiology, or others. These courses are selected with the advice and approval of the M.A. special education advisors.

Advising

All M.A. candidates within the special education concentration will be assigned to a special education faculty advisor for the purpose of developing an individualized program of study. Electives will be determined in consideration with the advisor, in an effort to provide a broader program of study that responds to varying student interests.

Educational Leadership Program Administrative Service Credentials

The Administrative Services Credential programs were designed collaboratively with school administrators to prepare graduates for positions of leadership in 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 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 three years of appropriate full-time experience on school or district letterhead (noting inclusive dates, level, and responsibilities) authorized by a teaching or services credential;
3. Secure favorable recommendations from two school administrators or other school leaders indicating possession of administrative and leadership potential;
4. Submit 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 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 and sometimes summer session(s); however, candidates can extend the time needed for program completion by meeting with an advisor and customizing

the program to meet individual needs. Typically candidates who do not have an M.A. go on to complete the M.A. in education with emphasis in education leadership.

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

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.

CANDEL

The CANDEL (Capital Area North Joint Doctorate in Educational Leadership) Program is a doctoral program designed to produce exemplary educational leaders for schools, community colleges and related areas in the field of education. The program is designed for working professionals in leadership positions.

CANDEL is a joint program of Sonoma State University and the University of California, Davis. Graduates of this program are prepared to provide visionary leadership to complex organizations, put policy into practice, use data for decision-making, and build community in a diverse society.

The program consists of two years of coursework. Students begin their dissertation research during the third year following advancement to candidacy. Through the preparation of scholar-leaders, the program emphasizes practical problem-based learning through critical examination of important issues in our schools and community colleges.

Dr. Viki Montera of the School of Education Department of Educational Leadership and Special Education serves as the SSU CANDEL Director. For more information and an application, please visit the CANDEL website at <http://candel.ucdavis.edu/>.

EDUCATION: LITERACY STUDIES AND ELEMENTARY EDUCATION (LSEE)

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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.

Multiple Subject Credential Program

The Multiple Subject Credential Program is a two semester program with additional prerequisites required.

The Multiple Subject Program is based on the belief that learning to teach requires building a professional knowledge base honed by practice in varied classroom settings. Thus, our curriculum integrates course work with field study in order to develop practical theory and to promote collaboration between the University and the public schools. The Multiple Subject Program prepares candidates to provide instruction for English language development and academic language.

The multiple subject emphasis prepares candidates to teach in self-contained classrooms with significant populations of students who are learning English as a second language in grades K-12. This program prepares candidates to provide instruction for language development and subject matter content in English. Because self-contained classes are located primarily in elementary schools, professional course work and field experiences focus on elementary classrooms.

SB2042 Multiple Subject Program Courses

The Department of Literacy Studies and Elementary Education offers a **Multiple Subjects Emphasis Certificate** providing 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
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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.

Program Coursework (30-36 units)

Reading/Language Core Courses (9 units)

EDRL 507 Research in Language and Literacy

3

EDRL 521A Language Development in First and Second Languages

3

EDRL 522 Assessment and Teaching in Reading and Language Arts

3

Education Core Courses (9-12 units)

EDUC 570 The Reflective Educator

3

EDUC 571 Research Paradigms in Education

3

Supporting Course Work (9 Units)

The M.A. in Reading/Language Education allows you to take 9 elective units (three courses, typically) in the reading/language project or in other approved areas, such as bilingual education, curriculum, ESL, and early childhood education.

Students who wish to pursue a Reading Certificate, Reading and Language Arts Specialist Credential, and an M.A. degree in reading and language education may complete the programs concurrently.

Reading Certificate Program

The Reading Certificate prepares individuals to take a leadership role at the school site and emphasizes work with students who experience difficulties with reading. Reading Certificate teachers assist and support other classroom teachers, assess student progress, and monitor student achievement while providing instruction and intervention. They also play a consultative role in materials and program selection at the district and may take leadership responsibility within the more limited realm of the school site. The Certificate is the first part of a continuum of services to students and teachers in the area of reading and language arts. Teachers completing the Reading Certificate Program are encouraged to continue to earn the Reading and Language Arts Specialist Credential (currently under review by the California Commission on Teacher Credentialing).

Program Prerequisite

A basic teaching credential is required for admission.

Reading Certificate Prerequisite

Three years of teaching experience is required for awarding of the Reading Certificate, however it is not necessary to have three years of experience when entering the program.

Block One: Developing a Personal Model of Literacy

Spring

Students take part in an integrated investigation of Literacy Research/Theories/Beliefs/Practices aimed at developing a working understanding and reflective stance for each of these themes through in-depth case studies of English language learners. The breadth and depth of the themes ensure that candidates examine and understand the nature of fluent reading and comprehension, assessment approaches, planning and delivery of reading intervention and instruction, and best practices in assisting classroom teachers of English-only and English language learners. Focused field experiences and assessment that lead to purposeful reading instruction permeate this block.

EDRL 521A Language Development in First and Second Languages

3

EDRL 522 Assessment and Teaching in Reading and Language Arts

3

On-Campus Reading and Writing Clinic

Summer

Public school students attend SSU for reading improvement and enrichment in a supervised clinical setting. Certificate candidates assess and teach these students, deepening knowledge of reading and language arts assessment, intervention, and instructional strategies, in collaboration with, and under the supervision of, clinical faculty, University faculty, and Reading and Language Arts Specialist candidates.

EDRL 527A Clinical Field Experience in Reading and Language Arts 3

Block Two: Developing a Professional Model of Literacy

Fall

Investigation of research/theories/beliefs/practices in teaching reading and writing, designed to produce a professional knowledge base for each of these themes. Candidates develop a comprehensive set of strategies for promoting fluent reading and comprehension, planning and delivery of literature-based reading curriculum, and assessment-based intervention and instruction. Candidates are prepared for literacy and language arts leadership roles at the school level.

EDRL 521B Reading and Language Arts in First and Second Languages 3

EDRL 524 Literature and Literacy 3

Reading and Language Arts Specialist Credential

The Reading and Language Arts Specialist Credential prepares candidates to work with students in various settings and to perform multiple roles, including assisting and supporting classroom teachers in the appropriate assessment and instruction of reading and writing for all students across all grade levels. The specialist may also:

- Provide direct services to students to help them attain independence in reading and writing, including comprehension and critical thinking skills;
- Do demonstration teaching and curriculum planning for groups and individuals;
- Organize and manage language arts programs at the district or school level;
- Assess teaching strategies to assist teachers in creating a literacy learning environment;
- Provide leadership in materials, textbook, and program selection at the district or school level; and
- Plan and conduct in-service professional development activities for teachers, administrators, school board members, parents, and members of the community at the district or school level.

Credential prerequisite requirements: All Reading Certificate courses including Certificate prerequisites ***Block Three: Developing Research-Based Literacy Theory***

Spring

Continued investigation of research/theories/beliefs/practices aimed at developing thorough understanding and a reflective stance for each theme. Candidates examine and critique research-based curricular practices and assessment approaches in professional literature and field settings. Topics include fluent reading; comprehension, planning, and delivery of literacy curriculum; intervention strategies; best practices in assisting classroom teachers; and assessments that lead to purposeful reading and writing instruction.

EDRL 523 Curriculum Development in Language and Literacy 3

EDRL 529 Evaluation in Reading and Language Arts Programs 3

Summer Reading and Writing Academy

Summer

Public school students attend at summer reading and writing academy in the Roseland School District. Graduate students attend for supervised and observed coursework in assessing, analyzing and teaching reading and writing to students from grades 2-8 for reading improvement and enrichment. Specialist Credential candidates supervise Certificate candidates in assessment and intervention strategies with the students with diverse reading abilities and backgrounds. Candidates also demonstrate effective teaching for second language learners of English and struggling readers, conduct clinical conferences, review clinical reports, and monitor overall clinical experiences.

EDRL 527B Advanced Clinical Field Experience in Reading and Language Arts 3

Block Four: Developing Professional Literacy Models

Fall

Advanced and intensive investigation of research/theory/beliefs/practice. All coursework and field experiences are aimed at articulating a professional knowledge base for each theme. Candidates critique research into reading and writing for diverse student populations, conduct their own literacy studies, and hone their leadership skills for assisting classroom teachers and other educational professionals with literacy education through focused field experiences.

EDRL 507 Research in Language and Literacy 3

EDRL 525 Leadership and Policy in Literacy Programs 3

Graduate Reading Advisor

Dr. MaryAnn Nickel of the School of Education LEE Department serves as the Graduate Reading Advisor. For more information, please visit the Reading Program website at www.sonoma.edu/lsee/reading or contact Dr. Nickel at nickel@sonoma.edu.

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** 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
(Three tracks: Bioengineering, 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 130 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)	54
Support courses (physics, computer science, and mathematics*)	33
GE courses (including 9 units in support courses)	50
Total units needed for graduation	128**

* 9 units overlap with GE units.

** Under revision.

Electrical Engineering

ES 110 Introduction to Engineering & Lab Experience	2
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
ES 310 Microprocessors & System Design	4
ES 314 Advanced Programing, 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	2
ES 493 Senior Design Project	3
ES 497 Engineering Science Colloquium	1
Subtotal	54
Computer Science	
CS 115 Programming I	4
Subtotal	4
Physics	
PHYS 114 Introduction to Physics I	4
PHYS 116 Introductory Lab Experience	1
PHYS 214 Introduction to Physics II	4
Subtotal	9
Mathematics	
MATH 142E Discrete Mathematics for Engineering	2
MATH 161 Calculus I	4
MATH 211 Calculus II	4
MATH 241 Calculus III	4
MATH 261 Calculus IV	4
MATH 345E Probability Theory for Engineering	2
Subtotal	20
General Education	
(Excluding math, physics, and CS courses)	
ENGL 101 Expository Writing & Analytical Reading	4
Remaining GE courses*	37
Subtotal	41
Total Units for Graduation	128**

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

** Under revision.

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 43

units depending upon the student's major field of study and the units available as free electives in the major that can be used by the EE minor program. The EE minor requirements are as follows.

I. Course Requirements

To minor in Electrical Engineering, students must complete 24 units of Electrical Engineering courses: 15 units of core courses and 9 units of electives and 19 units of support courses in Mathematics, Physics as follows:

Core Courses (15 Units):

ES 110 Introduction. to Engineering & Lab Experience	2
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 142E Discrete Structures I	2
MATH 161 Calculus I	4
MATH 211 Calculus II	4

Total units without support courses 24

Total units including support courses 43

Additional support courses may be needed depending upon the 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 http://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

- **Bioengineering (to be launched);**
- **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 three tracks or areas of specialization:

- **Track 1: Bioengineering** - This area of specialization prepares students to apply engineering principles in the areas of communications, photonics and computer hardware and software systems to develop solutions for health-related products and techniques that improve the quality of life. This specialization includes topics such as computational techniques for biomolecules, biomedical instrumentation, biophotonics, and medical image processing.
- **Track 2: Communications & Photonics** - This area of specialization provides students with expertise in the areas of (i) analog and digital electronics, (ii) semiconductor and photonics components and devices, (iii) communications techniques (wireless, wireline, and optical fiber media), (iv) local and wide area networking, and (v) broadband access technology.
- **Track 3: Computer Hardware & Software Systems** - This area of specialization is intended to deepen students' ability to analyze and design computer systems. This specialization includes topics such as embedded systems, digital data compression, software engineering, and computer networks.

A student chooses one of the three tracks at the time of admission but can change it during their course of study. However, that may mean taking additional courses to meet the requirements of the new track. A student's program of study consists of the following four components: a common core, a track core, culminating experience, and technical electives. Details of these components are as follows.

I. Common Core Curriculum (11 units)

CES 400 Linear Systems Theory	3
CES 440 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

(c) Bioengineering program

CES 561 Computational Techniques for Biomolecules	3
CES 562 Biomedical Instrumentation	3
CES 563 Biophotonics	3
CES 564 Medical Image Processing	3
CES 592B Selected Topics in Bioengineering	3

III. Discipline-Specific Curriculum Group 2 (3 units from the list of selected discipline)

(a) Computer Hardware and Software Systems program

CES 500 Queuing and Transform Theory	3
CES 510 Intelligent Systems Design	3
CES 516 High Performance Computing	3
CES 520 Embedded Systems	3
CES 522 VLSI Design	3

(b) Communications and Photonics program

CES 500 Queuing and Transform Theory	3
CES 542 Digital Signal Processing	3
CES 546 Data Compression	3
CES 547 Digital Switching: Techniques and Arch.	3
CES 552 Network Architecture and Protocols	3
CES 554 Broadband Access Technology	3

(c) Bioengineering program

CES 561 Theory of Software Systems	3
CES 562 Data Mining	3
CES 563 High Performance Computing	3
CES 564 Data Compression	3

IV. Culminating Experience

Thesis (Plan A), Project (Plan B) or Lab and Technical Report Experience (Plan C)	3
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V. Approved Technical Electives

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

Choose from the following list of courses:

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	2
CS 115 Programming I	4
MATH 142E Discrete Mathematics for Engineering	2
MATH 161 Calculus I	4
ENGL 101 Expository Writing & Analytical Reading (GE)	4

SEMESTER 2: 16 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	6

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: 18 Units

ES 210 Digital Circuits & Logic Design	4
ES 230 Electronics I	3
ES 231 Electronics I Laboratory	1
MATH 261 Calculus IV	4
GE	6

SEMESTER 5: 15 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	3

SEMESTER 6: 17 Units

ES 310 Microprocessors and System Design	4
ES 442 Analog & Digital Communications	4
ES 430 Electromagnetic Theory & Applications	3
GE	6

SEMESTER 7: 15 Units

ES 443 Introduction to Optical Fiber Communications	3
ES 465 Introduction to Networking and Network Management	3
ES 492 Senior Design Project Planning	2
ES 497 Eng. Science Colloquium	1
GE	6

SEMESTER 8: 15 Units

ES 493 Senior Design Project	3
Approved Technical Elective I	3
Approved Technical Elective II	3
GE	6

TOTAL UNITS: 128

ENGLISH

DEPARTMENT OFFICE

Nichols Hall 362

(707) 664-2140

www.sonoma.edu/english

DEPARTMENT CHAIR

John Kunat

ADMINISTRATIVE COORDINATORS

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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 134 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

A Survey Course

Complete one of the following courses:

ENGL 237 Survey: Early American Literature	4
ENGL 238 Survey: Later American Literature	4
ENGL 239 Survey: Early British Literature	4
ENGL 240 Survey: Later British Literature	4

A Shakespeare Course

Complete one of the following courses:

ENGL 339 Introduction to Shakespeare	4
ENGL 439 Studies in Shakespeare	4

A Theory Course

Complete one of the following courses:

ENGL 401 Introduction to Modern Critical Theory	4
ENGL 487 Studies in Rhetoric	4

A Senior Level Literature Course

Complete one of the following courses:

ENGL 436 Studies in Postcolonial Literature	4
ENGL 439 Studies in Shakespeare	4
ENGL 447 Studies in Comparative Literature	4
ENGL 448 Periods in British Literature	4
ENGL 450 Periods in American Literature	4
ENGL 451 Feminist Perspectives in Literature	4
ENGL 470 Studies in Poetry	4
ENGL 472 Studies in the Novel	4
ENGL 474 Studies in Drama	4
ENGL 480 Studies in California Literature	4
ENGL 481 Studies in British Literature	4
ENGL 482 Studies in American Literature	4
ENGL 483 Individual Authors: American	4
ENGL 484 Individual Authors: British	4
ENGL 485 California Authors	4

Total units in the major core 20

Note: English majors must choose one of three concentrations: literature, creative writing, or secondary teaching.

Literature Concentration

Three General Literature Courses:

Two of these courses (8 units) must be at the 400 level, and must be in literatures before 1914.

Two major electives

Total units in the Literature concentration 20

Creative Writing Concentration

Four Or More Courses In Creative Writing:

At least three of these courses (12 units) must be at the 300/400 levels, and course selections must include two different writing genres (poetry, fiction, scriptwriting, or creative nonfiction).

ENGL 207 Introduction to Creative Writing	4
ENGL 307 Introduction to Fiction Writing	4
ENGL 318 Introduction to Poetry Writing	4
ENGL 352 Personal Essay	4
ENGL 407 Advanced Fiction Writing	4

ENGL 409 Master Class in Fiction Writing	4
ENGL 418 Advanced Poetry Writing	4
ENGL 430 Creative Writing: Selected Genres	1-4
ENGL 435 Directed Writing	4-8
ENGL 475 Master Class in Nonfiction	4
One Major Elective	4

Total units in the Creative Writing concentration 20

English Education Concentration (Secondary Teaching Preparation)*

Collateral Requirements: 4 Units

<i>Complete the following courses:</i>	4 Units
ENGL 214 World Literature or ENGL 314	4
Field Work in Education	45 hours

Core Requirements: 44 Units

<i>Complete the Following Courses:</i>	32 Units
ENGL 301 Literary Analysis: Seminar	4
ENGL 313 Classical Literature and Mythology	4
ENGL 341 Explorations in Language (Fall only)	4
ENGL 343 Youth and Literature (Fall only)	4
ENGL 379 Pedagogical Grammar (Spring only)	4
ENGL 491 Teaching Composition (Fall only)	4
ENGL 492 Reading and Responding to Literature (Spring only)	4
ENGL 496 English Education Senior Capstone (Spring only)	4

Complete one of the following courses: **4 units**

ENGL 237 Survey: Early American Literature	4
ENGL 238 Survey: Later American Literature	4

Complete one of the following courses: **4 units**

ENGL 239 Survey: Early English Literature	4
ENGL 240 Survey: Later English Literature	4

Complete one of the following courses: **4 units**

ENGL 339 Introduction to Shakespeare	4
ENGL 439 Studies in Shakespeare	4

For the extended studies portion of the single-subject credential concentration, students will choose either Strand 1 or Strand 2:

Strand 1

Extended Studies: Literature and Text Analysis: **8 Units**

Complete two of the following courses:

ENGL 315 California Ethnic Literature	4
ENGL 345 Women Writers	4
ENGL 448 Periods in British Literature	4
ENGL 450 Periods in American Literature	4
ENGL 481 Seminar in British Literature	4
ENGL 482 Seminar in American Literature	4
ENGL 483 Individual Authors: American	4
ENGL 484 Individual Authors	4

OR an elective to be determined with and approved by an advisor

Strand 2

Extended Studies: Composition, Rhetoric and Linguistics:

8 Units

Complete two of the following courses:

ENGL 307, or 318, or 352 Creative Writing Course	4
ENGL 375 Advanced Composition	4
ENGL 487 Studies in Rhetoric	4
ENGL 489 Topics in Linguistics	4
ENGL 495 Tutor in Writing Center	4
ANTH 480 Studies in Language Use	4
OR an elective to be determined with and approved by an advisor	

**Total units in the English Education
(Secondary Teaching Preparation) concentration 52**

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 <http://www.sonoma.edu/english/ma.html>.

The English Department Graduate Committee reviews all complete application files that meet campus and departmental admission standards and admits the most qualified of these applicants to the program. Applicants may enter the program with conditional

or classified status. Classified status is usually granted to admitted applicants with undergraduate majors in English; conditionally classified status, which requires the completion of 4 to 24 additional units in English, is usually granted to admitted applicants with an undergraduate major in another field. Please see the catalog section on Graduate Degrees for more information.

Advancement to Candidacy

Students are advanced to candidacy when they have 1) completed their coursework (except for completion units), 2) passed either the department's qualifying oral exam or the Literature GRE (minimum score at the 65th percentile), and 3) completed the second-language requirement. Advancement to candidacy is formalized by the filing of a GS01 form with Graduate Studies.

Program Requirements

The M.A. in English requires 34 units. Students who select the thesis or creative project as a culminating option complete 28 of these units through coursework; the remaining 6 will be taken either as thesis units (599) or as directed writing units (535). Students who select the exam as their culminating option complete 32 units of coursework **plus** an additional 3 units of English 597 (directed reading) during their final semester for a total of 35 units. No more than 4 units of directed writing units (535) may be counted toward the degree prior to the culminating option.

In addition to the 494 reading course recommended for all graduate students studying for the qualifying exam prior to advancement to candidacy, students may take one course at the 400 level (senior seminar level) toward completion of their M.A. Research assistantship units (460) and the 494 course do not count toward the 34-unit total; nor, except at the discretion of the graduate advisor, do independent study units (595).

Degree Options

All options require candidates to take English 500 and two 500-level seminars. One course may be taken at the 400 level for degree credit.

To fulfill the requirements for the degree, the student must select one of the three following options:

1. Thesis Option: 28 units of coursework, plus 6 units of ENGL 599 for researching and writing a thesis;
2. Creative Writing Option: 28 units of coursework, plus 6 units of directed writing, ENGL 535, for writing a creative project prefaced with a critical introduction; or
3. Directed Reading Option: 32 units of coursework, plus preparation of a specialized reading area (3 units of ENGL 597 required) and passage, with a B- or better, of a written exam in this area. Note that this option requires 32 units of graded course work plus three units of ENGL 597, which is graded Cr/NC.

Students choosing the thesis or directed reading option are required to take an oral examination. Those choosing the directed writing option are required to give a public presentation of their work.

English Courses

A list of courses offered with descriptions appear in the separate course-listing section of this catalog. Please see the Schedule of Classes for most current information and faculty assignments.

- A. ENGL 101 and 214 or their equivalents are prerequisites for upper-division courses.
- B. These classes (or their equivalents), and ENGL 301, are prerequisites for English 400-level and 500-level courses; or by consent of instructor.
- C. Prerequisites apply to both major and minor.

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
Thomas Jacobson / Planning and ENSP minors
Rocky Rohwedder , Education and the Environment, Outdoor Leadership
Daniel Soto / Energy Management and Design
Laura A. Watt / Conservation and Restoration, Water Resources Management

Programs Offered

Bachelor of Arts in Environmental Studies
Education and the Environment
Energy Management and Design
Conservation and Restoration
Outdoor Leadership
Planning Concentration
Water Resources Management

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

Minor in Environmental Studies and Planning
Elementary Teacher Credential Multiple Subject
Preparation in Environmental Studies

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 six 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 138-141 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 141-142 for sample four-year programs.)

A bachelor of science degree is available for students in the Energy Management and Design and Water Quality 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 Quality 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 six study plans outlined below. Details of each plan, including specific courses and options, are available from the office of the Department of Environmental Studies and Planning.

Education and the Environment (B.A. degree option)

This study plan is designed for students interested in working with youth or a teaching career in public or private school settings. Coursework is designed to help students pass the California Subject Matter Examination for Teachers (CSET) as well as equip them with environmental science literacy, effective educational techniques, and extensive field experience. After completion of this B.A. degree track, many students go on for a multiple subject teaching credential.

Energy Management and Design (B.A. and B.S. degree options)

This program is designed to prepare students for careers or for graduate studies in the fields of residential and commercial energy management, energy-efficient architecture and design, energy planning in industry and government, renewable energy applications, and other energy-related businesses.

Conservation and Restoration (B.A. degree option)

Track 1, Biological Emphasis, is for students interested in science-based conservation, restoration, conservation planning, land management, and preservation. Students participate in an interdisciplinary curriculum that combines course work in ecology and biology with environmental policy, law, and/or planning. A minor in Biology is strongly encouraged. Track 2, Social Science Emphasis, is for students interested in the human dimensions of conservation and restoration. Coursework focuses on the political, historical, and/or geographic aspects of land and resource conservation, planning, and management, while also covering a solid interdisciplinary foundation of ecological understanding. A minor in Geography is strongly encouraged.

Outdoor Leadership (B.A. degree option)

This study plan combines relevant coursework in environmental science, kinesiology, leadership and small business management along with field experience to prepare the next generation of outdoor leaders. Career opportunities include the growing outdoor recreational field, eco and adventure tourism, and adventure and multi-sports programs at schools and universities, as well as activities for youth-at-risk and other special needs populations.

Planning Concentration (City and Regional Planning) (B.A. degree option)

Students in the CSU-approved planning concentration follow a general preprofessional curriculum in planning and may choose to develop a specialization to suit their interests through a program of recommended electives. Focus is on sustainable community planning, including land use, growth management, environmental impact assessment, transportation, and natural resource planning. Graduates may work for a wide variety of governmental agencies, 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 study plan 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 130A** (B2) (4)	BIOL 130B** (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) (physical science, social science or humanities)
ENSP Core Course (3-4) (physical science, social science or humanities)	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) (physical science, social science or humanities)	ENSP elective (2-4)
UD Biology Elective (4) (see study plan for list of eligible courses)	Elective (2-4)
	UD Biology Elective – taxonomic course (4) (see study plan for list of eligible courses)

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) (see study plan for list of eligible courses)	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) (see study plan for list of eligible courses)
	Elective in major (2-4)

TOTAL UNITS: 120

Sample Four-Year Program for Bachelor of Arts in ENSP-Education and the Environment

This is only an example of how one might plan our your four years as a Education and the Environment BA student. Most General Education (GE) classes can be taken in any order or sequence. These are GE recommendations only. Other approved courses can also meet your GE requirements. Please consult with your advisor for suggestions of when to take particular courses, or when choosing electives.

FRESHMAN YEAR: 30 Units

<i>Fall Semester (13-14 Units)</i>	<i>Spring Semester (14-15 Units)</i>
GEOL 102 (B1) (3)	ENGL 214 (C2) (4)
MATH 150 (B4) (3)	BIO 110 (B2) (4)
GE A2 (3-4)	HIST 201 (D2) (3)
GE A3 (4)	GE C1 (3-4)

SOPHOMORE YEAR: 30 Units

<i>Fall Semester (13-15 Units)</i>	<i>Spring Semester (14-15 Units)</i>
HIST 251 (D3) (3)	POLS 200 (D4) (3)
ENSP 201 (1)	ENSP 200 (D5) (3)
GE B3 (3-4)	ENSP 202 (3)
GE C3(3-4)	Applied Arts (2-3)
Elective (3)	EDMS 470 (3) (prerequisite to SSU Credential programs)

JUNIOR YEAR: 30 Units

<i>Fall Semester (17 Units)</i>	<i>Spring Semester (15-16 Units)</i>
EDUC 417 (D1) (3) (Upper Division GE plus prerequisite to SSU Credential program)	ENSP 305L (3)
EDEC 420 (E) (3) (Upper Division GE plus prerequisite to SSU Credential program)	ENSP 308 (3)
ENSP 302 (4)	ENSP Social Science Requirement (3-4)
ENSP 303 (4)	MATH 300B (3)
MATH 300A (3)	Elective (3)

SENIOR YEAR: 30 Units

<i>Fall Semester (16-17 Units)</i>	<i>Spring Semester (16 Units)</i>
ENSP 345 (3)	ENSP 442 (3)
ENSP 440 (4)	ENSP 499 - Internship (4)
KIN 400 (3)	Elective (3)
Upper-Division GE (3-4)	Elective (3)
Elective (3)	Elective (3)

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-Outdoor Leadership

This is only an example of how one might plan our your four years as a Education and the Environment BA student. Most General Education (GE) classes can be taken in any order or sequence. These are GE recommendations only. Other approved courses can also meet your GE requirements. Please consult with your advisor for suggestions of when to take particular courses, or when choosing electives

FRESHMAN YEAR: 29 Units

Fall Semester (13-14 Units)

GEOL 102 (B1) (3)
MATH 150 (B4) (3)
GE A2 (3-4)
GE A3 (4)

Spring Semester (14-15 Units)

ENGL 214 (C2) (4)
BIO 110 (B2) (4)
HIS 201 (D2) (3)
GE C1 (3-4)

SOPHOMORE YEAR: 30 Units

Fall Semester (13-15 Units)

HIST 251 (D3) (3)
ENSP 201 (1)
GE B3 (3-4)
GE C3(3-4)
Elective (3)

Spring Semester (15 Units)

POLS 200 (D4) (3)
ENSP 200 (D5) (3)
UNIV 238 (3)
KIN 217 or KIN 427 (3)
Elective (3)

JUNIOR YEAR: 31 Units

Fall Semester (15-16 Units)

ENSP 302 (4)
ENSP 303 (4)
ENSP 444 (4)
Upper-Division GE (3-4)

Spring Semester (15-17 Units)

ENSP 305L (3)
ENSP 307 or 401 (3-4)
(ENSP Social Science Requirement)
ENSP 308 (3)
Upper-Division GE (3-4)
Elective (3)

SENIOR YEAR: 30 Units

Fall Semester (13-14 Units)

ENSP 440 (4)
BUS 344 (3)
Elective (3 units)
Upper Division GE (3-4)
(BIO 314 recommended)

Spring Semester (13-16 Units)

ENSP 442 (3)
ENSP 499 - Internship (4)
Elective (3)
KIN 241 (3)
(or Wilderness First Responder Course)
KIN 325 or KIN 427 (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

Fall Semester (13-16 Units)

ENSP 200 (1)
ENSP 201 (D5) (3)
GE/Elective (3-4)
GE/Elective (3-4)
GE/Elective (3-4)

Spring Semester (14-16 Units)

MATH 165 (B4) (4)
GE/Elective (3-4)
GE/Elective (3-4)
GE/Elective (3-4)

SOPHOMORE YEAR: 30 Units

Fall Semester (12-15 Units)

GEOG 203 (D2) (3)
ENSP 201 (1)
GE/Elective (3-4)
GE/Elective (3-4)
GE/Elective (3-4)

Spring Semester (13-16 Units)

ECON 205 (D1) (4)
GE/Elective (3-4)
GE/Elective (3-4)
GE/Elective (3-4)

JUNIOR YEAR: 30 Units

Fall Semester (13-15 Units)

ENSP 302 (4)
ENSP 310 (3)
A course from the
"Planning Skills" category (3-4)
Upper-Division GE (3-4)

Spring Semester (14-16 Units)

ENSP 303 (4)
ENSP 311 (4)
A course from the
"Humanities" category (3-4)
Upper Division GE (3-4)

SENIOR YEAR: 30 Units

Fall Semester (12-15 Units)

ENSP 315 (3)
ENSP 411A (4)
ENSP 499 - Internship (3)
Upper-Division GE (3-4)
A course from the "Technical
and Research Skills" category (2-4)

Spring Semester (14-15 Units)

ENSP 411B (4)
ENSP 415 (3)
ENSP 498 (1)
An additional course from the
"Planning Skills" category (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 130A (B2) (4)	BIOL 130B (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)	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)	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 our 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 130A (B2) (4)	BIOL 130B (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

Fall Semester (15 Units)

CHEM 115A (5)
GE (A1) (3)
GE (A2) (3)
GE (A3) (4)

Spring Semester (16 Units)

CHEM 115B (5)
MATH 161 (4)
GE (C) (4)
GE (D1) (3)

SOPHOMORE YEAR: 30 Units

Fall Semester (14 Units)

MATH 211S (2)
PHYS 114 (4)
GE (B2) (4)
GE (C) (4)

Spring Semester (16 Units)

PHYS 214 (4)
GE (D2) (3)
GE (D3) (3)
GE (D4) (3)
GE (D5) (3)

JUNIOR YEAR: 31 Units

Fall Semester (16 Units)

ENSP 201 (1)
ENSP 330 (4)
ENSP 338 (4)
GE (C) (4)
Elective (3)

Spring Semester (15 Units)

ENSP 430 (2)
ENSP 438 (4)
GE (E) (3)
Elective (3)
Elective (3)

SENIOR YEAR: 28 Units

Fall Semester (15 Units)

MATH 165 (4)
ENSP 337 (4)
ENSP 499 - Internship (4)
Elective (3)

Spring Semester (13 Units)

ENSP 430 (2)
ENSP 437 (4)
Elective (4)
Elective (3)

TOTAL UNITS: 120

FILM STUDIES

PROGRAM OFFICE

Nichols Hall 214
(707) 664-2364

Program Coordinators/Faculty Advisors

Christina N. Baker / American Multicultural Studies
(707) 664-2928, bakechri@sonoma.edu
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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	4
AMCS 390 Independent Film Study	1-2
CALS 393 Chicano/Latino Cinema	4
COMS 324 Scriptwriting for Video	4
COMS 328 America at the Movies	4
COMS 329 "Reality" TV and Film	4
ENGL 377 Topics in Film Studies	1-4
ENGL 430 Creative Writing: Select Genres (Screenplay)	1-4
MLL 214 French Literature and Film	4
FR 201 Third Semester French	4
GER 210 Intermediate German through Film	4
LIBS 320C Bollywood	3
LIBS 390 Independent Film Study	1-2
NAMS 338 Native Americans and the Cinema	4
POLS 431 Politics and the Media	4
PSY 490 Psychology of Film	4
PSY 490 Adolescent Development Through 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.**

GEOGRAPHY

DEPARTMENT OFFICE

Stevenson Hall 3066
(707) 664-2194
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www.sonoma.edu/geoglobal

DEPARTMENT CHAIR

Matthew Clark

Faculty

Jeffrey Baldwin
Matthew Clark
Michelle Goman
Rheyna 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 147 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 316 Geography Inquiry	1
GEOG 490 Senior Seminar	4

Environment and Society Concentration

This concentration is designed for students interested in human-environment relations, sustainable development, and natural resource management.

Breadth Courses (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

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

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)

Geospatial Techniques	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 Liberation Ecologies: Globalization, Env. and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 340 Conservation of Natural Resources	4
GEOG 350 Globalization and the City	4
GEOG 352 Climate Change and Society	4

Upper-Division Physical

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 203 Cultural Geography or GEOG 202: World Regional Geography	3
GEOG 201 Global Environmental Systems	4
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: 29 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14 Units)</i>
GE (3)	GEOG 204 (B3) (4)
GE (3), GE (3)	GE (3), GE (3)
GE (3)	GE (3)
University Elective (3)	GEOG 205 (1)

JUNIOR YEAR: 30 Units

<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. Physical) (4)
Upper-Div. Supporting (4)	University Elective (4)

SENIOR YEAR: 31 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
Geography Elective (4)	GEOG 490 (4)
Geography Elective (3-4)	Upper-Division Supporting (4)
Geography Elective (2)	Course or Internship (4)
Upper-Division GE (3)	Geography Elective (4)
University Elective (3-4)	University Elective (3)

TOTAL UNITS: 120

GEOLOGY

DEPARTMENT OFFICE

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Matthew J. James

ADMINISTRATIVE COORDINATOR

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Faculty

Matthew J. James

Matty Mookerjee

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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 151-152 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

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 152 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

Astronomy

ASTR 100 Descriptive Astronomy

ASTR 231 Introductory Observational Astronomy

ASTR 100 prerequisite

ASTR 350 Cosmology

ASTR 100 prerequisite

Biology

BIOL 312 Biological Oceanography

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

BIOL 333 Ecology

BIOL 121, 122, and MATH 165 prerequisite

BIOL 335 Marine Ecology

BIOL 121, 122, and MATH 165 prerequisite

Environmental Studies and Planning

ENSP 200 Global Environmental Issues

ENGL 101 or PHIL 101 prerequisite

ENSP 302 Applied Ecology

ENSP 309 Soil Science

ENSP 322 Conservation Biology

ENSP 302 and BIOL 122 prerequisite

ENSP 330 Energy, Technology and Society

ENSP 451 Water Regulation

Geography

GEOG 204 Global Environmental Systems

GEOG 205 Introduction to Map Reading and Interpretation

GEOG 315 Field Methods in Geography

GEOG 205 and MATH 165 pre- or corequisite

GEOG 340 Conservation of Natural Resources

GEOG 360 Geomorphology

GEOG 204 and GEOL 102 prerequisite

GEOG 365 Biogeography and Landscape Ecology

BIOL 115, 121 or 122 prerequisite

GEOG 370 Weather and Climate

GEOG 204 prerequisite

GEOG 380 Remote Sensing and Image Processing

GEOG 205 prerequisite

GEOG 387 Geographic Information Systems

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

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Minor in Paleontology

The Minor in Paleontology offers students from any major on the SSU campus a cross-disciplinary concentration in the study of ancient life on Earth. Paleontology is by its very nature an 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

	Units
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

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PROGRAM ADVISOR

Gerryann Olson

ADMINISTRATIVE ANALYST

Janet Henker

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 OR	
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 304 Sibling Relations	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
GERN/PSY 493 Narrative: Theories & Methods	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 3066
(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	14-31
Breadth Requirements	14-15
Concentration	20
Capstone requirements	11
General electives	1-6
Total units needed for graduation	120-134

Note: Courses required for the major must be taken for a traditional letter grade, except for courses that are offered Cr/NC only. Students must earn a C- or better in any course applied to the major.

I. Foundational Requirements (14-31 units)

1. Language Skills (0-16 units)

Intermediate level proficiency in a modern language other than English, except where noted

2. Global Cultures (choose one)

ANTH 203 Cultural Anthropology (D1)	3
GEOG 203 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 300 Local Responses to Global Issues (D1)	3
GLBL 350A Introduction to Community Service	1
GEOG 302 World Regions in Global Context (D5)	4

II. Breadth Requirements (14-15 Units)

(One course from each of the following four areas)

1. Political Ideas and Institutions

POLS 303 Comp. Govt and Global Systems	4
POLS 304 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
UNIV 302 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
SOCI 305 Holocaust Lecture Series	3

Latin America Concentration

Students must take two survey courses from group I and choose more elective courses to meet the 20-unit minimum.

Group I: Survey Courses (select at least two)

GEOG 392 Latin American and the Caribbean	4
HIST 339 Ancient and Colonial Latin America	4
HIST 342 Modern Latin America	4
POLS 453 Political Systems of Latin America	4
SPAN 307 Cultures of Latin America	4

Group II: Elective Courses

GEOG 314D Field Experience Abroad (when Latin America)	2-3
ECON 403 Seminar in International Economic Development	4
HIST 348 Race and Ethnicity in Latin America	4
HIST 433 History of Mexico	4
HIST 449 Gender and Sexuality in Latin America	4
SPAN 402 Latin American Literature	4
SPAN 491 Seminar in Literature (when Latin American focus)	4
POLS 345 Model United Nations (when Latin American focus)	4

Asia Concentration

Students must take four history and political science courses from group I and choose two arts and humanities classes (group II) to meet the 20-unit minimum.

Group I: History and Political Science (select four)

HIST 338 Early Japan to 1650	4
HIST 438 Modern Japan	4
HIST 335 Early China to 1500	4
HIST 435 History of Modern China	4
HIST 436 Class and Gender in Modern East Asia	4
HIST 498 Senior Sem: The Pacific since 1500	4
HIST 498 Senior Sem: Asian Revolutions	4
POLS 450 The Politics of Asia	4
POLS 345 Model United Nations *	4

Group II: Arts and Humanities (choose classes from different departments)

ARTH 474 Islamic Art	3
ARTH 480 Selected Topics *	3-4
LIBS 320C The Arts and Human Experience *	3
MUS 301 The Sacred Traditions of South Asia	3
MUS 352 History, Music and Secular Traditions of South Asia	3
PSY 342 Psychology of Meditation	3-4
PSY 352 Psychology of Yoga	3-4
PHIL 390 Advanced Topics in Philosophy *	4

* when Asian Topic

Economic, Political and Social Development

Students select courses in consultation with an advisor, with no more than 8 units from a single department.

ANTH 352 Global Issues	4
ANTH 354 Quest for the Other: Tourism and Culture	4
BUS 393 Introduction to International Business	4
BUS 494 International Business Strategy	4
COMS 321 International Communications	4
ECON 303 International Economics	4
ECON 403a Seminar in Int'l Economic Development (prereq ECON 303)	4
ECON 403b Seminar in Int'l Trade (prereq ECON 303)	4
ENSP 330 Energy, Technology, and Society	4
GEOG 322 Liberation Ecologies: Globalization, Environment and Social Movements	4
GEOG 335 Global Food Systems: Scarcity and Sustainability	4
GEOG 345 Tourism Geographies	4
POLS 304 Introduction to International Relations	4
POLS 345 Model United Nations, when developing world	4
POLS 447 Nonviolent Strategies in International Relations	4
POLS 448 Political Violence, Terrorism and Law	4
POLS 452 Third World Political Systems	4
POLS 486 International Political Economy	4
WGS 385 Gender and Globalization	4

Global Environmental Policy Concentration

Students select courses in consultation with an advisor, with no more than 10 units from a single department. Please be attentive to prerequisites within the ENSP major.

ANTH 345 Anthropology and the Environment	4
COMS 323 Environmental Communications	4
ECON 381 Natural Resource and Environmental Economics	4
ENSP 302 Applied Ecology	3-4
ENSP 303 The Physical Environment	3-4
ENSP 306 Environmental Ethics	3
ENSP 307 Environmental History	4
ENSP 310 Introduction to Planning	3
ENSP 315 Environmental Impact Reporting	3
ENSP 322 Conservation Biology	4
ENSP 330 Energy, Technology, and Society	4
ENSP 401 Environmental Policy	4
ENSP 416 Environmental Planning	3
GEOG 322 Liberation Ecologies	4
GEOG 340 Conservation of Natural Resources	4
GEOG 345 Tourism Geographies	4
GEOG 372 Global Change: Past, Present, and Future	4
SOCI 482 Sociology of the Environment	4

Overseas Concentrations (20 units)

A wide variety of concentration options exist for students who study abroad under the auspices of the CSU International Program (IP). Coursework to be included in such concentrations will depend on the offerings available at the respective foreign universities. Students interested in pursuing such an individualized concentration should consult their Global Studies advisor and the SSU Study Abroad advisor as soon as they have decided which IP study abroad option they intend to pursue.

Global Studies Minor

With the exception of courses taken to fulfill the language skills requirement, only 4 units may double count with a student's GE requirements. Students who have met requirements through GE will take additional elective classes to meet the 20 unit minimum.

Core Courses (all required)

ECON 204 Macroeconomics (D5)	4
GEOG 302 World Regional Geography (D5)	4
GLBL 300 Local Responses to Global Issues (D1)	3
HIST 380 20th Century World (D2)	3

Language Requirement

Students will demonstrate an intermediate-low level proficiency in a foreign language. This may be met by taking 4-5 units of a foreign language at the 102 level or higher.

Global Cultures (choose one)

ANTH 203 Cultural Anthropology (D1)	3
GEOG 203 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

Mathematics

Some schools require a year of college mathematics and/or a calculus course or statistics.

4-8

Foreign Language

A few schools recommend a modern foreign language course.

0-8

Psychology

An introductory psychology course is recommended by some schools.

3

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 admissions officers);

3. Provide a practice admissions interview for candidates applying to health professions schools; and
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

*Judith Abbott / Medieval Europe and Rome
Theresa Alfaro-Velcamp / Mexican, Latin American, Borderlands History
Stephen Bittner / Russia, Soviet Union, Eastern Europe
*Randall A. Dodgen / Asia and the Pacific Basin
Steve Estes / Modern United States History
Mary Halavais / Early Modern Europe, Spain and Latin America
Michelle Jolly / Colonial and Antebellum U.S., California and the West, U.S. Women's History
Amy Kittelstrom / U.S. 1870-1920, Transnational Culture, Ideas, and Religion
Kathleen Noonan / Britain and Ireland, Early Modern Europe, Colonial America

**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 163 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
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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

One Lower-Division Course in World History 3

EITHER HIST 201 Foundations of World Civilization

OR HIST 202 Development of the Modern World

(Completion of either HIST 201 or HIST 202 also satisfies GE area D2.)

One Lower-Division Course in United States History 3

EITHER HIST 251 History of the United States to 1877

OR HIST 252 History of the United States since 1865

(Completion of either HIST 251 or HIST 252 also satisfies GE area D3.)

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 2084
(707) 664-2561 or (707) 644-2934

HUMAN DEVELOPMENT COORDINATOR

Suzanne Maggio-Hucek
Stevenson Hall 3057
(707) 217-2107

email: maggiohu@sonoma.edu

www.sonoma.edu/humandevlopment

Students interested in earning a major in Human Development should consult an advisor.

HUMAN DEVELOPMENT ADVISORS

Karin Enstam Jaffe / Biological Anthropology (707) 664-2944 / email: karin.enstam@sonoma.edu

Johanna Filp-Hanke / Early Childhood Education (707) 664-2280 / email: johanna.filp@sonoma.edu

*Susan Hillier / Gerontology/Psychology (707) 664-2586 / email: hillier@sonic.net

Suzanne Maggio-Hucek / Human Development Coordinator
(707) 217-2107 / email: maggiohu@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

Charlene Tung / Women's and Gender Studies (707) 664-2086 / email: charlene.tung@sonoma.edu

**Faculty Early Retirement Program*

Program Offered

Human Development is an interdisciplinary liberal arts program that focuses on human growth and development across the life span, the underlying processes and structures that support that development, and the relationship between the individual and the complex familial, social, and cultural environments in which development is situated.

The Human Development major is designed to provide students with a comprehensive grounding in complementary theoretical approaches to human development across the life span in comparative cross-species, cross-cultural, and multicultural, as well as class and gender perspectives. All students are required to take the core, plus perspectives, one methodology course, and to complete a senior project. Students must receive C or better in the core and elective courses.

Careers in Human Development

A B.A. in Human Development will help prepare students for professional, managerial, service, and educational careers in human development and human services serving infants, children, adolescents,

families, and elders. This degree will complement students' preparation for graduate studies in traditional fields such as psychology, sociology, anthropology, and human development.

Bachelor of Arts in Human Development

Prerequisites to the Major

- Sophomore standing.
- 2.50 GPA.
- Completion of the following required GE categories with a C or better:
 - A2 (ENGL 101).
 - A3 (Critical Thinking).
- Completion of or enrollment in the following GE courses:
 - BIOL 110, BIOL 115 Introduction to Biology or ANTH 201 Introduction to Biological Anthropology (BIOL 115 or ANTH 201 meet prerequisite for ANTH 318).
 - MATH 165 Elementary Statistics.
 - ANTH 203 Introduction to Cultural Anthropology, PSY 250 Introduction to Psychology, or SOCI 201 Introduction to Sociology.
 - ENGL 203 Introduction to Linguistic Studies or ANTH 200 Introduction to Linguistic Anthropology.

Total units required for B.A. in Human Development

Degree Requirements	Units
General education	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 (22-24 units)

HD 391 Seminar in Human Development (taken in the junior year)	2
ANTH 342 Organization of Societies or	3-4
ANTH 340 Living in a Pluralistic World (GE-E) or	3
WGS 385 Gender and Globalization or	3-4
SOCI 485 Organizations and Everyday Life	
ANTH/HD 318 Human Development: Sex and the Life Cycle (GE-E)	3
GERN/PSY 421 Psychology of Aging or	
GERN/PSY 408 Adult Development or	
GERN/SOCI 317 Emotions and Adult Life (GE-E) or	
GERN 300 The Journey of Adulthood (GE-E)	3-4
KIN 410 Lifespan Motor Development	3

PSY 410 Child Development or		PSY/GERN 493 Narrative Methods	4
PSY 412 Adolescent Development or		PSY 380 Introduction to Psychological Research Methods	4
EDEC 420 Child Development in Family, School, and Community (GE-E)	3-4	PSY 441 Qualitative Methods	4
WGS 350 Gender, Sexuality, and Family	3-4	SOCI 300 Sociological Research Methods	4
HD 490 Senior Project (taken in last semester)	1	WGS 425 Feminist Research Methods	4

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.

Substitutions can be made in elective courses with the consent of an advisor.

Comparative Perspectives

ANTH 302 Biological Basis of Sex Differences	4
ANTH 340 Living in a Pluralistic World (GE-E)	3
ANTH 380 Language, Culture, and Society	4
ANTH 386 Sign Language and Signing Communities	4
EDUC 417 School and Society	4
GERN/SOCI 319 Aging and Society	3
ANTH 383 Language in a Sociopolitical Context	4
PSY 328 Cross-Cultural Psychology	4
WGS 375 Gender, Race, and Class (GE-D1)	3

Sociological Perspectives

CCJS 441/SOCI 314 Deviant Behavior	4
EDMS 470 Multicultural Pedagogy	3
GERN/SOCI 332 Death and American Culture	4
GERN/PSY/SOC 432 Group Work with Older Adults	4
SOCI 312 Sociology of Gender	4
SOCI 315 Socialization	4
SOCI 326 Social Psychology (GE D1)	3-4
SOCI 445 Sociology of Childhood and Adolescence	
WGS 440/SOC 440 Sociology of Reproduction	3
WGS 390 Gender and Work	4

Psychological Perspectives

EDEC 420 Child Development in Family, School, and Community (GE-E)	3
PSY 302 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

Methodology

Choose one of the following:

ANTH 451 Applied Ethnographic Methods	4
ANTH 480 Studies of Language Use	4
EDEC 331 Practicum in Child Study	3

INTERDISCIPLINARY STUDIES

DEPARTMENT OFFICE

Stevenson 1041
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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 169 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	2
(Community Involvement Project in the USA or abroad)	
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

Michael Ezra/AMCS Department (707) 664-3293, ezra@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	3
JWST 350 Jewish Religion and Biblical Values	3
Total units in the minor core	6
Elective units in the minor	14
Total units in the minor	20

Minor Electives

In addition to the core, choose 14 units of electives from other Jewish Studies courses in at least two of the following areas of study:

1) religion, philosophy, values; 2) language; 3) history; 4) culture and society. All SSU majors may select the minor in Jewish Studies. Additional courses may be counted toward the minor with approval of the Jewish Studies program coordinator. Courses not designated for a particular area of study will be assigned an area of study by the program coordinator based on the course content. Cross-listed courses listed below without the JWST designation will count for the Jewish Studies minor pending approval of the Jewish Studies program coordinator.

Course Offerings and Areas of Study

1) Religion, Philosophy, and Values

	Units
AMCS 481 Religion and Spirituality	4
JWST 250 Introduction to Judaism	4
JWST 251 Topics in Jewish Biblical Studies	3-4
JWST 351 Topics in Jewish Religion	4
JWST 352 Topics in Jewish Thought	4
JWST 391 Topics in Comparative Religion	4
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

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

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Wanda Boda
Rebecca Bryan
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 177-179 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:

- Adapted Physical Education Concentration (26)
- Physical Education Concentration (26)
- Exercise Science Concentration (27)
- Lifetime Physical Activity Concentration (24-28)
- Interdisciplinary Concentration (25-28)

Total units in a concentration 24-28

Total units in the major 53-57

Specific content of concentrations is detailed below.

Specific Content of Concentrations

Several options are available to a student advancing toward a specific goal in the degree program. A student may select a pattern of courses in any one of the following concentrations.

I. Adapted Physical Education Concentration

After completing the bachelor's degree, students may pursue career opportunities in private or public agencies. In combination with the physical education concentration (Single Subject Credential), a student may meet the requirements for the 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.

Physical Therapy Program Prerequisites

Courses	SSU Course	UCSF	Samuel Merriitt	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

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 or musculoskeletal injury. This concentration incorporates coursework 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 Fitness

Careers or certifications that require a baccalaureate degree

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

Physical Education

- Teaching middle school and high school (B.S. degree leads into the Single Subject Credential Program which certifies graduates to teach in public schools).
- Coaching in public schools and at the collegiate level.
- Graduate Programs in
 - Physical Education (M.A., M.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

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 12 to 13 units (required of all students) and a minimum of 9 to 10 units of electives. The minor in kinesiology may be desirable for credential candidates pursuing a second teaching area or a career in coaching; for management students entering sport/fitness businesses; for those involved in outdoor recreation programs; for students in performing arts desiring a physical education/dance background. Students pursuing a kinesiology minor must consult with a departmental advisor for program requirements. A copy of a signed approved study list is placed in the student's advising folder.

Minor Core Requirements

KIN 201 Foundations of Kinesiology	3
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Choose one course from the following:

KIN 301 History and Philosophy of Human Movement (4) or	
KIN 315 Sociology of Sport or	
KIN 410 Lifespan Motor Development	3-4

Choose two courses from the following:

KIN 305 Psychological Bases of Human Movement	4
KIN 350 Biomechanics	4
[Prerequisite BIOL 220, Human Anatomy (4)]	
KIN 360 Physiology of Exercise	4
[Prerequisites CHEM 115A, General Chemistry (5) or CHEM 105 and BIOL 224, Human Physiology (4)]	8

Total units in the minor core	12-13
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Minor Options

These courses are to be determined with and approved by a departmental advisor. They must be in kinesiology and may include a maximum of 3 units of field work and/or special studies.

Total units in the minor option	9-10
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Total units in the minor	22
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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/ma_program/Applicant_Info.htm);
 - b. Personal statement articulating the applicant's academic and professional goals;
 - c. Official transcripts from **all** undergraduate and graduate institutions; and
 - d. Two letters of recommendation.

Electronic submission of application is preferred, e.g. of application, letters of recommendation, personal statement and unofficial copy/scan of transcripts (pending arrival of official transcripts).

Students may be admitted as conditionally classified or classified graduate students. The procedures for each are as follows:

Conditionally Classified Graduate

Application for students interested in pursuing a master's degree in kinesiology will be forwarded to the department for consideration. Students who have degrees in other areas of study must make up deficiencies in undergraduate areas: descriptive statistics, biomechanics, psychological basis of human movement, and physiology of exercise. Only one (up to 4 units) of these courses may be counted toward the M.A. degree. Completion of WEPT required.

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

Fall Semester (15 Units)

BIOL 110 (4)

CS 101 (3)

GE (8)

Spring Semester (16 Units)

CHEM 115A (5)

MATH 165 (4)

GE (7)

SOPHOMORE YEAR: 29 Units

Fall Semester (15 Units)

BIOL 220 (4)

CHEM 115B (5)

Nutrition (3)

GE (3)

Spring Semester (14 Units)

KIN 201 (3)

PHYS 209A/210A (4)

BIOL 224 (4)

GE (3)

UPPER-DIVISION SPECIALIZATION

JUNIOR YEAR: 30 Units

Fall Semester (15 Units)

KIN 241/242 (3)

KIN 301 (4)

PHYS 209B/210B (4)

GE (4)

Spring Semester (15 Units)

KIN 360 (4)

KIN 315 (3)

GE (4)

GE UD (4)

SENIOR YEAR: 30 Units

Fall Semester (14 Units)

KIN 305 (4)

KIN 350 (4)

KIN 410 (3)

GE UD (3)

Spring Semester (16 Units)

KIN 430D (3)

KIN 460 (3)

PSY 425 (4)

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 Fitness Activity (both emphases)

LOWER-DIVISION PREPARATION

FRESHMAN YEAR: 30 Units

Fall Semester (14 Units)

BIOL 115 (3)
MATH 165 (4)
CS 101 (3)
GE (4)

Spring Semester (16 Units)

CHEM 105 (5)
GE (11)

SOPHOMORE YEAR: 31 Units

Fall Semester (15 Units)

Biol 220 (4)
Nutrition (3)
GE (8)

Spring Semester (16 Units)

KIN 201 (3)
Biol 224 (4)
KIN 242 (3)
GE (6)

UPPER-DIVISION SPECIALIZATION

(see concentration specific classes to the right)

JUNIOR YEAR: 17 Units

Fall Semester (7 Units)

KIN 301 (4)
KIN 315 (3)

Spring Semester (10 Units)

KIN 360 (4)
KIN 410 (3)
GE UD (3)

SENIOR YEAR: 17 Units

Fall Semester (9 Units)

KIN 350 (4 units)
GE UD (3)

Spring Semester (10 Units)

KIN 305 (4)
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

Fall Semester (8 Units)

KIN 306 (1)
KIN 310 (1)
KIN 325 (3)
KIN 400 (3)

Spring Semester (4 Units)

KIN 308 (1)
KIN 320 (3)

SENIOR YEAR: 13 Units

Fall Semester (5 Units)

KIN 404 (2)
KIN 420 (3)

Spring Semester (6 Units)

KIN 309 (1)
KIN 422 (4)
KIN 430 (1)

• Adapted Physical Education •

(with Upper Division core)

JUNIOR YEAR: 11 Units

Fall Semester (5 Units)

KIN 306 (1)
KIN 426 (4)

Spring Semester (6 Units)

KIN 325 (3)
KIN 427 (3)

SENIOR YEAR: 12 Units

Fall Semester (7 Units)

KIN 425 (3)
KIN 430C (1)
EDSP 433 (3)

Spring Semester (5 Units)

KIN 430C (1)
EDSP 422 AB (4)

• Lifetime Physical Activity Emphasis:

Fitness and Wellness•

(with Upper Division core)

JUNIOR YEAR: 13 Units

Fall Semester (7 Units)

KIN 241 (7)
KIN 426 (4)

Spring Semester (6 Units)

F&W Elective (3)
F&W Elective (3)

SENIOR YEAR: 12 Units

Fall Semester (5 Units)

KIN 430E (3)
2 Units of your choice (2)

Spring Semester (7 Units)

KIN 442 (4)
KIN 446 (3)

• **Lifetime Physical Activity Emphasis:Coach Education**•

(with Upper Division core)

JUNIOR YEAR: 9-11 Units

Fall Semester (6-7 Units)

KIN 404 (2-3)
4 Units of your choice (4)

Spring Semester (3-4 Units)

KIN 420 or 422 (3-4)

SENIOR YEAR: 12-14 Units

Fall Semester (5-7 Units)

KIN 430E (3)
CE Elective (2-4)

Spring Semester (7 Units)

KIN 403 (3)
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: 34 Units

Fall Semester (17 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

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(707) 664-2491
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Program 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 alterna-

tive General Education program that integrates material from the humanities, the social sciences, and the natural sciences. It offers upper-division students a similarly integrated major in Liberal Studies leading to a B.A. degree. It offers a multiple subject preparation program for pre-credential students, and a blended program leading to a B.A. and multiple subject teaching credential in four years. A minor in integrative studies is also offered.

The Hutchins School has several distinctive features:

- 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 (Please see course descriptions below.);
- Encouragement to engage in independent study projects and study abroad programs;
- Internship/field study to bridge academic studies with career placements and community service; and
- An opportunity for student-instructed courses.

Hutchins is also committed to offering students opportunities for contributing to and learning from local communities. Some seminars include a service learning component which enhances the reading, writing, and discussion of shared materials through applied service projects. These seminars provide hands-on experience for students while also creating valuable partnerships with local community organizations. Through service, Hutchins students can draw connections between what they discuss in seminar with how they live their lives, enabling them to integrate critical thinking, active participation, and careful reflection.

Students in other majors may complete a Hutchins School integrative studies minor to help place their disciplines in a wider intellectual context.

Careers in Liberal Studies

Hutchins School graduates do especially well in teaching, counseling, social services, law, media, journalism, and many types of businesses. They have entered graduate programs in fields as diverse as American studies, anthropology, business, counseling, English, history, law, library science, management, medieval studies, physics, religion, sociology, and theatre arts.

Students seeking a teaching credential in elementary or early childhood education can enroll in the Track II: Subject Matter Preparation

for the Multiple Subject Teaching Credential. If 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 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. Several of the small seminar sections come together once a week for group activities, including field trips, labs, lectures, films, group presentations, and other hands-on learning experiences. The emphasis throughout is on the critical examination of contemporary problems in their historical contexts. Each student is expected to arrive at conclusions that result from personal reflection and exploration of the ideas of major thinkers in diverse fields.

At mid-semester, students meet individually with the professor to discuss their progress. At this point, they have an opportunity to reflect on and assess their own learning, a key ingredient in developing the skill of lifelong learning. At the end of every semester, the student receives an official grade or credit or 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

also is 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 186-188 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 and 208/308.)

Requirements for the Major

First Semester

LIBS 302 Introduction to Liberal Studies, and	3
LIBS 304 We Hold These Truths (Fall) or LIBS 204	3
LIBS 308 The Practice of Culture (Spring) or LIBS 208	3

Subsequent Semesters

LIBS 304 or 204 and LIBS 308 or 208 (2 semester sequence)	6
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One course from each of 4 core areas:

LIBS 320A Society and Self	3
LIBS 320B Individual and the Material World	3

LIBS 320C The Arts and Human Experience	3
LIBS 320D Consciousness and Reality	3
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

Those students wishing a broad interdisciplinary major as a foundation for their career choice (e.g. the arts, the law, public service, etc.), or who are motivated by intellectual curiosity and wish to pursue an individualized study plan, often choose interdisciplinary studies. Track I students may use up to 9 units from other majors or 12 units from approved study abroad 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 as follows:

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

LIBS 308 Practice of Culture (3) or LIBS 208

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.

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

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.mcfeters@sonoma.edu
Website: www.sonoma.edu/exed/libis

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

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)
LIBS 304 (3) or LIBS 204 (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)	LIBS 308 (3) or LIBS 208 (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

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 101 Human Enigma (12)	LIBS 102 In Search of Self (12)
MATH 150 Geometry (3)	Chemistry, Physics, or Astronomy (3)

SOPHOMORE YEAR: 29-32 Units

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (14-16 Units)</i>
LIBS 201 Exploring the Unknown (12)	LIBS 202 Challenge & Response in the Modern World (12)
Geology or Physical Geography (3-4)	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.

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (15-16 Units)</i>
LIBS 304 or 204 (3-4)	LIBS 308 or 208 (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

<i>Fall Semester (15-16 Units)</i>	<i>Spring Semester (13-16 Units)</i>
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 (3-4)	electives to reach 120 units total if needed

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)

FRESHMAN YEAR: 30 Units

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

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
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

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 302 (3)	LIBS 308 or 208 (3-4)
LIBS 304 or 204 (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

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
LIBS 320 (3)	LIBS 320 (3)
LIBS 330 (3)	LIBS 320 (3)
LIBS 327 (3)	LIBS 402 (4)
EDMS 470 (3)	Electives (5)
Concentration Course (3)	

TOTAL UNITS: 120

Sample Four-Year Plan for Bachelor of Arts in Liberal Studies with Teaching Credential, Track III

FRESHMAN YEAR: 34 Units

Fall Semester (17 Units)

LIBS 101 (12)
EDMS 100 (2)
MATH 150 (3)
Take CBEST or CSET: Writing Skills
Exam spring/summer.

Spring Semester (17 Units)

LIBS 102 (12)
EDMS 200 (2)
CHEM, Physics, or Astronomy (3)

SOPHOMORE YEAR: 35-36 Units

Fall Semester (18 Units)

LIBS 201 (12)
LIBS 312 (3)
GEOL or PHYSICAL GEOG (3)
Certificate of clearance - Apply
For Live Scan and Clear TB test.
Apply to Education Program
(Nov.- Jan).

Spring Semester (17-18 Units)

LIBS 202 (12)
LIBS 330 (3)
Performing Arts Elective:
Music, Theater
or Dance survey or history (2-3)
Interviews April

JUNIOR YEAR: 36 Units

Fall Semester (18 Units)

LIBS 304 (3)
LIBS 320 (3)
LIBS 320 (3)
LIBS 327 (3)
EDMS 470 (3)
EDMS 411 (3)
Take the WEPT during academic year.
Apply for fall graduation by audit deadline.

Spring Semester (18 Units)

LIBS 308 (3)
LIBS 320 (3)
KIN 400 (3)
MATH 300A (3)
EDMS 463 (3)
EDMS 475 (3)
Re-apply to SSU as post-
baccalaureate student
Aug 1 – Aug 31.

SENIOR YEAR: 30 Units

Fall Semester (16 Units)

LIBS 320 (3)
LIBS 402 (4)
MATH 300B (3)
EDMS 474F (3)
EDMS 464S (2)*

Spring Semester (14 Units)

EDMS 482F: Student Teaching (10)*
EDMS 464 (2)
EDMS 471 (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: 135-136

Some courses may be taken during the summer.

In order to continue in the program after the first year, students must have the recommendation of their professors in LIBS 101, LIBS 102, EDMS 100, and EDMS 200.

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

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Ben Ford

Susan Herring

Izabela Kanaana

Brigitte Lahme

*Rick Luttmann

Elaine Newman

Jerry Morris

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	52-55
Electives	23-26
Total units needed for graduation	120

Core Curriculum

MATH 161 Differential and Integral Calculus I (GE B4)	4
MATH 211 Differential and Integral Calculus II	4
MATH 220 Higher Mathematics: An Introduction (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 194 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 195 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

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
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Total units in secondary teaching program 55

Note: Students considering graduate school in mathematics are advised to also take MATH 322.

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

B.S. Program (Applied Mathematics)

This B.S. concentration prepares students for employment in industry and graduate schools in scientific fields.

Core Curriculum

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
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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.

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 telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

Grading Policy in the Department of Mathematics and Statistics

Non-majors

All mathematics 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 (11)
GE (4)	
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 (11)
GE (4)	
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 (4)

Spring Semester (15 Units)

MATH 306 (4)
MATH 316 (4)
UD GE (3)
Elective (3)

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

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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.

ties 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 200 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.

Requirements for the Major

Complete the following 32 Units:

FR 202 Oral French	4
FR 300 Introduction to Literary Analysis & Critical Writing	4
FR 320 France Yesterday	4
FR 321 France Today	4
FR 410 French Literature	4
FR 411 French Literature	4
FR 415 Special Topics in French Culture	4
FR 475 Senior Seminar	4
Total units in the major	32

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
And one of the following groups of courses:	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>
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>
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>
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>
GER 315 (1 unit)—Fall
German Language and Literature
<i>Note: Requires concurrent enrollment for German minor students in GER 314.</i>
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>

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 200 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

Spanish Placement Evaluation

A free evaluation is offered by the department. Students who have some background in Spanish, whether through study in high school or informal exposure, and have not previously taken a college Spanish course are encouraged to have a placement evaluation. Information is available through the Language and Culture Learning Center, www.sonoma.edu/modlang/learning_center

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

Lower-Division Spanish Courses

These courses are prerequisites for the upper-division courses in the major and minor. Some or all of these courses or their equivalents may be waived by virtue of prior language study, courses in transfer, or placement in higher level courses.

SPAN 101 Basic Spanish, 1st Semester	4
SPAN 101L Language Laboratory	1
SPAN 102 Basic Spanish, 2nd Semester	4
SPAN 102L Language Laboratory	1
SPAN 201 Intermediate Spanish, 1st Semester	4
SPAN 201L Language Laboratory	1
SPAN 202 Intermediate Spanish, 2nd Semester	4
SPAN 202L Language Laboratory	1

Electives

SPAN 150 Elementary Conversation	2
SPAN 250 Intermediate Conversation	2

Total units 20-24

Spanish Minor

For a minor, students must complete SPAN 300, 301, 304, and 305, and either 306 or 307.

SPAN 300 Advanced Spanish Language	4
SPAN 301 Advanced Composition and Conversation	4
SPAN 304 Introduction to Spanish Linguistics	4
SPAN 305 Introduction to Literature and Research	4

Plus, either:

SPAN 306 Cultures of Spain or	
SPAN 307 Cultures of Latin America	4

Total minor units 20

Spanish Major

For the major, students must complete SPAN 300, 301, 304, 305, 306, 307, and three classes at the 400 level, at least one of which must be SPAN 490 or SPAN 491 (490 or 491 must be taken in residence at SSU):

SPAN 300 Advanced Spanish Language	4
SPAN 301 Advanced Composition and Conversation	4
SPAN 304 Introduction to Spanish Linguistics	4
SPAN 305 Introduction to Literature and Research	4
SPAN 306 Cultures of Spain	4
SPAN 307 Cultures of Latin America	4
plus, any two of:	
SPAN 400 Topics in Linguistics	4
SPAN 401 Peninsular Literature	4

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: 30 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (14 Units)</i>
SPAN 101 (4)	SPAN 102 (4)
SPAN 101L (1)	SPAN 102L (1)
GE Electives (A2, A3, B4) (11)	SPAN 150 (2)
	GE Electives (C1, B1) (7)

SOPHOMORE YEAR: 34 Units

<i>Fall Semester (18 Units)</i>	<i>Spring Semester (16 Units)</i>
SPAN 201 (4)	SPAN 202 (4)
SPAN 201L (1)	SPAN 202L (1)
GE Electives (B3, D2, C2, D5) (13)	SPAN 250 (2)
	GE Electives (D3, D4, B2) (9)

JUNIOR YEAR: 33 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (18 Units)</i>
SPAN 300 (C3) (UD) (4)	SPAN 301 (C3) (UD) (4)
SPAN 305 (C3) (UD) (4)	SPAN 304 (4)
SPAN 306 (C3) (UD) (4)	SPAN 307 (C3) (UD) (4)
GE UD (E) (3)	GE UD (C3, D1) (6)

SENIOR YEAR: 23 Units

<i>Fall Semester (11-16 Units)</i>	<i>Spring Semester (8-12 Units)</i>
Two SPAN classes at the 400 level	One SPAN class at the 400 level
Electives/Minor (4-8)	Electives/Minor (4-8)

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
Ruth Wilson, Brass Pedagogy
Betsy London, String Pedagogy
Jennifer Wilsey, Percussion Pedagogy
Eric Cabalo, Guitar Pedagogy

Musicology And Ethnomusicology

John Palmer, Musicology
Jeff Langley, American Music History
Laxmi G. Tewari, Ethnomusicology

Performing Ensembles - Vocal

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
Judyaba, String Orchestra

Strings

Joe Edelberg, Violin
Judyaba, Cello
Eric Cabalo, Classical Guitar

Theory/Composition and Musicianship

Brian Wilson, Theory, Analysis and Composition
William Johnson (Emeritus), Composition
Jeff Langley, Composition
John Palmer and Jenny Bent, Ear Training
Doug Leibinger, Jazz Theory and Arranging
Marcia Bauman, Music Technology and 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
Roy Malan, 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/performances 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

(See pages 208-210 for sample four-year programs.)

Bachelor of Music Applied Music Concentration

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**

Total units in the major

68

Bachelor of Music Jazz Studies Concentration

Degree Requirements	Units
General education	45
Major requirements	68
Electives	7
Total units needed for graduation	120

Requirements For the Major

The jazz studies concentration is designed to furnish the training and background needed for students seeking to work as jazz performers, arrangers, composers, or teachers.

Students planning to pursue careers as jazz performers should take private instruction in their major instrument or in voice as a part of their program. These students normally enroll each semester in at least one music department ensemble appropriate to their area of interest. They should also seek opportunities for performance off - campus in a wide variety of performing environments.

Complete all the following:

Preparatory (credit not applicable toward major; students may challenge by exam)

MUS 106 Fundamentals of Music Theory

MUS 109 Intensive Keyboard Lab I

MUS 120 Ear Training I

MUS 189 Jazz Improvisation I

MUS 209 Intensive Keyboard Lab II

Theory/Musicianship (15)

MUS 110 Theory I

MUS 212 Jazz Harmony and Arranging I

MUS 312 Jazz Harmony and Arranging II

MUS 220 Ear Training II

MUS 320 Ear Training III

MUS 420 Ear Training IV

History/Literature (12)

MUS 252 History of Western Music - 1750 to the Present

MUS 342 History of Jazz

And two of the following four courses: (6 units)

MUS 150 Survey of U.S. Music (satisfies GE Area C1)

MUS 251 History of Western Music - Ancient World to 1750

MUS 300 Seminar (various topics)

MUS 350 Survey of World Music or Music 160 A/B (satisfies GE Area C3)

Applied Skills (16)

MUS 292 Jazz Piano I

MUS 289 Jazz Improvisation II

MUS 392 Jazz Piano II

MUS 412 Jazz Composition

MUS 389 Jazz Improvisation III

MUS 489 Jazz Improvisation IV

MUS 490 Senior Project

Music Electives (minimum of 3 units)*Courses will vary according to area(s) of interest—see department advisor.***Private Instruction (each semester in residence)***Transfer students must take lessons for every semester in residence.***Jazz Forum (each semester in residence)****Ensembles (each semester in residence)***(See section on performance ensemble requirement.)*

Total units in the major

68

Bachelor of Music Music Education Concentration

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

And two of the following four courses (2 units)

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
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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 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.

Nine units of prerequisites are needed to enter the credential program: EDUC 417, EDSS 418, EDSP 433.

The Integrated Program is available to freshmen. This program prepares students to teach music in the elementary schools, middle schools, junior high schools, and high schools in California. Students in this program take coursework in education along with music and general education throughout their undergraduate years, eventually graduating with a B.A. and a teaching credential simultaneously. The Integrated Program requires formal application to SSU's Single Subject program prior to the junior year.

Bachelor of Arts Liberal Arts Music Concentration

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)

MUS 292 Jazz Piano I	2
MUS 392 Jazz Piano II	2
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

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	3
or MUS 106 Fundamentals of Music Theory	3
MUS 110 Theory I: Diatonicism	3
MUS 120 Ear Training I	2
Ensemble courses	4
Elective in music	2
Upper-division lecture course	3

And one of the following courses: (3 units)

MUS 150 Survey of U.S. Music	3
MUS 250 Survey of European Music (3)	3
Ancient World to 1750	3
MUS 251	3

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	6
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

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)	*EDSP 433 (3)
*EDSS 418 (3)	Repertory Class (1)
MUS 440 (1)	
Repertory Class (1)	

TOTAL UNITS: 135

* 9 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) 664-2458

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

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

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

Requirements:

NAMS 495 Special Studies or Internship at a local Native American agency or organization	4
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Total units in minor 24

NURSING

(707) 664-2465

Fax: (707) 664-2653

www.sonoma.edu/nursing

DEPARTMENT CHAIR

Deborah A. Roberts

ADMINISTRATIVE STAFF

Ana Munoz

Eileen O'Brien

Faculty

*Liz Close

*Carole Heath

Michelle Kelly

Deborah Kindy

Jeanette Koshar

Wendy Smith

*Melissa Vandever

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 215 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. An 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 higher in prerequisite science courses: BIOL 220, 218, 224, and CHEM 105 or equivalent;
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	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.

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 impact 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

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 215-216 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.

A.D.N.-M.S.N. Pathways Option (for registered nurses with a bachelor's degree in a discipline other than nursing)

Admission to the Department of Nursing's master of science program requires the foundation and skills equivalent to a bachelor of science degree in nursing. For those registered nurses who hold a baccalaureate degree in a field other than nursing, the department offers an option in preparation for admission to the master's program. This option provides an individualized plan of study considering the student's background and the family nurse practitioner program.

A.D.N.-M.S.N. Pathways Program Admissions Procedure: In addition to the standard California State University application, a A.D.N.-M.S.N. supplemental Pathways application must be submitted. Applications are available on the department website, www.sonoma.edu/nursing.

Admission Status: Initial status will be "conditionally classified" while the student is fulfilling requirements for B.S.N. equivalency and other graduate admissions criteria. Completion of the A.D.N.-M.S.N. Pathways Program allows a candidate to apply to the M.S.N. F.N.P. program.

Culminating Experience

Degree requirements include completing a culminating experience during the final semester of study. The experience provides an opportunity for the student to synthesize and demonstrate the major learning outcomes of the graduate program and the nursing specialty option.

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 management of common illness as well as health teaching, counseling, and preventive services. Emphasis is placed upon advanced clinical skills that include history-taking, physical examination, health screening, management of common illnesses, and techniques of prevention and risk reduction. Graduates may work in clinics, health maintenance organizations, schools, and medical practices as primary health care providers.

Admission Requirements

1. B.S.N. degree (R.N.s with a bachelor's in an area other than nursing, please see previous section on 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.

Prelicensure Bachelor of Science in Nursing (B.S.N.) Curriculum Plan

Freshman Year : 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
BIOL 115 (3)	BIOL 220 (4)
CHEM 105 (5)	MATH 165 (4)
GE A2 (4)	GE C1 (4)
GE D2 (3)	GE D3 (3)

Sophomore Year : 29-30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (14-15 Units)</i>
BIOL 224 (4)	BIOL 240 (4)
GE C2 (4)	PSY 302 (UD GE) (3)
GE D1 (3-4)	GE C3 (4)
GE A3 (4)	GE D4 (3-4)

Junior Year : 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
NURS 301 (9)	NURS 302 (4)
NURS 303 (6)	NURS 304 (6)
	NURS 310 (3)

Senior Year : 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
NURS 407 (6)	NURS 410 (5)
NURS 409 (6)	NURS 412 (5)
GE D5 (3-4)	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 B.S.N. Program Curriculum Plan

Senior Year : 32 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (17 Units)</i>
NURS 310 (3)	NURS 410 (5)
NURS 312 (4)	NURS 412 (5)
NURS 313 (4)	NURS 416 (3)
UD GE C1 (4)	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.

FNP Masters 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

FNP Masters Part-time Curriculum Plan

YEAR 1: 16 Units

Fall Semester (8 Units)

N 501 (4)

N 560 (4)

Spring Semester (8 Units)

N 509 (4)

N 564 (4)

YEAR 2: 16-17 Units

Fall Semester (6-7 Units)

N 549 (3)

Optional Elective (3-4)

Spring Semester (10 Units)

N 540A (3)

N 552 (3)

YEAR 3: 17 Units

Fall Semester (7 Units)

N 540B (3)

N 550B (4)

Spring Semester (10 Units)

N 562 (4)

N 550C (4)

N 566 (2)

TOTAL UNITS: 46

FNP Post Masters Certificate Curriculum Plan

YEAR 1: 21 Units

Fall Semester (11 Units)

N 501 (4)

N 509 (4)

N 549 (3)

Spring Semester (10 Units)

N 540A (3)

N 550A (4)

N 552 (3)

YEAR 2: 15 Units

Fall Semester (7 Units)

N 540B (3)

N 550B (4)

Spring Semester (8 Units)

N 550C (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
Gillian Parker
John Sullins
Andy Wallace

Programs Offered

Bachelor of Arts in Philosophy
Pre-Law/Applied Ethics (Optional) Concentration
Minor in Philosophy

The Philosophical Life

The value of a philosophy degree stems from the richness of the perennial themes that are addressed in philosophical texts and discussions. Majors in this department balance their studies of the great classical themes of philosophy with a focus on the particular philosophical issues that are of paramount importance to them. In designing the department major, care has been taken to emphasize both the historical and analytical dimensions of philosophy, as well as its theoretical and practical dimensions. In this regard, the Department of Philosophy believes that the Socratic dictum “know thyself!” requires the exercise of both theoretical and practical reason. The design of the major expresses this fundamental belief.

In its historical dimensions, an education in philosophy gives the student a nuanced appreciation of the wide array of conceptual systems that human beings have employed to deal with questions concerning reality, justice, truth, morality, and the meaning of life. In its analytical and critical dimensions, philosophy trains one to detect and avoid errors in thinking. Such training involves special emphasis on the logical use of language, the analysis of concepts, and the ability to critique and construct extended arguments.

Philosophy's emphasis on both the imaginative and critical use of rationality helps prepare one for a wide variety of careers that require finely-honed reasoning and communication skills. Such fields include law, medicine, social and political advocacy, counseling, teaching, print and electronic media, and research and writing in both academic and nonacademic fields.

Faculty and Curriculum

At the heart of the philosophy program is the faculty: dedicated teachers and scholars who represent key approaches to philosophy, and who are actively engaged in ongoing research. We have designed the curriculum to provide the major with a balanced historical and contemporary understanding of philosophy.

Advising

Advising begins with an initial advising interview with the department chair. During the following semester the student will choose a regular faculty advisor. See department Administrative Coordinator at department office for details.

Bachelor of Arts in Philosophy

(See page 218 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
(These GE C3 units do not count for the major)	
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 worksheet.

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)
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

GEOL 323 Hydrology	3
PHYS 342 Light and Color	3

Total units in the minor electives 6

Total units in the minor, including
6 units in general education 22-23

Program Offered

Minor in Physical Sciences

The minor in physical sciences for elementary teachers provides an introduction to the physical sciences at a nontechnical (nonmathematical) level. The minor is intended for liberal studies majors who also plan to enter a general elementary school teaching credential program. The minor will provide the background and skills to teach some physical sciences in the elementary and middle schools. This minor is not appropriate for students planning to teach science in the secondary schools; they should study physical science at a more technical level and may choose a minor in astronomy, chemistry, geology, or physics.

Minor in Physical Sciences

The minor consists of the following 22-23 units. Six of these will also be counted in general education. Students interested in the minor should consult an advisor.

Minor Core Requirements

Complete the following 16-17 units; of these, 6 may be applied to general education.

ASTR 100 Descriptive Astronomy	3
CHEM 102 Chemistry and Society	3
GEOL 102 Our Dynamic Earth	3
CS 101 Introduction to Computers and Computing	3
PHYS 100 Descriptive Physics	3
ASTR 231 Introductory Observational Astronomy	2
or PHYS 102 Descriptive Physics Laboratory	1

Total units in minor core 16-17

Minor Electives

Complete 6 units from the following:

ASTR 305 Frontiers in Astronomy	3
ASTR 350 Cosmology	3
GEOG 310 Meteorology	3-4
GEOL 306 Environmental Geology	3

PHYSICS

DEPARTMENT OFFICE

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Lynn R. Cominsky

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Andrea Cullinen

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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, 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. The department is also developing a new observatory at the Galbreath Wildlands Preserve in southern Mendocino County. Students are strongly encouraged to use all of the above facilities for special studies, undergraduate research, and capstone projects.

Careers in Physics

For information on what you can do with a bachelor's degree in physics, follow links from: <http://phys-astro.sonoma.edu>

Bachelor of Science in Physics

(See pages 223-224 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 224-225 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
Choose one of the following two programming courses:	2-4
PHYS 381 Computer Applications for Scientists	2
CS 115 Programming I	4
Capstone course; One of the following:	2
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	8
PHYS 209AB General Physics Laboratory	2
PHYS 210AB General Physics	6

Choose one of the following two courses in modern physics or astronomy:	3-4
ASTR 305 Frontiers in Astronomy	3
PHYS 314 Introduction to Physics III	4
Choose one of the following two courses in optics:	3
PHYS 340 Light and Optics	3
PHYS 342 Light and Color	3

An approved course in computer applications, e.g., PHYS 381 (2):	2-4
---	------------

Capstone course; One of the following:	2
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*Fall Semester (15 Units)*

CHEM 115A (5)

MATH 161 (4)

GE (3)

PHYS 100 (3) (Recommended)

Spring Semester (15 Units)

CHEM 115B (5)

MATH 211 (4)

PHYS 114 (4)

PHYS 116 (1)

PHYS 494 (1) (Recommended)

SOPHOMORE YEAR: 30 Units*Fall Semester (15 Units)*

MATH 261 (4)

PHYS 214 (4)

PHYS 216 (1)

GE (6)

Spring Semester (15 Units)

MATH 241 (4)

PHYS 313 (3)

PHYS 313L (1)

PHYS 314 (4)

GE (3)

JUNIOR YEAR: 30 Units*Fall Semester (15 Units)*

PHYS 325 (3)

PHYS 381 (2)

GE (6)

Elective (4)

Spring Semester (15 Units)

PHYS 320 (3)

PHYS 340 (3)

PHYS 366 (3)

GE (6)

SENIOR YEAR: 30 Units*Fall Semester (16 Units)*

PHYS 450 (2)

PHYS 460 (3)

GE (8)

Elective (3)

Spring Semester (14 Units)

PHYS 430 (3)

PHYS Capstone (2)

GE (9)

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

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**Faculty Early Retirement Program*

Programs Offered

Bachelor of Arts in Political Science
Master's in Public Administration
Minor in Political Science
Teaching Credential Preparation
Certificate Program in the Administration of Nonprofit Agencies

The political science program at Sonoma State University offers excellent opportunities for the study of government, 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. 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 229 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

American Government And Politics

Choose one of the following twenty courses:

POLS 320 State, City, and County Government

POLS 330 Race, Ethnicity, and Politics

POLS 391 Gender and Politics

POLS 420 American Political Development

POLS 421 Federalism and Intergovernmental Relations

POLS 423 Introduction to Constitutional Law

POLS 424 the Bill of Rights, Civil Liberties, and the Constitution

POLS 425 the American Party System

POLS 426 the Legislative Process

POLS 427 the American Presidency

POLS 428 Seminar in California Politics and Government

POLS 429 Interest Groups

POLS 430 Introduction to Public Administration

POLS 431 Politics and the Media

POLS 466 Political Psychology

POLS 475 Urban Politics and Policy

POLS 481 Politics of Regulation and Land Use

POLS 483 Politics of Wealth and Poverty

POLS 484 Elections and Voter Behavior

POLS 485 Political Power and Social Isolation

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/mpa-home)

Offered primarily as an evening program, the master's degree in public administration provides a rigorous 40-unit curriculum that emphasizes the education required to effectively analyze, formulate, and implement public policy in local, state, and national government, and to achieve similar goals in nonprofit agencies. The program recognizes the need for a strong combination of theoretical and practical learning. Students choose from two concentrations: public management or nonprofit agency management.

Each student is required to complete a 20-unit analytic core, a 16-unit concentration, and 4 units of graduate-level electives. Courses are based upon the professional curriculum established for public

administration programs by the National Association of Schools of Public Affairs and Administration (NASPAA).

Concentrations include specialized courses oriented toward the operation and management of public and nonprofit agencies and typically include fiscal management, personnel administration, legal issues, public policy, labor relations, marketing and resource development for nonprofits, and grants and contract management. Electives cover a wide range of important topics, including ethics, leadership, organizational computer usage, internships, and special studies.

Up to 9 units of comparable graduate course work may be transferred into this program per CSU policy.

If at any time it is determined that the candidate has an English deficiency, extra courses in English will be required in addition to the regular course of study.

Admission Requirements

Students apply to **both** the University and to the M.P.A. program.

- A. A bachelor's degree with a major from an accredited college or university with a grade point average of at least 3.00 for the last 60 units of college-level work attempted;
 - B. **Prerequisites:** To ensure adequate background, a candidate for admission should have experience or course preparation in the following areas:
 1. State and local government,
 2. Federalism and intergovernmental relations,
 3. Influences on domestic policy making.
- **Recommended:** One year experience working in a 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;

- C. Completion of **both** University and departmental applications. Included in the departmental application are three letters of recommendation. Only three letters will be considered; and
- D. Recommendation of the program by the graduate coordinator for entrance to the program.

Graduation Requirements for the Master's Degree

- A. A grade point average of at least 3.00;
- B. Satisfactory completion of required coursework, including elective units. No courses for which a grade less than B is earned will be acceptable in meeting the 40-unit M.P.A. requirement. Students earning a B- or lower in a course will be required to repeat the course with a grade of B or better;

- C. Completion of a master's thesis and oral defense, or two comprehensive written examinations;
- D. Recommendation of the program graduate coordinator; and
- E. Successful completion of the WEPT (or its equivalent), or waiver by the University of this requirement. This waiver is granted by the program graduate coordinator.

Course Work

Common Core Requirements - 20 Units

POLS 502 Organizational Theory and Analysis	4
POLS 503 Budget and Fiscal Administration	2
POLS 505 Research Methods	4
POLS 539 Program Implementation	4
POLS 550 Planning and Evaluation	4
POLS 580 Nonprofit Dynamics: Politics and Community Environment	2

Public Management Concentration Requirements - 16 Units

POLS 501 The Administrative State	4
POLS 503A Public Finance	2
POLS 504A Human Resources for the Public Sector	2
POLS 506 Public Policy Process	4
POLS 511 Labor Relations	2
POLS 538 Administrative Law	2

Nonprofit Concentration Requirements - 16 Units

POLS 503B Fiscal Management 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

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Programs Offered

Bachelor of Arts in Psychology
Minor in Psychology
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. The field of psychology develops from continuing questioning and investigation, and contemporary psychologists study areas such as health and wellness, mindfulness, neuropsychology, optimal development, and growth-enhancing interactions. The Department focuses on five subfields in psychology: holistic, clinical / counseling, developmental, social / personality, and cognitive / physiological. Psychology is a field that requires one to apply focused knowl-

edge, abilities, and skills in order to solve human problems. It is an extremely diverse field that attracts people with a wide variety of backgrounds, interests, and skills.

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, an international organization. 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, health psychology, depth psychology, clinical practice and mental health counseling, community health, spirituality and mindfulness, community-based learning, autism, ecopsychology, creativity, and infant 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 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 fruitfully 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.

Some psychologists find it rewarding to work directly with people—for example, helping them to overcome depression, to deal with the problems of aging, or to stop smoking. Others are excited by research questions on topics such as health and well being, decision-making, eating disorders, brain functioning, parenting skills, forensic work, and child development.

Traditionally, psychologists have been employed in universities, schools, and clinics. Today, more than ever before, they can be found working in businesses, hospitals, private practice, courtrooms, sports competitions, police departments, government agencies, private laboratories, and the military, among other settings.

Psychologists fill many different roles. For example, they work as teachers, teaching the discipline of psychology in universities, four-year and two-year colleges, and high schools. Psychologists work as researchers employed by universities, government, the military, and

business to do basic and applied studies of human behavior. Psychologists also work as psychotherapists, helping people to individuate and resolve conflicts. Psychologists work as counselors in school settings, working with students and their families to provide support for the students' social, cognitive, and emotional development. In addition, psychologists work as administrators, functioning as managers in hospitals, mental health clinics, nonprofit organizations, government agencies, schools, universities, and businesses. Psychologists also work as consultants hired for their special expertise by organizations to advise on the subject or problem in which the consultant is an expert, including such tasks as designing a marketing survey or organizing outpatient mental health services for adolescents.

Careers: Graduate Work And Further Training

For most professional work in psychology, a minimum of an M.A. degree is necessary. Most of our students who go on to graduate 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.

Careers: Bachelor's Degree in Psychology

Many undergraduate psychology majors do not go on to do graduate study. A bachelor's degree in psychology means that you graduate with a strong liberal arts education and adequate preparation for entry-level employment in one of many career paths, including:

- Administration and management
- Aging, human services, and advocacy
- Behavior change consulting
- Biofeedback consulting
- Child development programs
- Counseling
- Editing
- Employment interviewing
- Environmental advocacy
- Executive coaching
- Health services
- Marketing and public relations

- Organizational consulting
- Personal coaching
- Personnel and human systems
- Probation and parole
- Psychiatric assisting
- Social service casework and advocacy
- Teaching
- Technical writing

Bachelor of Arts in Psychology Degree Requirements

(See page 235 for a sample four-year program.)

For first-time freshmen	Units
General education	50
Major requirements	44
Electives	26
For transfer students	
General education	48
Major requirements	40
Electives	32
Total units needed for graduation:	120

Major Requirements

The Psychology major consists of 44 units at SSU: 40 units in psychology 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)	3
MATH 165, Statistics (GE Area B4) (or equivalent)	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

No more than 11 of the 44 major units 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.

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 B 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
- 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
- 411 Behavioral & Emotional Problems of Children

- 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 (Diversity)
- 461 Personality
- 490 Seminar: Social / Personality

Cognitive / Physiological

- 362 Human Sexuality
- 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. Courses marked with (Diversity) represent courses that focus on Diversity issues. A maximum of 8 units may be taken C / NC in the major.

Electives

- 303 Person in Society (GE Area D1)
- 306 History of Modern Psychology
- 311 Dialogue Series (C/NC)
- 313 Careers in Psychology
- 324 Learning Moments (C/NC)
- 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)
- 488 Biofeedback Experience (C/NC)
- 493 Narrative: Theories & Methods
- 494 Counseling Experience (C/NC)
- 495 Special Studies (C/NC)
- 496 Psychology Tutorial (C/NC)
- 499 Internship (C/NC)

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 advisor provides information on GE course selection. Psychology department faculty advisors answer questions about the major, provide information about specific 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.

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

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.

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. 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; 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

Fall Semester (14 Units)

PSY 250 (3)
GE (11)

Spring Semester (14 Units)

Elective (4)
GE (10)

SOPHOMORE YEAR: 28 Units

Fall Semester (14 Units)

PSY 270 (4)
MATH 165 (4)
GE (3)
Elective (3)

Spring Semester (14 Units)

PSY 280 (4)
GE (10)

JUNIOR YEAR: 32 Units

Fall Semester (16 Units)

PSY Breadth Area Requirement (4)
PSY Breadth Area Requirement (4)
PSY Breadth Area Requirement (4)
PSY Elective (4)

Spring Semester (15-16 Units)

PSY Breadth Area Requirement (4)
PSY Elective (4)
PSY Elective (4)
Upper-Division GE (4)

SENIOR YEAR: 32 Units

Fall Semester (16 Units)

PSY Elective (4)
Elective (4)
Upper-Division GE (4)
PSY 499 (4)

Spring Semester (16 Units)

Elective (4)
Elective (4)
Upper-Division GE (4)
PSY Elective (4)

TOTAL UNITS: 120

SOCIOLOGY

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www.sonoma.edu/sociology

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James Joseph Dean

Brian Gillespie

*Elaine Leeder

Melinda Milligan

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 ageing,

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 238 for a sample four-year program.)

Degree Requirements	Units
General education	51
Sociology courses	40
General electives	29
Total units needed for graduation	120

Major Requirements

This requirement list and advising guide is designed for students entering the sociology major beginning in Fall 2014. Students who entered the major in earlier semesters may follow the requirements listed in this worksheet or they may complete their requirements using the earlier advising guide.

SOCI 201 Introduction to Sociology	3
SOCI 300 Sociological Research Methods	4
SOCI 375 Classical Sociological Theory	4
Methods Seminar (see below)	4
SOCI 498 Senior Seminar	4
Total units	19

A student must take SOCI 201 before proceeding to any other required sociology course. 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 five required courses. See a faculty advisor in the department for details on these minimum grade requirements.

Methods Seminar

The Methods Seminar furthers students' methodological skills in a wide choice of substantive areas. Students must take one of the following seminars or another course designated as a methods seminar.

SOCI 414 Methods Seminar: Social Interaction
SOCI 418 Methods Seminar: Social Development of Self
SOCI 425 Methods Seminar: Urban Sociology
SOCI 441 Methods Seminar: U.S. by the Numbers
SOCI 443 Methods Seminar: Women and Social Policy
SOCI 452 Methods Seminar: Health Care and Illness
SOCI 463 Methods Seminar: Bureaucracies and Institutions
SOCI 470 Methods Seminar: Culture and Identity
SOCI 480 Methods Seminar: Sociology of Work

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)

Additional Major Requirements

Sociology electives (chosen in consultation with a department advisor)	16-19
Total Units in the Major	40

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.

Substantive Areas of Sociology

Majors must take a minimum of one course in three of the five substantive areas below. Additional area courses may be offered in a given semester. Consult with an advisor.

Microsociology

This area assumes human agency and social action as fundamental to social life and takes into account both thinking and feeling in defining situations and in constructing actions. Microsociology focuses on reciprocal relationships between self and society with emphasis on:

- The social shaping of self, identity, and role;
- The interaction between self and others; and
- The development, maintenance, and change of subjective and social meanings. Applying microsociological approaches to status variables such as gender and age reveals how they are constructed, given meaning, and played out in individual lives.

SOCI 314 Deviant Behavior (cross-listed with CCJS)
SOCI 315 Socialization
SOCI 317 Emotions and Adult Life (cross-listed with GERN)
SOCI 319 Aging and Society (cross-listed with GERN)
SOCI 326 Social Psychology
SOCI 350 City and Community Life
SOCI 414 Methods Seminar: Social Interaction
SOCI 417 Sociology of Mental Illness
SOCI 418 Methods Seminar: Social Development of the Self

Organizations, Occupations, and Work

This area addresses both organizational dynamics and their relation to broader societal processes. These include organizational cultures, structures, processes, and outcomes. Knowledge of these matters is relevant to students interested in human services, business, non-profit agencies, education, and criminal justice administration.

SOCI 306 Careers in Sociology
SOCI 365 Human Services Administration
SOCI 366 Juvenile Justice (cross-listed with CCJS)
SOCI 450 Punishments and Corrections (cross-listed with CCJS)
SOCI 451 Sociology of Education
SOCI 461 Social Work and Social Welfare
SOCI 463 Methods Seminar: Bureaucracies and Institutions
SOCI 480 Methods Seminar: Sociology of Work
SOCI 485 Organizations and Everyday Life
SOCI 496 Internship Practicum (concurrent with SOCI 499)

Macrosociology

Courses in this area investigate large social structures, institutions, networks, and processes that define and shape individual and organizational behavior, and that contribute to social and public policy. This area provides a conceptual overview of diverse social institutions. Macrosociology gives the student new insight into American society and its problems and possibilities from both the personal and professional perspectives.

SOCI 263 Sociology of Race and Ethnicity
SOCI 301 Statistics for Sociologists
SOCI 335 American Society
SOCI 340 Drugs and Society (cross-listed with CCJS)
SOCI 345 Sociology of Families
SOCI 347 American Class Structure
SOCI 377 Contemporary Sociological Theory
SOCI 383 Social Change
SOCI 384 Sociology of Consumption
SOCI 425 Methods Seminar: Urban Sociology
SOCI 440 Sociology of Reproduction (cross-listed with WGS)
SOCI 441 Methods Seminar: U.S. by the Numbers
SOCI 443 Methods Seminar: Women and Social Policy
SOCI 445 Sociology of Childhood and Adolescence
SOCI 452 Methods Seminar: Health Care and Illness
SOCI 488 Selected Topics in Service Learning

Culture

Courses in the sociology of culture introduce students to central social forms that generate, transmit, and/or critique values, ideas, ideologies, lifestyles, and popular culture. Topics include the ways in which culture can act as a socializing agent reaffirming the existing social order or providing impetus to change, helping integrate societies or contributing to dissension. Students considering careers in the media, education, human services, and recreation are among those who will find these classes of special value.

SOCI 312 Sociology of Gender
SOCI 330 Sociology of Media
SOCI 332 Death and American Culture
SOCI 336 Investigative Sociology
SOCI 360 Sociology of Sexualities
SOCI 385 Sociology of Culture
SOCI 431 Sociology of Religion
SOCI 434 Cinema and Society
SOCI 435 Media Censorship
SOCI 470 Methods Seminar: Culture and Identity

Transnational Sociology

Transnational sociology provides a comparative perspective on societies throughout the world. Economic, political, and social institutions and dynamics are examined and compared. Among specific topics are comparative ideologies, roles, world elites, and local communities. Courses in transnational sociology explore these consequences and their long-term implications. Students interested in a historical and comparative examination of international issues would be well served to take courses in this area.

SOCI 380 Political Sociology

SOCI 381 Population and Society
SOCI 382 Social Movements and Collective Behavior
SOCI 449 Sociology of Power
SOCI 482 Sociology of the Environment

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 (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE Comparative Perspectives & Foreign Languages (3)	GE Social Sciences (6)
GE History/Political Science (6)	History of the Fine Arts (3)
Electives (6)	GE World Literature (3)
	Electives (3)

JUNIOR YEAR: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
SOCI 300 (4)	SOCI 375 (4)
Sociology Organizations Area (4)	Sociology Microsociology Area (4)
Sociology UD Electives (4)	UD GE Integrated Person (3)
UD GE Philosophy and Values (3)	Electives (4)

SENIOR YEAR: 29 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (13 Units)</i>
Sociology Methods Seminar (4)	SOCI 498 (4)
Sociology Transnational Area (4)	SOCI 499 (4)
UD GE Contemporary International Perspectives (3)	Electives (5)
Electives (5)	

TOTAL UNITS: 120

STATISTICS

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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 foun-

ation 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 241 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 (B4)	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 242 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 telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

Grading Policy in the Department of Mathematics and Statistics

Non-majors

All mathematics and statistics courses except MATH 35, 45, 103, 104, 105, 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

Fall Semester (16 Units)

MATH 161 (B4) (4)

MATH 165 (4)

Freshman Learning Community (GE) (5)

GE (3)

Spring Semester (15 Units)

MATH 211 (4)

MATH 265 (4)

Freshman Learning Community (GE) (4)

GE (3)

SOPHOMORE YEAR: 31 Units

Fall Semester (16 Units)

MATH 241 (4)

MATH 367 (2)

MATH 220 (A3) (4)

GE (6)

Spring Semester (15 Units)

MATH 261 (4)

MATH 322 (4)

GE (4)

Elective (3)

JUNIOR YEAR: 30 Units

Fall Semester (15 Units)

MATH 345 (4)

Elective (4)

GE (4)

UD GE (3)

Spring Semester (15 Units)

MATH 381 (2)

MATH 445 (4)

Elective (6)

UD GE (3)

SENIOR YEAR: 28 Units

Fall Semester (14 Units)

MATH 340 (4)

UD GE (3)

Elective (7)

Spring Semester (14 Units)

MATH 465 (4)

Elective (6)

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/theatre

DEPARTMENT CHAIR

Kristen Daley

PERFORMING ARTS PROGRAM SPECIALIST

Alyssa Corona

Faculty

Acting: Paul Draper, Danielle Cain, Stephanie Hunt, Brent Lindsay, Doyle Ott, John Sullins

Dance: Kristen Daley, Christine Cali, Jennifer Jaffe, *Nancy Lyons, Scott Wells, Mo Miner, Raul Duenas

Theatre Studies: Scott Horstein, Judy Navas

Technical Theatre: Anthony Bish, Peter Crompton, Kristin Torok

**Professor Emeritus*

Guest Artists

Theo Bridant, Christine Cali, Danielle Cain, John Connole, Adam Chanzit, Alex de Grassi, Adrian Effenbaum, Doug Elkins, Mark Haim, Rob Brent Hamilton, Kathleen Hermesdorf, Pamela Johnson, Julia Kwitchoff, Liz Lerman, Cassie Meador, Matthew Cumbie, Brent Lindsay, Albert Mathias, Will McCandless, Amanda McTigue, Jesse Olsen Bay, Maureen O'Sullivan, Doyle Ott, Claire Porter, 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

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 247 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, playwriting, 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 247 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 248 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
---	---

** 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
 ART 101 Art Fundamentals (strongly recommended)
 ART 102 Art Fundamentals (strongly recommended)

Choose 3 units from the following dance/drama courses:

THAR 120A or B Acting: Fundamentals
 THAR 110 Dance Fundamentals
 THAR 210A Contemporary Dance I
 THAR 116 Comedy and Improvisation

Total units in Phase I

Phase II, Required (junior and senior years)

THAR 300 Theatre in Action
 THAR 344A Design for the Stage
 THAR 344B Design for the Stage
 THAR 321A Intermediate Technical Block
 THAR 321B Intermediate Technical Block
 THAR 350 Directing Workshop
 THAR 370A Early Plays: Evolution and Innovation
 THAR 370B Modern Plays: Evolution and Innovation
 THAR 400 Theatre of Today
 THAR 421A Advanced Technical Block
 THAR 421B Advanced Technical Block
 THAR 444 History of Ornament
 Electives - Theatre

Total units in Phase II

Total units in the technical theatre concentration

**Bachelor of Arts in Theatre Arts with
 Concentration in Theatre Studies**

(See page 248 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

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

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,

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

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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 251-252 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.

- Women and Gender in American Society
- Women and Gender in the Humanities

- Biological and Psychological Perspective on Women or Gender
- Women or Gender in International and Cross-Cultural Perspective
- Special Topics on Women or Gender

For more information, please come to the Women's and Gender Studies Department office (664-2840), Rachel Carson 18.

Total units in the WGS minor 16

Career Minor in Women's Health

Women's health is a large and growing area of research and policy interest in the United States. The career minor in women's health provides students with interdisciplinary coursework, training, and work experience in the social, political, and economic aspects of women's health and illness. Career needs of both health care providers and liberal arts and sciences majors are addressed. It is a highly suitable program for those interested in pursuing careers as nurses, physicians, counselors, therapists, public health workers, research analysts, policy makers, and in a variety of other fields.

Minor Core Requirements (6 units)

WGS 280 Women's Bodies: Health and Image	4
NURS 480 Health, Sexuality, and Society or	
WGS 350 Gender, Sexuality, and Family	3-4

Practical Application (4 units)

WGS 499 Internship in Women's Health Setting or	
NURS 414 Clinical Nursing Preceptorship	5

Electives (10-11 units)

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

Suggested Electives

ANTH 318 Human Development: Sex and Life Cycle	3
BIOL 311 Sexually Transmitted Diseases	3
BIOL 318 Biology of Aging	3
GERN 300 Basic Gerontology	3
GERN 319/SOCI 319 Aging and Society	3
KIN 316 Women in Sports: Issues, Images, Identities	3
NURS 303 Maternity and Womens Health Care	6
NURS 409 Nursing Care of Child in Family	6
NURS 345 Clinical Practicum Expanding Family (Nursing only)	
PSY 362 Human Sexuality (Summer)	4
PSY/GERN 408 Transitions of Adult Development	4
PSY 418 Psychology of the Family	3-4
PSY 454 Biofeedback Somatics and Stress Management	4
SCI 150 Introduction to Careers in Health Professions	1
WGS 301 Feminist Lecture Series	1-2
WGS 440/SOCI 440 Sociology of Reproduction	4
WGS/NURS 495 Special Study Research on Women's Health	1-4

Total units required in women's health minor 20

For more information come to the Women's and Gender Studies Department Office in Rachel Carson 18.

Minor in Queer Studies

The minor in queer studies gives students competency within a dynamic field of interdisciplinary scholarship related to lesbian, gay, bisexual, and transgender lives as well as gender and sexual structures and identities. It provides coursework in queer theory, politics, history, sociology, psychology, cultural criticism, and methodology. The queer studies minor will augment students' pursuit of graduate and professional degrees. In a public- and private-sector job market with increasing demand for nuance in issues of diversity and critical flexibility, the minor will position graduates on the leading edge in many fields, including social work, counseling, education, health-care, social service, media, policy, nonprofit advocacy, and social marketing.

Minor Core Requirements (12 units)

WGS 255 Introduction to Queer Studies (Fall only) (GE D1)	4
WGS 301 Queer Studies Lecture Series (Spring only)	1
WGS 350 Gender, Sexuality, and Family (GE E)	3-4
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 260 Sexual Identities	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

<i>Fall Semester (14 Units)</i>	<i>Spring Semester (15 Units)</i>
WGS 350 (3)	WGS 375 (3)
WGS Elective (3)	WGS 390 (4) and WGS 499 (2)
Gender course in disciplinary concentration (4)	Disciplinary course (4)
Course in disciplinary concentration (4)	Upper-Division GE (3)

SENIOR YEAR: 30-32 Units

<i>Fall Semester (16 Units)</i>	<i>Spring Semester (15 Units)</i>
WGS 425 (4)	WGS 485 (4)
WGS 475 (4)	WGS 499 (2)
Disciplinary course (4)	WGS elective (3)
Course to complete the minor in a discipline (4)	Upper-Division GE (3)
	Electives (3)

TOTAL UNITS: 120

COURSE DESCRIPTIONS

American Multicultural Studies (AMCS)

AMCS 160A HUMANITIES LEARNING COMMUNITY (4)

AMCS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Area.

AMCS 160B HUMANITIES LEARNING COMMUNITY (4)

AMCS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Area.

AMCS 200 WRITTEN AND ORAL ANALYSIS (3)

Students practice the techniques of critical reading and thinking, of expository writing, and of oral expression through an in-depth examination of race, ethnicity, and multiculturalism and its impact on American cultural, political, and social institutions. They examine the principles of thinking, speaking, and writing with a view to the multiple purposes for which these activities are crucial. Satisfies GE Area A1. Prerequisites: Completion of GE Areas A2 and A3. Students who received a passing grade in AMCS 225 may not enroll in AMCS 200 without instructor consent.

AMCS 210 ETHNIC GROUPS IN AMERICA (4)

Survey and analysis of the diverse experiences of major ethnic groups in their present socioeconomic and political position in American society as depicted in literary, historical, anthropological, and sociological studies. Satisfies Ethnic Studies in GE Area D1. This course satisfies one of the core requirements of the AMCS major.

AMCS 225 HOW RACISM WORKS: AMERICA IN BLACK AND WHITE (4)

Students analyze the ideological aspects and material conditions of American life through an in-depth examination of the impact of race and ethnicity on U.S. history and its cultural, political, and social institutions. The course will concentrate particularly on investigating how racism works in the 21st century through the study of literature and values. Fulfills GE Area C2 and the Ethnic Studies requirement. Students who received a passing grade in AMCS 200 may not enroll in AMCS 225 without instructor consent.

AMCS 260 ETHNICITY IN THE ARTS, CULTURE, AND MEDIA (4)

Students will explore the impact that the arts, media, and humanities have had on perceptions of race, ethnicity, and identity in the United States. The course will integrate a wide variety of forms — including film, theater, and music — to encourage student appreciation of artistic endeavors. Fulfills GE Area C1 and the Ethnic Studies requirement.

AMCS 339 ETHNIC GROUPS AND AMERICAN SOCIAL POLICY (3)

The impact of American social policies on ethnic minorities. Topics include public policy issues related to employment, immigration, education, mental health, and minority children and families. The impact of major court decisions affecting public policy and ethnic minorities will also be examined. Course might be taught from single ethnic group's perspectives. Satisfies upper-division Ethnic Studies in GE Area D1.

AMCS 350 ETHICS, VALUES, AND MULTICULTURALISM (4)

This course examines theories and discourses of race, ethnicity, and multiculturalism and their impact on American thought and practice. Students will explore questions of ethics and values that shape the U.S. as a multicultural society and learn about conceptual tools they can apply in thinking critically about these issues in the various contexts they live in. Satisfies GE Area C2, and the Ethnic Studies requirement.

AMCS 355 LANGUAGE AND ETHNICITY (4)

An interdisciplinary approach to understanding the interrelationships between language ethnicity, and the symbolic conflicts over language issues in the U.S.. Explores the politics of language — e.g. the English-Only debates, bilingual education issues, and minority language rights and cultural issues — and their impact on different ethnic groups. Examines the responses of affected groups through their literary and creative expressions. Satisfies the Ethnic Studies requirement and GE Area C3.

AMCS 360 ETHNIC LITERATURE (4)

A survey of representative novels, short stories, essays, biographies, and poetry of various ethnic authors in the United States. This course may also provide an in-depth study of one or more specific ethnicities (e.g. Asian American, African American, the poetic tradition in ethnic literature, women in ethnic literature, etc.) and may include multimedia instruction such as film, music, and visual art. Satisfies GE Area C2. Satisfies the upper-division Ethnic Studies requirement.

AMCS 370 GENDER IN ASIAN AMERICA (4)

This course originates in WGS 370. This interdisciplinary course examines gender, race, class, and sexuality in Asian America. We consider how Asian American women and men fit into debates about sexism and racism in the United States - historically and contemporarily. Topics include Asian American participation in women's/civil right movements as well as popular culture representations. Cross-listed as WGS 370.

AMCS 374 THE MULTIRACIAL EXPERIENCE (4)

A general survey of the historical and contemporary experience of people claiming more than one racial or ethnic background. Emphasis will be given to inter-racial relations, the impact of political and social factors, and the cultural expressions of the multiracial experience.

AMCS 377 ASIAN AMERICAN EXPERIENCE (4)

A course designed to explore areas of contemporary, historical, or artistic concern as these affect the Asian American experience. Advanced studies and/or research projects will be discussed and analyzed.

AMCS 381 RESEARCH ASSISTANTSHIP (2-4)

Student assistance to help faculty with research on the experiences of people of color in America. Topic matter and research agenda will be discussed with faculty. By individual arrangement with faculty sponsor.

AMCS 385 FACILITATION TRAINING (2-4)

Facilitation pedagogy training in active learning situations within established courses. Prerequisite: junior- or senior-level standing with satisfactory completion of either AMCS 210 or 255. By individual arrangement with instructor.

AMCS 392 ETHNIC IMAGES IN FILM AND MEDIA (4)

An examination of representative and significant works in film and other visual media tracing the evolution of racial and ethnic images from their earliest to latest manifestations. Examines how systems of representation shape the racial and ethnic discourses in U.S. society. Satisfies GE Area C1 and the Ethnic Studies requirement.

AMCS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Course provides students with practical experience in various community organizations and health and social service agencies and educational settings. Includes schools, recreation programs, tutoring programs, day care centers, cultural arts organizations, civic promotion organizations, etc.

AMCS 399 STUDENT-INITIATED COURSE (1-4)

Student-initiated and instructed course on topics that enrich or extend current departmental offerings. Students may take up to 4 units of AMCS 399 courses for major credit.

AMCS 420 GENDER AND ETHNICITY (4)

A historical overview of racism and sexism as they affect women of color, focusing on issues in which racism and sexism intersect, e.g. affirmative action, abortion, sterilization, violence against women, and other issues.

AMCS 445 MULTI-CULTURALISM AND EDUCATION (4)

An analysis of the philosophical and definition issues related to pluralistic education; developing resources germane to this philosophy and the guidelines constituting the foundation for multiethnic educational programs and ethnic studies.

AMCS 475 GLOBALIZATION AND RACE IN THE UNITED STATES (4)

The United States, as one of the destination countries of diasporic peoples in this era of globalization, has often responded to the crises of globalization through racialization. This course emphasizes the importance of understanding this crisis and explores the possibilities of creating anti-racist strategies and new social movements.

AMCS 476 SELECTED TOPICS IN AFRICAN AMERICAN STUDIES (4)

Subjects will vary by semester, but this course will concentrate on topics and periods in African American History. Students will be required to do a research project in this course. Students will also be asked to review primary documents in African American history. Topics subject to change.

AMCS 480 RESEARCH AND METHODOLOGY (4)

Survey of research and methodological tools used in the study of American ethnic groups. Special attention is given to the problems of objectivity and bias and the political and moral implications of quantitative and field research. Students engage in semester-long research projects. Students can substitute CALS 458 Research and Methodology for this course.

AMCS 481 SPECIAL TOPICS (1-4)

Please refer to the current Schedule of Classes.

AMCS 495 SPECIAL STUDIES (1-4)

Independent study. Prerequisites: AMCS 210 or 255, a core upper-division course, approval of the supervising faculty member, and approval of the department chair. May be repeated for credit.

AMCS 499 SERVICE LEARNING INTERNSHIP (1-4)

Course provides students with practical experience in various ethnic community organizations and in health/social service/educational settings. Includes recreation programs, tutoring programs, day care centers, cultural arts organizations, civic promotion organizations, etc.

Anthropology (ANTH)**ANTH 200 INTRODUCTION TO LINGUISTIC ANTHROPOLOGY (3)**

This introduction to the anthropological study of language surveys core topics in linguistics (e.g., phonetics, morphology, syntax, semantics, and pragmatics) and the relationship of language to social, cultural, and psychological factors. Nonverbal communication, evolution of language abilities, and historical linguistics are included, with linkages to the other subfields of anthropology. Satisfies GE Area D5.

ANTH 201 INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY (3)

This course is an introduction to the evolutionary biology of human and nonhuman primates. The course focuses on evolutionary perspectives on form and function, behavior, population, and social structure to reconstruct human evolution and explain human adaptations. Satisfies GE Area B2 (Biological Sciences).

ANTH 202 INTRODUCTION TO ARCHAEOLOGY (3)

An introduction to archaeology as a method of inquiry, the course seeks to answer the question "How do archaeologists know what they know?" Topics include history of archaeology, field and laboratory methods, relationship between method and theory, and "scientific" and humanistic approaches to the interpretation of data.

ANTH 203 INTRODUCTION TO CULTURAL ANTHROPOLOGY (3)

Examination of the anthropological approach to the study of human behavior. Exploration of human dependence on learned, socially transmitted behavior through consideration of ways of life in a broad range of societies. Satisfies GE Area D1 (Individual and Society).

ANTH 300 NATURE, CULTURE, AND THEORY: THE GROWTH OF ANTHROPOLOGY (4)

The nature of science, disciplinary inquiry, and the changing intellectual, institutional, and material context of the development of anthropology and its four major subfields in the contemporary world. Identification of significant issues, schools of thought, and historic persons. Training in the analysis of primary sources, scholarly procedure, library research, bibliography, and professional format and style. Prerequisites: at least one of the following: ANTH 200, 201, 202, or 203. Restricted to Anthropology juniors, seniors, and graduate students only.

ANTH 301 HUMAN FOSSILS AND EVOLUTION (4)

This course reviews the fossil evidence for human evolution in Africa, Asia, and Europe during the Pliocene-Pleistocene epochs. The fossil evidence is treated in temporal, geological, and geographic contexts. The primary focus is on the evolutionary implications of the fossil evidence for understanding the evolution of human morphology and behavior. Implications for the emergence of modern human races are also considered. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor.

ANTH 302 BIOLOGICAL BASIS OF SEX DIFFERENCES (4)

An examination of the current theoretical frameworks for explaining the evolution of sex differences in humans. Issues addressed will include: evolution of behavior and the sex differences in morphology and behavior, ecological basis of sex differences in hominin evolution. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor.

ANTH 303 HUMAN BEHAVIORAL ECOLOGY (4)

This course is an introduction to human behavioral ecology, the application of evolutionary and biological models to the study of human behavioral variation. Topics of discussion will include optimal foraging theory, kin selection, resource transfer, mate choice, and parental investment. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor.

ANTH 305 TOPICS IN BIOLOGICAL ANTHROPOLOGY (4)

In-depth examination of a specific topic within biological anthropology. Topics vary with each offering and might include: history of biological anthropology, human behavioral ecology, human osteology, human variation, bioarchaeology, evolution of human and/or primate social behavior. May be repeated for credit with permission of chair if topic differs. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor.

ANTH 313 PRIMATE BEHAVIORAL ECOLOGY (4)

This course will familiarize students with our closest living relatives, the primates. Topics include taxonomy, diets & dietary adaptations, ranging behavior, cooperation & competition, community ecology, and conservation. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor. This course is strongly recommended in preparation for ANTH 414.

ANTH 315 FORENSIC ANTHROPOLOGY THEORY AND PRACTICE (4)

This course explores the theories underlying forensic anthropology and how they are put into practice. Topics include a history of the discipline, professional responsibilities in the autopsy suite and courtroom, taphonomy and the estimation of time since death, techniques and contexts for positive identification, and depictions of forensic anthropologists in popular culture. Examination of case studies at local, national, and international scales. Prerequisite: completion of GE Area B2 and upper-division standing, or consent of instructor.

ANTH 318 HUMAN DEVELOPMENT: SEX AND THE LIFE CYCLE (3)

An examination of developmental and evolutionary aspects of human reproductive biology and behavior from fetal through adult stages. Sexual selection and life history perspectives on fetal sex differentiation, gender identity, sex role development, puberty and secondary sexual characteristics, and mate choice. Satisfies GE Area E (The Integrated Person). Prerequisite: completion of GE Area B2 and open to juniors, seniors, and graduate students only.

ANTH 322 HISTORICAL ARCHAEOLOGY (4)

Introduction to the history, methods, and issues of the field of historical archaeology. Extensive readings provide examples of archaeology from post-1300s contexts in North America, Africa, Australia, and Latin America. Topics covered range from archaeological approaches to ethnic, gender and class diversity to the study of large-scale processes of colonialism, industrialism and global expansion. Broader issues discussed include the relationships between history and anthropology, the cross-cultural impact of European expansion, and the development of contemporary industrial societies. Prerequisite: upper-division standing or consent of instructor.

ANTH 325 WORLD PREHISTORY (4)

A global survey of the human past from the earliest evidence of tool use to the emergence of stratified urban societies. Emphasis is on the complex diversity of past lifeways, including the reconstruction of human social and material life, the development of different social systems, and connections between societies and their physical environment. Limited discussion of relevant archaeological methods of reconstruction and analysis. Prerequisite: upper-division standing or consent of instructor.

ANTH 326 TOPICS IN ARCHAEOLOGY (4)

Topics vary with each offering; may be repeated for credit with permission of chair. Possible topics might include: environmental adaptation in foraging groups, Holocene transition studies, early food production, emergent cultural complexity, technological innovation and change regional studies, materials analysis, and geoarchaeology. Prerequisite: upper-division standing or consent of instructor.

ANTH 327 ARCHAEOLOGY OF NORTH AMERICA (4)

This course is a broad survey of the regions, periods, and issues relevant to the study of the North American archaeological record. Topics range from the human settlement of the hemisphere, and the many diverse cultural histories of the continent, through the development of key cultural components such as trade and exchange networks, food production systems, and urban societies, to the increasing impact of cultural resource legislation and the views and interests of modern indigenous populations on contemporary archaeological practice. Prerequisite: upper-division standing or consent of instructor.

ANTH 329 BIOARCHAEOLOGY (4)

Bioarchaeologists use human remains obtained from archaeological settings to reconstruct past lifeways. Key concepts include recovery and analysis of human remains, human skeletal anatomy, disciplinary ethics, bodily expressions of disease and behavior, social complexity and population affinity, and embodied identity. Use of case studies reveals how bioarchaeological methods and theories are implemented around the world. Prerequisite: upper-division standing or consent of instructor.

ANTH 340 LIVING IN OUR GLOBALIZED WORLD (3)

This course explores differences in human cultures primarily as highlighted through cultural interactions. Focus is on learning to perceive how cultural differences influence the dynamics of human interactions and relationships at the level of the individual, the community, the nation, and the world. This will contribute to an understanding of the processes and patterns shaping our lives allowing students to develop the skills and perspectives necessary to live in the global community. Not applicable to the Cultural Anthropology subfield requirement for the Anthropology major. Satisfies upper-division GE Area E (The Integrated Person). Prerequisite: upper-division standing or consent of instructor.

ANTH 341 EMERGENCE OF CIVILIZATIONS (3)

A presentation of theory and data related to the development and characteristic features of civilization. Such crucial issues as the domestication of plants and animals, the appearance of stratified societies, the emergence of urban life, the emergence of literacy and its implications for thought, and the emergence of the state will be addressed from a comparative perspective. The course takes a global approach to these topics, covering materials from Southwest Asia; Africa; the Mediterranean; and North, Central, and South America. Not applicable to the Archaeology subfield requirement for the anthropology major. Satisfies upper-division GE Area D2 (World History and Civilization). Prerequisite: upper-division standing or consent of instructor.

ANTH 342 ORGANIZATION OF SOCIETIES (4)

Intensive in-class discussions of accounts from several societies, past and present. Discussions address key issues in cultural analysis (e.g., status, kinship, gender and identity, symbolism) by means of cross-cultural comparison and a holistic examination of culture. Students are encouraged to think critically and interpretively about the organization and cultural practices of the societies under review. Prerequisites: ANTH 203 and upper-division standing or consent of instructor.

ANTH 345 NATURE AND SOCIETY: TOPICS IN ANTHROPOLOGY AND THE ENVIRONMENT (4)

Using the methods of anthropology, this course focuses on the study of environmental issues. The course covers the history of anthropological approaches to the environment. Selected topics such as human ecology, historical ecology, natural resource management, environmental justice, and environmentalism will be announced in the semester schedule. May be repeated for credit. Prerequisite: upper-division standing or consent of instructor.

ANTH 352 GLOBAL ISSUES (4)

This course explores anthropological perspectives on global issues. The course includes a brief introduction to the theoretical frameworks developed in the discipline for studying issues that impact humanity on a global scale. Possible topics may include: globalization, global capitalism, global climate change, international development, population movements such as international migration and diasporas, and global impacts of diseases such as HIV/AIDS and SARS. Topics vary with each offering; may be repeated for credit with consent of instructor. Prerequisite: upper-division standing or consent of instructor.

ANTH 354 QUEST FOR THE OTHER: TOURISM AND CULTURE (4)

Examines the nature of tourism as a social and economic force. Different forms of tourism (eco, ethnic, heritage mass, elite, etc.) are assessed both in terms of impacts on host cultures and their environments as well as tourists themselves. Case studies illustrate the positive and negative impacts of tourism as an agent of culture change. Prerequisite: upper-division standing or consent of instructor.

ANTH 358 TOPICS IN SOCIOCULTURAL ANTHROPOLOGY (4)

In-depth examination of a specific topic within sociocultural anthropology. Topics vary with each offering and might include: medical anthropology; economic anthropology; political anthropology; or issues such as homelessness, social capital, or community. May be repeated for credit if topics vary. Prerequisite: upper-division or graduate standing or consent of instructor.

ANTH 380 LANGUAGE CULTURE, AND SOCIETY (4)

A survey of basic issues concerning language as a part of human behavior, the symbolic nature of human communication, language as an interpretive model for culture, the social nature of language, the psychobiological bases of language and its acquisition, human and nonhuman communicative behavior, and verbal and nonverbal communication. Prerequisites: upper-division standing and ANTH 200 or ANTH 203 or ENGL 203, or consent of instructor.

ANTH 382 LANGUAGE CHANGE (4)

Survey of the distribution of the world's languages and language families, with discussion of language evolution and areal, genetic, and typological classifications of languages. Study of the languages in contact and the processes of language change with attention given to the history of writing systems and to writing as a source of evidence for the reconstruction of linguistic change. Prerequisites: ANTH 200 or ANTH 203 and upper-division standing, or consent of instructor.

ANTH 383 LANGUAGE IN SOCIOPOLITICAL CONTEXT (4)

Focus on such topics as language attitudes, political power and linguistic equality, language and sociopolitical institutions, and language planning. Practical introduction to the insights offered by discourse analysis to the study of language varieties reflected in particular geographical regions, and by members of particular social classes/groups. Prerequisites: ANTH 200 or ANTH 203 or ENGL 203 and upper-division standing or consent of instructor.

ANTH 384 TOPICS IN LINGUISTIC ANTHROPOLOGY (3-4)

Topics may include: language acquisition, ideology, policy, revitalization, evolution, creolization and language contact, semantics and pragmatics, and sociolinguistics. Topics vary with each offering. Prerequisite: upper-division standing or consent of instructor.

ANTH 386 SIGN LANGUAGES AND SIGNING COMMUNITIES (4)

Focus is on sign languages used in Deaf communities around the world, with an emphasis on three themes: (a) language as a system, (b) language in cultural and social context, and (c) language relationships in space and time. No previous knowledge of sign language is required. Prerequisites: ANTH 200 or ENGL 203, and upper-division standing, or consent of instructor.

ANTH 392 RESEARCH IN CALIFORNIA PREHISTORY (4)

A seminar offering an introduction and review of a specific topic in California prehistory, emphasizing method and theory. Specific topics — such as regional culture history, subsistence and settlement, trade and exchange prehistoric technology and osteology — will be announced in the semester schedule. Prerequisite: upper-division standing or consent of instructor.

ANTH 395 COMMUNITY INVOLVEMENT PROGRAM (1-3)

An experience involving the application of anthropological method and theory to community service work. Requirements: approval of a project of anthropological relevance, a minimum of 30 hours per unit of credit in the actual working situation, regular consultation with a faculty sponsor, and a paper to be determined by the student and faculty member in charge. Prerequisites: major status, upper-division standing, and consent of instructor. May be repeated for credit.

ANTH 396 EXPERIMENTAL COURSES (1-3)**ANTH 399 STUDENT INITIATED COURSE (1-3)**

Student-initiated and -instructed courses on topics that enrich or extend current departmental offerings. Cr/NC only. May be repeated for credit.

ANTH 400 ANTHROPOLOGY TEACHING PRAXIS (1-3)

Supervision and assessment of curriculum development, course assessment as applicable to students in instructional or faculty-adjunct roles. May be repeated for credit. Instructor consent required.

ANTH 401 SCURF PLANNING AND PUBLICATION (1-2)

Planning, organizing, and implementing the Society and Culture Undergraduate Research Forum. Students learn about all aspects of conference organization and proceedings publication. The fall semester emphasizes event production, abstract solicitation and selection, publicity, and budgeting. The spring semester emphasizes the latter categories as well as journal editing, layout, and publication. May be repeated for credit. Prerequisite: Instructor consent required.

ANTH 412 HUMAN OSTEOLOGY (4)

Combined lecture/laboratory course on the anatomy and biology of the human skeleton. Students learn to identify the bones and teeth of the human skeleton; the landmarks used for osteological analyses; and how morphological and metric analyses of bones and teeth can reconstruct personal biographies and population histories. Prerequisites: completion of GE Area B2 and upper-division standing, or consent of instructor.

ANTH 414 PRIMATE OBSERVATIONAL METHODS (4)

In this research methods course, students will learn how to describe and analyze primate behavior through direct observations of local fauna and captive primates at Bay Area zoos. Prerequisites: completion of GE Area B2 and upper-division or graduate standing, or consent of instructor. Completion of ANTH 313 is strongly recommended.

ANTH 415 FORENSIC ANTHROPOLOGY METHODS (4)

Combined lecture/laboratory course for students interested in the methods used by forensic anthropologists. Topics include learning the anatomy of the human skeleton; creating a biological profile by estimating age, sex, stature, and ancestry; identifying the effects of trauma and pathology on bone to discover cause and manner of death; and understanding forensic anthropologists' role in crime scene investigation. Prerequisites: completion of GE Area B2 and upper-division standing, or consent of instructor.

ANTH 420 ARCHAEOLOGY METHODS: LECTURE (3)

Basic methods of archaeological reconnaissance, excavation and laboratory analysis. Class time is divided between lecture/discussions, survey and excavation on local archaeological sites, and processing and analyzing excavated collections of artifacts. Prerequisites: concurrent enrollment in ANTH 421 and upper-division standing.

ANTH 421 ARCHAEOLOGY METHODS: LABORATORY (1)

Prerequisite: concurrent enrollment in ANTH 420.

ANTH 444 MATERIAL CULTURE STUDIES (4)

An interdisciplinary examination of the objects, structures, technologies and environments humans create and use. Compares approaches from anthropology, archaeology, folklore, history, vernacular architecture, and cultural landscape studies. Introduces students to material culture study methods, emphasizing techniques of identifying, recording, analyzing and interpreting a wide range of material culture categories. Prerequisites: Class open to Juniors, Seniors, and Graduate Students only, or consent of instructor.

ANTH 451 APPLIED ETHNOGRAPHIC METHODS (4)

This is an applied research course designed to link theory, field research, data collection, and service learning in the local community. This will include research design, data collection and analysis, and final report preparation and presentation. Other topics covered include historic overview of the development of applied anthropology, the uses and roles of anthropology outside academia, survey of professional practice including ethical considerations, state of the job market, techniques for career preparation, and issues of generalization versus specialization. Prerequisites: ANTH 201 or 203 and upper-division standing or consent of instructor.

ANTH 454 ETHNOGRAPHIC FIELD SCHOOL (4)

A field school designed to help students develop their ethnographic field work skills, especially rapid appraisal techniques in an applied setting. Students will learn how to design and carry out a research project utilizing such skills as participant observation, interviewing, and data analysis. Students will be required to write a report based on their research and experiences. Contact department for more information. May be repeated for credit. Prerequisite: upper-division standing or consent of instructor.

ANTH 480 STUDIES OF LANGUAGE USE (4)

Application of methods and procedures used in the investigation of communication in natural contexts. Topics include research ethics, problem formation, research design, basic data gathering techniques and strategies (with an emphasis on linguistic approaches), quantitative and qualitative data analysis and report writing. Prerequisites: ANTH 200 or ENGL 203 and upper-division standing, or consent of instructor.

ANTH 490 TOPICAL SEMINAR IN ANTHROPOLOGY (1-4)

May be repeated for credit if topic differs. Prerequisite: upper-division standing or consent of instructor.

ANTH 491 SENIOR SEMINAR (1)

The focus of the seminar may vary, but the class will comprehensively address the four goals of the anthropology major — comparative perspective, four-field coverage integration of the four field approach, and ethical awareness — through discussion of areas of special interest to the department faculty. Project and activities will be designed that will require students to demonstrate their mastery of curricular goals as outlined in the department's assessment program. Majors are strongly encouraged to enroll during their final spring semester prior to graduation. Prerequisite: Anthropology majors with senior-level standing or consent of instructor.

ANTH 495 SPECIAL STUDIES (1-4)

During the first week of the semester, students interested in special studies in anthropology must submit a written proposal and an outline of projected work to a faculty sponsor for approval. Each unit of credit requires a minimum of 45 hours of work per semester (3 hours per unit per week), including regular consultation with an evaluation by the faculty member in charge. Prerequisite: ANTH 201 or 203, or an appropriate upper-division course in anthropology, or an upper-division course relevant to the proposed topic from another discipline. May be repeated for credit.

ANTH 496 AGENCY INTERNSHIPS (1-3)

Students in the internship program have an opportunity to apply anthropological theory and methods to a variety of situations in public and private agencies. Internships require faculty approval and a minimum of 45 hours of work per unit per semester, including regular consultation with the faculty sponsor. This internship is usually overseen by supervisors in off-campus agencies who report to faculty supervisors. Cr/NC only. May be repeated for credit. Prerequisite: upper-division standing or consent of instructor.

ANTH 496A INTERNSHIP IN ARCHAEOLOGY (2-3)

Students will team with staff of SSU's Anthropological Studies Center to perform, for example, pre-field research, recognize and record archaeological sites, use GPS equipment, make computer-generated maps, and complete state record forms. Activities will vary depending on available projects. Internships require a minimum of 45 hours of work per semester/unit, including regular consultation with faculty sponsor. Cr/NC only. Prerequisite: consent of instructor. May be repeated for credit.

ANTH 497 ANTHROPOLOGY INTERNSHIPS (1-3)

Students in the internship program have an opportunity to apply anthropological theory and methods to a variety of situations in public and private agencies. Internships require faculty approval, a minimum of 45 hours of work per unit per semester, including regular consultation with and evaluation by the faculty sponsor. Cr/NC only. May be repeated for credit. Prerequisites: upper-division standing and consent of instructor.

ANTH 500 PROSEMINAR (4)

Introduction to research methodology in the social sciences; research design and implementation, use of library and archival materials, editorial review of writing, and guide to preparation of professional anthropological papers. Prerequisite: admission into Cultural Resources Management Program or consent of instructor.

ANTH 502 ARCHAEOLOGY: HISTORY AND THEORY (3)

The rise of theoretical archaeology, with emphasis on the range of theoretical approaches taken by archaeologists and the nature of archaeological problem solving in theory and practice. Prerequisite: graduate status or consent of instructor.

ANTH 503 SEMINAR: CULTURAL RESOURCES MANAGEMENT (3)

Who owns the past and who has the right to manage it? Review of federal, state, and local legislation pertinent to the inventory, evaluation, and treatment of archaeological sites, historic buildings, and places that are important to Native Americans and others. Emphasis is placed on process of evaluation according to legal guidelines including, CEQA, the Section 106 Process, and the National Register of Historic Places. Prerequisite: graduate standing or consent of instructor.

ANTH 554 FIELD SCHOOL IN CULTURAL HERITAGE MANAGEMENT (4)

A field school designed to introduce graduate students to fieldwork in cultural heritage management. Students will learn how to design and carry out a research project utilizing skills appropriate to the specific focus of their project. Students will be required to write a report based on their research and experiences. Contact department for more information. May be repeated for credit. Prerequisite: graduate status or consent of instructor.

ANTH 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

ANTH 590 ADVANCED SEMINARS IN ANTHROPOLOGY (1-3)

In-depth consideration of specific anthropological, applied anthropology or anthropologically related topics. Topics will vary from semester to semester. Prerequisite: graduate standing or consent of instructor.

ANTH 592 PRACTICUM IN NATIONAL REGISTER OF HISTORIC PLACES (2)

This hands-on course will introduce students to the process by which historic buildings are recorded and evaluated for eligibility to the NRHP. Classes will cover basic wood-frame construction techniques, basic architectural description, and how to undertake focused historical research in official records. Students will learn to identify and describe a historic building; document it using photographs, plans, and detailed drawings; and reconstruct its history. Prerequisite: graduate standing or consent of instructor.

ANTH 595 SPECIAL STUDIES (1-4)

During the first week of the semester students interested in special studies in anthropology must submit a written proposal and an outline of projected work to a faculty sponsor for approval. Each unit of credit requires a minimum of 45 hours of work per semester, which includes regular consultation with and evaluation by the faculty member in charge. Prerequisites: graduate standing and consent of supervising instructor.

ANTH 596 AGENCY INTERNSHIPS (1-3)

Students will have an opportunity to apply anthropological theory and methods and/or cultural resources management procedures as interns with public and private agencies. Internships require faculty approval and a minimum of 45 hours of work per unit per semester, including regular consultation with the faculty sponsor. This internship is usually overseen by supervisors in off-campus agencies who report to faculty supervisors. Cr/NC only. May be repeated for credit. Prerequisites: graduate standing and consent of instructor.

ANTH 596A INTERNSHIP IN ARCHAEOLOGY (2-3)

Students will team with staff of SSU's Anthropological Studies Center to perform pre-field research, recognize and record archaeological sites, use GPS equipment, make computer-generated maps, and complete state record forms. Activities will vary depending on available projects. Internships require a minimum of 45 hours of work per semester/unit, including regular consultation with faculty sponsor. Cr/NC only. Prerequisites: graduate standing and consent of instructor. May be repeated for credit.

ANTH 596B INTERNSHIP IN CULTURAL RESOURCES MANAGEMENT (2-3)

Students will team with staff of SSU's Anthropological Studies Center to get intensive, hands-on experience in carrying out CRM projects, including: responding to requests for proposals, assessing the legal context of their work, budgeting, field logistics, cultural resources inventory, mapping, and report writing. Internships require a minimum of 45 hours of work per semester/unit, including regular consultation with faculty sponsor. Cr/NC only. Prerequisites: graduate standing and consent of instructor.

ANTH 596C INTERNSHIP IN INFORMATION MANAGEMENT (2-3)

Students will team with staff of the Northwest Information Center to get intensive instruction in and experience with a variety of archival and research-based information, and a range of data management techniques relevant to current practices in cultural resources management and historic preservation in the regulatory context. Internships require a minimum of 45 hours of work per semester/unit, including regular consultation with faculty sponsor. Cr/NC only. Prerequisites: graduate standing and consent of instructor. May be repeated for credit.

ANTH 597 ANTHROPOLOGY INTERNSHIPS (1-3)

Students will have an opportunity to apply anthropological theory and methods and/or cultural resources management procedures as interns with public and private agencies. Internships require faculty approval, a minimum of 45 hours of work per semester/unit, including regular consultation with and evaluation by the faculty sponsor. Cr/NC only. May be repeated for credit. Prerequisites: graduate standing and consent of instructor.

ANTH 598 TEACHING ASSISTANT IN ANTHROPOLOGY (1-3)

Provides experience by assisting an instructor in an anthropology course. Open only to advanced students for specific anthropology courses approved by the department. Prerequisites: graduate standing and consent of instructor. May be repeated for credit.

ANTH 599A THESIS (2-3)

Planning and execution of a research program culminating in the completion of a thesis (4 units maximum for 599A plus B). Prerequisites: filing an Advancement to Candidacy form, which requires completion of a thesis prospectus in Special Studies 595 (1), and formation of student's Graduate Committee.

ANTH 599B THESIS (2-3)

Planning and execution of a research program culminating in the completion of a thesis (4 units maximum for 599A plus B). Prerequisites: filing an Advancement to Candidacy form, which requires completion of a thesis prospectus in Special Studies 595 (1), and formation of student's Graduate Committee.

Art History (ARTH)

ARTH 160B HUMANITIES LEARNING COMMUNITY (4)

ARTH 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas. Students taking this course can not get credit for ARTH 210.

ARTH 199 STUDENT-INSTRUCTED COURSE (1-4)

Please see current Schedule of Classes for details. May be repeated for credit.

ARTH 200 INFORMATION RESOURCES AND SKILLS FOR ART HISTORY (1-2)

Techniques for finding library and information resources in visual culture and art history. Covers the use and strategies for accessing information and images in the university library and incorporating that visual imagery into research projects using computer applications. Students will learn about facilities available and how to access, retrieve, and evaluate information. Teaching includes lectures, demonstrations, and online research for both electronic and print sources. Students will gain experience with software packages such as Pagemaker and Photoshop using the graphics lab in the art department.

ARTH 210 INTRODUCTION TO ART HISTORY (3-4)

A survey course covering painting, sculpture, and architecture of prehistoric and primitive cultures, and ancient, classical, and medieval civilizations. Satisfies GE Area C1 (Fine Arts). Students who have taken ARTH 160A will not receive credit for taking ARTH 210.

ARTH 211 INTRODUCTION TO ART HISTORY (3-4)

A survey course covering painting, sculpture, and architecture from the Renaissance to the present with a global perspective. Satisfies GE Area C1 (Fine Arts). Students who have taken ARTH 160B will not receive credit for taking ARTH 211.

ARTH 270A SURVEY OF ISLAMIC ART (3-4)

Course examines the formation, establishment, and variations of Islamic artistic culture from its beginnings in the 7th century through the 20th century. Satisfies GE Area C1 (Fine Arts)

ARTH 270B SURVEY OF ASIAN ART (3-4)

Course examines artistic developments in Asia (including China, Japan, and India) from prehistoric periods to the present. Satisfies GE Area C1 (Fine Arts).

ARTH 300 GRADED ASSISTANCE PROJECTS (1-4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classroom, visual resources management, or exhibition projects. Work under supervision of faculty or staff. Each unit requires 3 hours of work per week. Grade only. (See also ARTH 499.) May be repeated for credit.

ARTH 301 ASSISTANCE PROJECTS (1-4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classrooms, or exhibition projects. Work under supervision of faculty or staff. Each unit requires 3 hours of work per week. Cr/NC only. May be repeated for credit.

ARTH 312 PRINCIPLES OF ARTS MANAGEMENT (3)

May be offered every three or four semesters. A seminar surveying the management of nonprofit visual arts institutions in the United States and the role of those institutions within society. Topics range from practical information, such as the structure of nonprofit organizations, the role of a board of trustees, fundraising, financial management, marketing, and the growing use of technology in the arts, to theoretical concepts being discussed within the field. Guest lecturers will be featured on a regular basis, and several field trips will be scheduled.

ARTH 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Student-directed creative activities on behalf of nearby off-campus community agencies. One to four units of credit, based on 30 hours of contributed effort per unit per semester. Art education assistance and selected private enterprises. Six CIP units may be applied toward a degree. Prerequisites: prearranged program with community host-sponsor and consent of instructor and the department chair.

ARTH 399 STUDENT-INSTRUCTED COURSE (1-4)

Please see current Schedule of Classes for details. May be repeated for credit.

ARTH 400 ART HISTORY INFORMATION RESOURCE AND RESEARCH SKILLS (2)

Course for upper-division majors researching information for their senior thesis projects. Covers the use and evaluation of methods for finding technology and appropriate software. Prerequisites: upper-division Art History standing or a related major and concurrent enrollment in or completion of ARTH 490H.

ARTH 420 PRE-CLASSICAL ART (3-4)

A course exploring topics in the history of the arts and architecture of Egypt, Crete, and/or the Near East before the conquests of Alexander the Great.

ARTH 422 GREEK ART (3-4)

A course exploring topics in the history of Greek art and architecture from the Proto-Geometric through the Hellenistic periods (ca. 1000 B.C.-100 A.D.).

ARTH 424 ROMAN ART (3-4)

A course exploring topics in Etruscan and Roman art as well as architecture from the early Republic through the age of Constantine, 4th century C.E.

ARTH 430 EARLY CHRISTIAN, BYZANTINE, AND EARLY MEDIEVAL ART (3-4)

A seminar/survey course covering Christian art from its origins in the 3rd century through the fall of Constantinople in the East and the rise of the Romanesque in the West (ca. 1050). Content emphasis may vary.

ARTH 432 ROMANESQUE AND GOTHIC ART (3-4)

A course exploring topics in Medieval art and architecture of the Romanesque and the Early and High Gothic periods. Content emphasis may vary.

ARTH 440 EARLY ITALIAN RENAISSANCE ART (3-4)

A course exploring topics in painting, sculpture, and architecture in Italy in the 14th and 15th centuries.

ARTH 442 LATER ITALIAN RENAISSANCE ART (3-4)

A course exploring topics in painting, sculpture, and architecture of Italy in the 16th century. Includes High Renaissance and Mannerist periods.

ARTH 444 NORTHERN RENAISSANCE ART (3-4)

A course exploring topics in painting, printmaking, sculpture, and architecture of the 14th-16th centuries in Europe, apart from Italy.

ARTH 450 BAROQUE ART (3)

A course exploring topics in painting, architecture, and sculpture of the 17th century. Content emphasis may vary. May be repeated with consent of instructor.

ARTH 452 ART IN THE AGE OF ENLIGHTENMENT (3-4)

This course examines topics in the 18th Century art and may include examinations of painting, architecture, sculpture and printmaking. Themes include the relationship between art and social class, influences of enlightenment philosophy, women and the arts, art and revolution. Topics vary. May be repeated for credit with the consent of the instructor.

ARTH 454 ART AND THE EMERGENCE OF MODERNITY (3-4)

This course explores 19th Century art movements such as Impressionism, Neo-impressionism, Symbolism in relation to the changes that marked the Nineteenth Century: the development of the democratic nation state, colonialism, the rise of social movements, the shift from private court patronage to a free market economy, the development the dealer-critic system, the invention of photography, scientific advances in optics, and the discovery of the unconscious in psychology, shifts in gender roles. Satisfies upper-division GE Area C (Fine Arts). Prerequisite: HUM200 or ENG 101 or ENG 100B

ARTH 454 NINETEENTH CENTURY ART (3-4)

A culturally diverse survey of painting and sculpture in Europe, which may include non-Western traditions, ca. 1780 through the end of the 19th century. Satisfies upper-division GE Area C1 (Fine Arts). Prerequisite: HUM 200, ENGL 101, or ENGL 100B.

ARTH 456 THE HISTORY AND THEORY OF PHOTOGRAPHY (3-4)

This course examines photography as a cultural object and a form of art from its invention to the digital age. Topics may include: photography as art, photography and the avant-gardes, photography and gender, photography and memory, photography as scientific or juridical proof, documentary and photojournalism, photography and the construction of identities, photography and place, and the transformation of photography in the digital age.

ARTH 460 HISTORY OF AMERICAN ART (3-4)

A survey of the American experience from pre-Colonial times to the present, with insights into European, non-Western, and native influences. Satisfies upper-division GE Area C1 (History of the Fine Arts). Prerequisite: HUM 200 or ENGL 201.

ARTH 461 SELECTED TOPICS IN FILM (3)

This course explores a genre, the work of a single filmmaker, a cinematic movement, a national cinema, a focused study of a problem in film history or aesthetics, etc.

ARTH 464 AVANT-GARDES OF THE EARLY 20TH CENTURY (3-4)

This course explores topics in the history of art from approximately 1900-1945: Examines avant-garde movements such as Fauvism, Cubism, Expressionism, Primitivism, Constructivism, Dada and Surrealism with relation to the cultural upheavals of the early 20th Century including industrialization, revolution, WWI, shifts in gender roles and the rise of fascism. Satisfies upper-division GE Area C1 (Fine Arts). Prerequisite: HUM 200 or ENGL 101 or ENGL 100B.

ARTH 465 MODERN ART FROM 1945 TO 1979 (3-4)

A course exploring European and American developments in late modern and early postmodern art with a focus on work made between 1945 and 1979. Movements such as Abstract Expressionism, Pop, Minimalism, Photo-Realism, Earth Art, and Feminist Art will be discussed in depth, along with the social, economic, and political context within which the work was created. Reading and writing assignments on designated topics will be required. Satisfies upper-division GE Area C1 (Fine Arts). Prerequisite: HUM 200, ENGL 101, or ENGL 100B.

ARTH 466 CONTEMPORARY ART (3-4)

A course exploring international developments in postmodern and current art with a focus on work made from 1980 and to the present. Movements and styles such as Neo-Expressionism, Appropriation, Graffiti, Body and Identity Art, and the use of new technology will be discussed in depth. In addition, we will examine the critical theories necessary for a thorough understanding of contemporary art and artists. Reading and writing assignments on designated topics will be required.

ARTH 470A SURVEY OF ISLAMIC ART (3-4)

Course examines the formation, establishment, and variations of Islamic artistic culture from its beginnings in the 7th century through the 20th century. May be repeated with consent of instructor.

ARTH 470B ASIAN ART (3-4)

Course examines artistic developments in Asia (including China, Japan, and India) from prehistoric periods to the present. May be repeated with consent of instructor.

ARTH 474 TOPICS IN ISLAMIC ART (3-4)

A course dealing with intensive study of a particular topic of Islamic Art. The topic will vary from semester to semester and may include the Age of Empire, Islamic Spain, or other topics. Course may be repeated.

ARTH 476 BEYOND EUROPEAN TRADITIONS: SELECTED TOPICS (3-4)

A course whose emphasis may include the art of Africa, Native America, Hispanic, Latin America, and/or other indigenous cultures.

ARTH 480 SELECTED TOPICS IN ART HISTORY (1-4)

A course dealing with intensive study of a particular art topic. The topic will vary from semester to semester. The course may be repeated and may be applicable to requirements for a major in art. Consult advisor and department chair. Prerequisites: major status, advanced standing, and consent of instructor.

ARTH 490H PRO-SEMINAR IN ART HISTORY METHODS (3-4)

A seminar concentrating on the discipline and philosophy of art historical studies. Emphasis will be placed on formal and stylistic problems, research techniques, and appropriate new research technology. Readings designed to stress the variety of relevant approaches possible to a given problem. May be offered only once every two years. Prerequisite for non-majors: consent of instructor; students must have completed two Art History papers in upper-division courses to be admitted.

ARTH 491H SENIOR THESIS IN ART HISTORY (1-2)

Submission of a scholarly paper to the faculty is required in the senior year. The student works in a tutorial situation with an art historian. Must be taken with two separate advisors.

ARTH 492 SENIOR HONORS THESIS (1-2)

The honors student prepares an in-depth research paper under the guidance of members of the art history or film faculty. The student will utilize scholarly resources of the region and produce an original research paper of extended length. Participation by consent of the art history faculty. Must be taken with two separate advisors.

ARTH 494 GALLERY AND MUSEUM METHODS (3)

An advanced lecture and activity course in methods and techniques of nonprofit gallery and museum practice. Topics include history and philosophy of museums, their structure and purpose, exhibition development, and a museum's relationship to the public. Current issues such as accountability, management of cultural artifacts, censorship, and funding for the arts will also be discussed. Students participate in various functions of the University Art Gallery including exhibition installation and design, opening receptions, publicity, fundraising events, and administration. Two off-campus field trips will be planned.

ARTH 495 SPECIAL STUDIES (1-4)

For upper-division Art History and Film History majors only. Consult department faculty in your area of emphasis. The University contract form with required signatures of student, instructor, faculty advisor, and department chair must be completed before registering for special studies units. Not applicable to the Art History major or minor. May be repeated for credit.

ARTH 496 DIRECTED FIELD RESEARCH EXPERIENCE (1)

Travel to galleries and museums in various North American cities. Individual and group participation required. Destinations vary; consult semester schedule for specifics. May be repeated and may be applicable to requirements in the major. Fee required at time of registration. Prerequisites: major status and advanced standing or consent of instructor. Cr/NC only.

ARTH 497 DIRECTED FIELD RESEARCH EXPERIENCE (1)

Travel to various destinations, which vary depending on type of field research being offered; consult semester schedule for specifics. May be repeated and may be applicable to requirements in the major. Students will be responsible for a field research project(s), based on the trip. Fee required at time of registration. Prerequisites: major status and advanced standing or consent of instructor.

ARTH 499 INTERNSHIPS (1-4)

Students in the internship program will have an opportunity to gain practical skills by working in a variety of capacities, including gallery and museum situations in the private and public sectors. Credit will be given for completion of 3 hours of work per week per unit, by prior arrangement with department coordinator. Prerequisite: consent of instructor. A-F and Cr/NC. (See also ARTH 300.) May be repeated for credit.

ARTH 590H PROSEMINAR IN ART HISTORY METHOD (1-3)

Course for ITDS graduate and other art related students which will apply research technology to their thesis projects. Offered concurrently with ARTH 490H.

ARTH 595 SPECIAL STUDIES (1-4)

Prerequisites: graduate standing and consent of instructor.

ARTH 599 INTERNSHIP (1-4)

Graduate students, working through ITDS or related programs, will have an opportunity to gain practical skills by working in a variety of capacities, including gallery and museum situations in private and public sectors. Credit will be given for completion of 3 hours of work per week per unit, by prior arrangement with department coordinator and chair. Prerequisite: consent of instructor. A-F and Cr/NC.

Art Studio (ARTS)

ARTS 101 ART FUNDAMENTALS (3)

Basic design. A studio course in the study of form, color, and composition in 2-dimensional art; rendering of 3-dimensional objects from observation using line and values; and principles of perspective. Basic requisite course for studio courses on the 200 level.

ARTS 102 FUNDAMENTALS OF THREE DIMENSION DESIGN (3)

A studio course introducing the student to the principles of three dimensional design. Sculptural, architectural and design projects are realized through a series of assigned projects exploring form, volume, plane, line, and structure. Traditional and non-traditional sculptural materials are used. Prerequisite course for 200 level studio courses. Laboratory fee due at time of registration.

ARTS 103 SAFETY AND SHOP PRACTICES (1)

An activity course required for new or transfer sculpture students, or for any student wishing to have access to the wood shop or use power and hand tools dispensed from the tool crib. Class is recommended for all students majoring in Art Studio. Required for students in the Sculpture emphasis. Examinations required every semester for continued use of power equipment. Laboratory fee payable at registration. May be repeated for credit.

ARTS 104 STUDIO ART FOUNDATIONS (4)

This course is designed to encompass the primary learning objectives of ARTS 101 and 102 into one intensive studio experience. Geared specifically to incoming Art History and Studio Art majors, students will be asked to participate in a variety of activities and exercises that are designed to break down preconceived notions of art-making and the creative process, introduce a conceptual focus, and apply the basic principles of 2- and 3-dimensional design. Concurrent registration in ARTH 160 A/B is suggested. This course, when taken in conjunction with ARTS 103, meets the basic requisite for studio courses on the 200 level. Laboratory fee payable at registration.

ARTS 199 STUDENT-INSTRUCTED COURSE (1-4)

Please see current Schedule of Classes for details. May be repeated for credit.

ARTS 200 PHOTOGRAPHY IN THE WORLD (3-4)

Lecture presenting overview of the role of photography in the world and an introduction to the creation of photographs. Integrates intellectual, analytical, and creative skills and capacities by examining photography from several perspectives. Photography's history, current forms, uses, and conventions included. Students will practice photography as a creative communicative endeavor.

ARTS 202 BEGINNING DRAWING (1-4)

A beginner's studio course in drawing employing a variety of media, including pencil, ink, charcoal, conte, and pastel. Includes a unit on objective drawing.

ARTS 204 BEGINNING LIFE DRAWING (1-4)

An introductory studio course in drawing from nature, including the human figure. Basic problems in dealing with the figure as subject matter.

ARTS 208 BASIC BLACK AND WHITE PHOTOGRAPHY (2-4)

A studio introduction to basic photographic processes, including lecture/discussion, reading, lab work, and critique. Covers handling the camera, previsualization, history, exposure control, perceiving and working with light, roll film processing, print enlarging and finishing for presentation, balancing technique, and individual creativity. Lab fee payable at time of registration.

ARTS 210 INTRODUCTION TO DIGITAL IMAGING (1-3)

Covers basic digital processes: lecture/discussion, reading, lab work, individual projects, and critique. Topics include: fundamental digital theory, hardware/software/technique of 2-D artwork, image acquisition, basic digital photography, image manipulation (Photoshop), vector based design (Illustrator), digital output, and overview of strategies/practices of contemporary digital artists. Lab fee required.

ARTS 220 BEGINNING PAINTING (1-4)

Studio course in painting in a variety of media, with primary concentration in oil. Directed problems. Work from imagination, still life, and the figure. Group and individual criticism. Prerequisite: previous or concurrent enrollment in ARTS 101 or ARTS 104.

ARTS 229 BEGINNING CERAMICS (2-4)

A studio course surveying a wide range of ceramic processes, including a variety of hand building techniques, working on potter's wheel, glazing, and firing. Directed problems cover both traditional/sculptural aspects of ceramics. Course includes lectures, demonstrations, discussion, critiques, and laboratory. Lab fee payable at time of registration. Prerequisite: ARTS 102 or ARTS 104.

ARTS 236 BEGINNING SCULPTURE (2-4)

A studio course offering a range of traditional and non-traditional sculptural processes and materials. Introduces the beginning student to welding, woodworking, mold-making, and casting. Group critiques, field trips, textbook required. Lab fee due at time of registration. Prerequisite: ARTS 102 or ARTS 104.

ARTS 245 BEGINNING PRINTMAKING (2-4)

A studio course introducing the student to a variety of printmaking media, which may include etching, lithography, woodcut, and linocut. Lecture, demonstration, and laboratory work, which may include proofing, printing, and a small edition. Laboratory fee payable at time of registration. Prerequisite: ARTS 101 or ARTS 104.

ARTS 298 SELECTED TOPICS IN ART STUDIO (1-4)

A beginning studio course dealing with intensive study of a particular art topic, which may vary from semester to semester. May be repeated, and applicable to requirements for a major in art. Prerequisites: previous or concurrent enrollment in ARTS 101 and 102.

ARTS 300 GRADED ASSISTANCE PROJECTS (1-4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classrooms or exhibition projects. Work under supervision of faculty or staff. Each unit requires 3 hours of work per week. Grade only. May be repeated for credit.

ARTS 301 ASSISTANCE PROJECTS (1-4)

Designed for advanced students to gain practical experience in the functions of art studios, workshops, classrooms, or exhibition projects. Work under supervision of faculty or staff. Each unit requires 3 hours of work per week. Cr/NC only. May be repeated for credit.

ARTS 302 INTERMEDIATE DRAWING (1-4)

Directed problems in drawing for the intermediate student. Work from both imagination or observational approaches. Prerequisite: ARTS 202 or 204. May be repeated for credit.

ARTS 304 INTERMEDIATE LIFE DRAWING (1-4)

A workshop in drawing the human figure for students who have fulfilled the beginning drawing prerequisite or are at intermediate skills levels. Group and individually directed special problems related to drawing the live model. Prerequisite: ARTS 204. May be repeated for credit.

ARTS 308 PHOTOGRAPHIC DARKROOM PROCESSES (2-4)

A process course with individualized development of photographic skills and theory. Concentration on print quality, including zone system. Familiarization with papers, films, and developers. Various processes expanding upon black and white technology and darkroom experimentation. Laboratory fee payable at registration. Prerequisite: ARTS 208 and consent of instructor, based on portfolio review. May be repeated once for credit.

ARTS 310 DIGITAL IMAGING (1-3)

Covers intermediate digital techniques: lecture/discussion, reading, lab work, individual projects, and critiques. Topics may include: digital theory, hardware/software techniques of 2-D artwork, image manipulation (Photoshop), vector-based design (Illustrator), multimedia design, integration of digital media into traditional practices, and overview of strategies/practices of contemporary digital artists. Lab fee required. Prerequisite: ARTS 210 or 208.

ARTS 320 INTERMEDIATE PAINTING (1-4)

Intermediate-level studio course in painting. Directed and individual problems. Group and individual criticism. May only be repeated by majors. Prerequisite: ARTS 220. Laboratory fee payable at time of registration. May be repeated once for credit.

ARTS 329 INTERMEDIATE CERAMICS (2-4)

A studio course concentrating on wheel and hand building techniques to explore formal/functional issues in clay. Emphasis is placed on design issues, content, and developing a personal visual vocabulary through individual and group critiques. Laboratory exercises to develop color/texture in glazes and firing techniques are also covered. Lab fee payable at time of registration. Prerequisite: ARTS 229. May be repeated once for credit. Textbook required.

ARTS 335 INTERMEDIATE BRONZE FOUNDRY (2-7)

In-depth instruction of processes involved in producing bronze sculpture. Students explore all aspects of realizing sculpture in bronze, from clay or plaster molds to wax: various methods of wax working/mold-making, including ceramic shell, sand, and investment; casting; and patination. Group critiques, fieldtrips. Laboratory fee due at time of registration. Prerequisite: ARTS 236, or consent of instructor. May be repeated once for credit.

ARTS 336 INTERMEDIATE SCULPTURE (1-4)

A studio course with directed projects. Emphasis on content and developing a personal sculptural vocabulary through experimentation with traditional and non-traditional materials and processes. Group critiques, field trips, short writing assignments. Textbook required. Laboratory fee due at time of registration. Prerequisite: ARTS 236. May be repeated once for credit.

ARTS 340 INTERMEDIATE ETCHING AND WOODCUT (1-4)

A studio course on the intermediate level in various printmaking aspects, including woodcut, engraving, photo-engraving, monotype, and etching. Laboratory fee payable at time of registration. Prerequisite: ARTS 245. May be repeated once for credit.

ARTS 342 INTERMEDIATE LITHOGRAPHY (1-4)

Continued studio work at the intermediate level in lithographic methods, including color technology and conceptual development. Lecture, demonstration, and studio work. Laboratory fee payable at time of registration. Prerequisite: ARTS 245.

ARTS 382 INTERMEDIATE MONOPRINT (1-4)

An intermediate studio course emphasizing single and multiple images derived from a variety of original sources, including painting, hand-painted prints, collagraphs, chine colle, and multiple manipulated prints. A maximum of 3 upper-division units may be applied toward a printmaking or a painting emphasis. Laboratory fee payable at time of registration. Prerequisite: ARTS 245.

ARTS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Student-directed creative activities in behalf of nearby off-campus community agencies. One to 4 units of credit, based on 30 hours of contributed effort per unit per semester. Art education assistance and selected private enterprises. Six CIP units may be applied toward a degree. Prerequisite: prearranged program with community host-sponsor and consent of instructor.

ARTS 399 STUDENT-INSTRUCTED COURSE (1-4)

Please see current Schedule of Classes for details. May be repeated for credit.

ARTS 400 ART IN THE CLASSROOM (3)

Combined lecture/lab course for teaching credential candidates (K-12). Skills, methods, and ideas for introducing art education to children/adolescents will be discussed/practiced, based on the California Framework for Art Education, and intended to stress the necessity of art instruction for the young. Art education history will be covered.

ARTS 402 ADVANCED DRAWING (1-4)

Independent work from imagination or nature for the advanced student. Can be arranged as correlative drawing problems done in conjunction with advanced studio projects in area of emphasis. May be repeated for up to a maximum of 12 units. Prerequisites: at least 4 units of ARTS 202 or 204, and 3 units of 300-series drawing courses, or consent of instructor.

ARTS 404 ADVANCED LIFE DRAWING (2-4)

An advanced studio life drawing class with directed special problems related to drawing the live model and to drawing from nature. May be repeated for up to a maximum of 12 units. Prerequisite: ARTS 304.

ARTS 420 ADVANCED PAINTING (2-4)

Continued studio work in painting in oils and/or acrylics. May be repeated by art majors only for credit up to a maximum of 9 units, more for B.F.A. students. Prerequisite: ARTS 320. Laboratory fee payable at time of registration.

ARTS 429 ADVANCED CERAMICS (2-4)

A studio course addressing advanced throwing and hand building, glazing, and firing techniques. Emphasis is placed on content and development of a personal voice in ceramics. Students are encouraged to create individual project plans and work large scale. Prerequisites: ARTS 229 and 329. Lab fee payable at time of registration. May be repeated once for credit.

ARTS 430 LARGE SCALE CLAY AND INSTALLATION OF CERAMIC SCULPTURE (2-4)

Course concentrates on large scale ceramics sculpture/installation. Hand building and wheel throwing techniques utilized. Emphasis placed on project planning, content, and developing a personal visual vocabulary through individual/group critiques. Lab fee payable at registration. Prerequisites: ARTS 229 and 329 or 330. Can replace one semester of Advanced Ceramics.

ARTS 432 CERAMIC MATERIALS (2-4)

General course covering origin/properties of clays, composition, properties/uses of materials in glazes, and calculation of glaze formulas/batches. Laboratory exercises involve use/properties of materials, development of clay body compositions and development of color/texture in glazes. Prerequisites: ARTS 229 and 330 or 329. Can replace one semester of Advanced Ceramics.

ARTS 435 ADVANCED BRONZE FOUNDRY (2-4)

In-depth instruction of processes involved in producing bronze sculpture. Students explore all aspects of realizing sculpture in bronze, from clay or plaster molds to wax: various methods of wax working/mold making, including ceramic shell, sand, and investment; casting; and patination. Group critiques, fieldtrips. Laboratory fee due at time of registration. Prerequisite: ARTS 236, or consent of instructor. Textbook required.

ARTS 436 ADVANCED SCULPTURE (2-4)

Studio and field work that emphasizes the development of individual style. Group critiques, field trips, and short writing assignments. Text book required. May be repeated for credit up to a maximum of 15 units, more for B.F.A. Laboratory fee payable at time of registration. Prerequisite: 6 units of ARTS 336 or consent of instructor.

ARTS 440 ADVANCED ETCHING AND WOODCUT (1-4)

Advanced studio problems in relief and intaglio printmaking methods, including relief, engraving, photo-engraving, monotype, and etching. May be repeated for credit up to 12 units. Laboratory fee payable at registration. Prerequisite: ARTS 340.

ARTS 442 ADVANCED LITHOGRAPHY (2-4)

Advanced studio work in the lithography medium. Work with images on stone or metal plates involving black and white and some color processes, printing of limited editions and single proofs. Lecture, demonstration, and laboratory work. May be repeated for credit up to a maximum of 12 units. Laboratory fee payable at time of registration. Prerequisite: ARTS 342.

ARTS 457 ADVANCED PHOTOGRAPHY (1-4)

An advanced studio course, with an emphasis on contemporary photography, black and white and color, and student critiques in conjunction with in-progress darkroom work. Students contract for a body of work for the semester, culminating with an individual presentation of a final, professional portfolio. Prerequisites: ARTS 208 and two semesters of ARTS 308 or consent of instructor, based on portfolio review. May be repeated for credit.

ARTS 465 B.F.A. SEMINAR (1-4)

A studio seminar class designed specifically for B.F.A. students. Advanced topics in art and aesthetics will be examined through selected readings, writing, and discussion. In-depth critiques of each student's work will be held. B.F.A. students only.

ARTS 466 B.F.A. PORTFOLIO ARTISTS' PRACTICES (3)

Professional issues will be addressed in the preparation and presentation of a B.F.A. exhibition that will be reviewed and critiqued by the studio faculty. Students will be expected to give an oral defense of their work, prepare a statement, a curriculum vitae, and document their work in preparation for graduation. B.F.A. students only.

ARTS 470 ART: THEORY AND PRACTICE (2-4)

Advanced seminar course combining lecture/activity. Emphasis placed on development of proposals for works of art, in response to slide lectures and assigned readings, and exploration of new methods and materials outside student's usual medium. Participation in group critiques is an essential element of course. Lab fee. Prerequisite: instructor(s) consent.

ARTS 482 ADVANCED MONOTYPE (1-4)

An advanced studio course emphasizing single and multiple images derived from a variety of original sources, including painting, hand-painted prints, chine colle, and multiple manipulated prints. Up to 3 upper-division units may be applied toward a printmaking or painting emphasis. Laboratory fee payable at registration. Prerequisite: ARTS 382.

ARTS 491 VISITING ARTISTS' LECTURE SERIES (1)

The Visiting Artist Lecture Series is a Credit / No Credit course, which brings prominent contemporary artists to Sonoma State University to present their creative and scholarly work on a weekly basis. Class discussions will occur on weeks a speaker is not scheduled. Attendance to all lectures is mandatory and a paper is required at the end of the semester to receive course credit. Satisfies GE Area C1 (Fine Arts). This course may be repeated for credit but only 1 unit of C1 credit will be awarded.

ARTS 492 B.A. PORTFOLIO ARTISTS' PRACTICES (1-3)

Professional issues will be addressed in the preparation and presentation of a portfolio of student work. Students will be expected to give an oral defense of their work, prepare a statement, a curriculum vitae, and document their work in preparation for graduation.

ARTS 495 SPECIAL STUDIES (1-4)

For upper-division Art majors only. Consult department faculty in your area of emphasis. The University contract form with required signatures of student, instructor, faculty advisor, and department chair must be completed before registering for special studies units. Not applicable to the Art minor or non-art major. May be repeated for credit.

ARTS 496 DIRECTED FIELD RESEARCH EXPERIENCE (1)

Travel to galleries and museums in various North American cities. Individual and group participation required. Destinations vary; consult semester schedule for specifics. May be repeated and may be applicable to requirements in the major. Fee required at time of registration. Prerequisites: major status and advanced standing or consent of instructor.

ARTS 497 DIRECTED FIELD RESEARCH EXPERIENCE (1-4)

Travel to various destinations, which vary depending on type of field research being offered; consult semester schedule for specifics. Students will be responsible for a field research project(s), based on the trip. Fee required at time of registration. Prerequisites: major status and advanced standing or consent of instructor.

ARTS 498 SELECTED TOPICS IN ART STUDIO (1-4)

A studio course dealing with intensive study of a particular art topic, which may vary by semester. May be repeated and applicable to requirements for a major in Art. Consult advisor and department chair. Prerequisites: major status, advanced standing, and instructor consent.

ARTS 499 INTERNSHIP (1-4)

Students in the internship program will have an opportunity to gain practical skills by working in a variety of gallery and museum situations in the private and public sectors. Credit will be given for completion of 3 hours of work per week, per unit, by prior arrangement with department coordinator. Prerequisite: consent of instructor. A-F or Cr/NC. Course may be repeated for credit.

ARTS 595 SPECIAL STUDIES (1-4)

Prerequisites: graduate standing and consent of instructor.

Astronomy (ASTR)**ASTR 100 DESCRIPTIVE ASTRONOMY (3)**

Lecture, 3 hours. A survey designed primarily for non-science majors, including an introduction to historic astronomy, Newton's Laws, gravitation, atomic structure, light, and telescopes. Take a tour of the solar system, learn about space flight, stars and stellar evolution, galaxies, and the structure of the universe. Satisfies GE Area B1 or B3 (Physical Sciences).

ASTR 231 INTRODUCTION TO OBSERVATIONAL ASTRONOMY (2)

Lecture, 1 hour; laboratory, 3 hours. Principles of astronomical measurement techniques with field and laboratory studies of astronomical objects. Identification of constellations; astronomical coordinates; use of the telescope; and techniques in imaging, photometry, and spectroscopy. Satisfies GE Area B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisite: previous or concurrent enrollment in ASTR 100.

ASTR 303 LIFE IN THE UNIVERSE (3)

Lecture, 3 hours. The course is an appraisal of the possibilities and prospects for life in the universe and travel beyond our Solar System. Topics to be covered include: the nature of life, habitability of Earth and other worlds within our Solar System, detection of planets beyond our Solar System, the search for life beyond Earth, and space travel. This course emphasizes the scientific method, especially the development of scientific theories founded in observational and experimental evidence. Satisfies GE AreaB3 (Specific Emphasis in Natural Sciences). Prerequisite: ASTR 100.

ASTR 305 FRONTIERS IN ASTRONOMY (3)

Lecture, 3 hours. A survey of recent developments in astronomy and how these breakthroughs are made: the discovery of planets orbiting other stars; the explosive deaths of stars and the creation of neutron stars and black holes; and the study of the origin and fate of the Universe, including the search to understand dark matter and dark energy. Satisfies GE Area B3 (Specific Emphasis in Natural Sciences). Prerequisite: one course in astronomy.

ASTR 331 ASTRONOMICAL IMAGING (2)

Lecture, 1 hour; laboratory, 3 hours. An introduction to the methods and techniques of astronomical imaging. The course will offer a practical approach to using charged-coupled device (CCD) detectors and computer-controlled telescopes to obtain images of the moon, planets, stars, and nebulae. Topics include telescope control, planning observing programs, identifying astronomical objects, determining image sizes and exposure times, and image processing techniques. Prerequisite: ASTR 231 or consent of instructor.

ASTR 350 COSMOLOGY (3)

Lecture, 3 hours. A survey of what we know about the Universe and how scientists have learned it. Topics include the Big Bang, cosmic inflation, surveys of galaxies, the origin and evolution of structure in the Universe, dark matter, and dark energy. Satisfies GE Area B3 (Specific Emphasis in Natural Sciences). Prerequisite: ASTR 100.

ASTR 380 ASTROPHYSICS: STARS (3)

Lecture, 3 hours. A quantitative study of the structure and evolution of stars, including stellar interiors and atmospheres, nucleosynthesis and late stages of stellar evolution. Prerequisites: PHYS 314 and MATH 211.

ASTR 396 SELECTED TOPICS IN ASTRONOMY (1-3)

Lecture, 1-3 hours. A course of lectures on a single topic or set of related topics not ordinarily covered in the Astronomy curriculum. The course may be repeated for credit with a different topic. Prerequisite: consent of instructor.

ASTR 482 ADVANCED OBSERVATIONAL ASTRONOMY (2)

Lecture, 1 hour; laboratory, 3 hours. A study of advanced observing techniques including imaging and spectroscopy. Emphasis on the use of telescopes, instrumentation, and data processing including photometry and astrometry. Discussion of techniques across the electromagnetic spectrum. Statistical treatment of data and error analysis. Prerequisites: ASTR 231, PHYS 209B and 210B, and MATH 161; or consent of instructor.

ASTR 492 INSTRUCTIONAL DESIGN PROJECT (2)

A directed project to develop at least one laboratory experiment and/or classroom activity that teaches basic concepts in undergraduate Astronomy. Both written and oral presentations (including a demonstration of the experiment or activity) will be required. Prerequisites: PHYS 214 and 216 or PHYS 210B and 209B; ASTR 231. Course may be repeated for credit.

ASTR 495 SPECIAL STUDIES (1-4)

The Department of Physics and Astronomy encourages independent study and considers it to be an educational undertaking. Students wishing to enroll for special studies are required to submit to their supervising faculty members proposals which outline their projects and exhibit specific plans for their successful completion. May be repeated for credit.

ASTR 497 UNDERGRADUATE RESEARCH IN ASTRONOMY (2)

Supervised research in an area of astronomy that is currently under investigation by one or more members of the Physics and Astronomy Department's faculty. This course may be repeated for up to 6 units of credit. Prerequisites: junior-standing and consent of instructor.

Biology (BIOL)

BIOL 110 BIOLOGICAL INQUIRY (4)

Lecture, 3 hours; laboratory, 3 hours. A factual and conceptual exploration of the living world through presentation, student inquiry, and laboratory exercises. Topics include the bases of life; organization of living systems, from molecules to ecosystems, and their interactions; and genetics, evolution, and ecology. Satisfies GE Area B2 and the GE laboratory science requirement. Not applicable to the Biology major.

BIOL 115 INTRODUCTION TO BIOLOGY (3)

Lecture, 3 hours. The unifying concepts of biology. Topics include the chemical and physical basis of life; cellular structure and function; molecular and Mendelian genetics; reproduction, development, structure, and function of representative plants and animals; and evolution and ecology. Satisfies GE Area B2. Not applicable to the Biology major.

BIOL 121 DIVERSITY, STRUCTURE, AND FUNCTION (4)

Lecture, 3 hours; laboratory, 3 hours. First in three-semester series required for biology majors. Introduces the extraordinary diversity of life and evolutionary relationships between groups of organisms, and compares body plans. Satisfies GE Area B2 or B3.

BIOL 122 GENETICS, EVOLUTION, AND ECOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Second in three-semester series required for biology majors. Introduces mechanisms of inheritance, evolution, and ecology. Recent advances in understanding processes underlying ecological and evolutionary relationships will be emphasized. Satisfies GE Area B2 or B3. May be taken before BIOL 121.

BIOL 123 MOLECULAR AND CELL BIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Third in three-semester series required for Biology majors. Introduction to cell and molecular biology, with emphasis on molecular processes, cellular physiology, and regulatory mechanisms. For Biology majors, satisfies GE Area B2 or B3. Prerequisites: BIOL 121 and 122 or 121 and 130A or consent of instructor, and CHEM 115AB or 125A. Concurrent or prior enrollment in CHEM 335A recommended.

BIOL 220 HUMAN ANATOMY (4)

Lecture, 3 hours; laboratory, 3 hours. Survey of the body systems. Designed for pursuing careers in the allied health professions. Satisfies GE Area B3 and the GE laboratory requirement. Prerequisite: BIOL 110 or 115, or 121/122 or 130A.

BIOL 224 HUMAN PHYSIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An integrated examination of the human body as an efficient system maintained by a complex of interacting, homeostatic mechanisms. Includes fundamental principles of function of major organ systems. Designed for those pursuing careers in the allied health professions. Satisfies GE Area B3 and the GE laboratory requirement. Prerequisites: BIOL 110 or 115 or 121/122 or 130A; and CHEM 115AB or 105.

BIOL 240 GENERAL MICROBIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An introduction to the organization and characteristics of microorganisms, including bacteria, fungi, protists, and viruses. Topics include their role in agriculture, industry, and disease processes. Prerequisites: BIOL 110 or 115, and CHEM 115AB or 105.

BIOL 307 HUMAN NUTRITION (3)

Lecture, 3 hours. Concepts of modern nutrition, including some discussion of principal nutritional problems and modern food processing methods. Prerequisites: BIOL 110, 115, or BIOL 121 and 122; and one course in beginning chemistry.

BIOL 308 ENVIRONMENTAL TOXICOLOGY (3)

Lecture, 3 hours. Information needed to formulate a philosophy of chemical use: the nature of the interaction of toxicants and living organisms; categories of toxicological activity; toxicological evaluation and environmental monitoring; and governmental regulations and procedures. Satisfies GE Area B3. Prerequisite: BIOL 110, 115, or 121 and 122.

BIOL 309 BIOLOGY OF CANCER (3)

Lecture, 3 hours. Biological, clinical, environmental, and psychosocial aspects of cancer explored through the perspectives of medical researchers, physicians, patients, and health educators. This lecture series is intended for students of all majors, for those in the health professions, and for the general public. It is designed so that everyone (regardless of scientific background) will benefit. Satisfies GE Area B3. Prerequisite: BIOL 110, 115, or 121 and 122.

BIOL 311 SEXUALLY TRANSMITTED DISEASES (3)

Lecture, 3 hours. Biological, environmental, societal, and psychosocial aspects of sexually transmitted diseases. Satisfies GE Area B3. Prerequisite: BIOL 110, 115, or 121 and 122.

BIOL 312 BIOLOGICAL OCEANOGRAPHY (3)

Lecture, 3 hours. An introduction to the world's oceans with emphasis on the way in which their physical properties support life. Satisfies GE Area B3. Prerequisite: BIOL 110, 115 or 121 and 122.

BIOL 314 FIELD BIOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. A course emphasizing plant and animal communities of Northern California. Satisfies GE Area B3 and GE laboratory requirement. Prerequisite: BIOL 115 or 121 and 122.

BIOL 315 PLANTS AND CIVILIZATION (3)

Lecture, 3 hours; field trips. Historical and evolutionary interrelationships between humans and domesticated plants, including the origins of agriculture and its development. Satisfies GE Area B3. Prerequisite: BIOL 110, 115 or 121 and 122.

BIOL 318 BIOLOGY OF AGING (3)

Lecture, 3 hours. Examines the biological processes occurring in a cumulative fashion in the course of human senescence, including the medical and social consequences. Satisfies GE Area E. Prerequisite: BIOL 110, 115, or 121 and 122.

BIOL 322 INVERTEBRATE BIOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. Exploration of the systematics, functional morphology, behavior, and ecology of invertebrates. Prerequisites: BIOL 121 and 122.

BIOL 323 ENTOMOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. A comprehensive foundation in the biology of insects, with emphasis on ecology, behavior, evolution, and systematics. Emphasis on the diagnostic features of insects and their major orders. Prerequisites: BIOL 121/122 or 121/130A.

BIOL 327 VERTEBRATE BIOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. Exploration of the systematics, behavioral ecology, biogeography, evolution, and conservation biology of fish, amphibians, reptiles, birds, and mammals. At least one weekend field trip. Prerequisites: BIOL 121/122 or 121/130A; requires consent of instructor.

BIOL 328 VERTEBRATE EVOLUTIONARY MORPHOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Trends in the evolution of structure and function in the vertebrates. This course focuses on morphological adaptations at the organ system level that have enabled vertebrates to diversify and succeed in a wide range of habitats and environments. Prerequisites: BIOL 121/122 or 121/130A.

BIOL 329 PLANT BIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An overview of plant biology, with focus on structure, function, reproduction, and evolution. Emphasis is on flowering plants, but a survey of all plant and plant-like organisms, both modern and extinct, is included. Prerequisites: BIOL 121 and 122.

BIOL 330 PLANT TAXONOMY (4)

Lecture, 3 hours; laboratory and field, 3 hours. An introduction to the principles and practices of plant taxonomy, including approaches to classification, data analysis, and a survey of vascular plant families in the California flora. A minimum of two Saturday field trips is required. Prerequisites: BIOL 121 and 122.

BIOL 331 AQUATIC BOTANY (4)

Lecture, 3 hours; laboratory and field, 3 hours. An overview of the ecology, evolution, physiology, conservation, and practical uses of marine, estuarine, and freshwater plants and algae. Required field trips may be scheduled outside of scheduled class time. Prerequisites: BIOL 121 and 122.

BIOL 333 ECOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. A current overview of this field, with in-depth coverage of ecology at the population, community, and ecosystem level. Emphasis on diverse taxa and habitats, hypothesis testing, and data collection and analysis. Prerequisites: BIOL 121 and 122 and MATH 165.

BIOL 335 MARINE ECOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. An overview of current topics in marine ecology and conservation with emphasis on ecology of coastal ecosystems. Extensive focus on field and laboratory research projects. Includes experimental design, data analysis, and presentation. At least three 5-hour field trips outside of scheduled class time. Prerequisites: BIOL 121/122 or 121/130A and MATH 165.

BIOL 337 BEHAVIORAL ECOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. Examines how the behavior of animals functions to optimize their fitness. Explores such topics as foraging, altruism, breeding systems, sexual selection, deceit, communication systems, and aggression with emphasis on techniques for formulating and testing hypotheses. Prerequisites: BIOL 121 and 122.

BIOL 338 ENVIRONMENTAL MICROBIOLOGY AND BIOTECHNOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Examines microbial ecology and diversity along with biotechnological applications of microbes in agriculture, wastewater treatment, bioremediation, and biofuel production. Satisfies the ENSP Hazardous Materials Management and Water Quality Technology core requirement. Prerequisites: BIOL 121/122 or 121/130A and CHEM 115AB, or consent of instructor.

BIOL 340 GENERAL BACTERIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An introduction to prokaryotes covering their cell structure, metabolic diversity, interactions with other organisms, and pivotal roles in biogeochemical cycling. Laboratory projects develop skills essential for studies of bacteria. Laboratory in two 1.5 hour sessions per week. Prerequisites: BIOL 123 and CHEM 335A.

BIOL 341 EVOLUTION (4)

Lecture, 3 hours; laboratory and field, 3 hours. A broad examination of the patterns and processes involved in the evolution of life on earth. Includes inquiry into the origin of life, microevolutionary processes, systematics, and large-scale evolutionary history. Prerequisite: BIOL 123.

BIOL 342 MOLECULAR GENETICS (4)

Lecture, 3 hours; laboratory, 3 hours. Gene structure and function at the level of DNA, RNA, and protein interactions. Emphasis on molecular analytical techniques used for genetic analysis in a diversity of prokaryotic and eukaryotic organisms. Prerequisites: BIOL 123 and CHEM 335A.

BIOL 344 CELL BIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An introduction to structural and molecular organization of eukaryotic cells and tissues. Specific topics will represent the central core of cell biology and are concerned mainly with those properties that are common to most eukaryotic cells. Prerequisites: BIOL 123 and CHEM 335A.

BIOL 346 INTRODUCTION TO BIOINFORMATICS (4)

3 Lecture, 2 hours; laboratory, 6 hours. Principles and techniques of accessing biomolecular databases and analyzing retrieved sequences of nucleic acids and proteins. Statistical tools, sequence alignments, pattern mapping, structural modeling, and phylogenetics will be explored. Examples will be selected from plants, animals, fungi, protists, bacteria, and viruses. Laboratory will involve computer exercises, projects, discussions, and student presentations. Prerequisite: BIOL 123 or consent of instructor.

BIOL 347 ENVIRONMENTAL PHYSIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Course examines the adaptations and physiological responses that allow animals to live under widely different environmental conditions. Laboratory and field exercises will utilize modern techniques of physiological measurement to examine adaptive strategies among and between species in different environmental conditions. Prerequisite: BIOL 123.

BIOL 348 PLANT PHYSIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Concepts and principles of plant function. The following areas are investigated in detail: photosynthesis, water relations, mineral nutrition, and plant growth regulation. Prerequisite: BIOL 123.

BIOL 349 ANIMAL PHYSIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Principles and concepts of animal function, with emphasis on cellular and biochemical/molecular bases of physiological activities in tissues and organ systems, environmental adaptations, and comparative homeostatic mechanisms. Prerequisite: BIOL 121, 122 & 123.

BIOL 383 VIROLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. The study of viruses: their characteristics, classification, genetics, and host-parasite interactions. Emphasis will be placed on the molecular mechanisms viruses use to replicate and how this can affect the host. Prerequisites: BIOL 121, 122 & 123 and CHEM 335A.

BIOL 385 CONTEMPORARY ISSUES IN BIOLOGY (3)

Lecture, 3 hours. Selected topics related to the quality of life and the search for perspectives on the future. Satisfies GE Area B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 110, 115, or 121 and 122.

BIOL 390 BIOLOGY COLLOQUIUM (1)

Lecture, 1 hour. Presentations by visiting scholars, departmental faculty, and master's degree candidates on current research and contemporary issues in biology. May be repeated for credit. All majors and graduate students are encouraged to enroll each semester, although no more than 2 units are applicable to the Biology major. Cr/NC grading.

BIOL 393 INDEPENDENT STUDY IN BIOLOGY (1-3)

Opportunity for independent research or special projects under the supervision of a Biology faculty member, for developing competency in biological research methods. May be repeated for up to a total of 4 units. Prerequisite: approved petition to enroll.

BIOL 398 NON-MAJORS TEACHING PRACTICUM (1-3)

Application of prior knowledge towards supervised instructional experience in Biology courses. Intended for professional growth and lifelong learning for non-major undergraduates in biology. A total of 4 units may apply to the Biology minor. Prerequisites: prior completion of the course for which instructional assistance is to be provided with a grade of B or better, consent of the instructor, and an approved petition to enroll.

BIOL 463 HERPETOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. Classification, functional and evolutionary morphology, environmental physiology, and ecology of reptiles and amphibians. Includes at least one weekend field trip. Prerequisite: BIOL 327 or 328.

BIOL 465 ORNITHOLOGY (4)

Lecture, 2 hours; laboratory and field, 6 hours. Avian classification, anatomy, and life histories, including such topics as molts, distribution, migration, and breeding habits. Prerequisite: BIOL 327 or 328.

BIOL 468 MAMMALOLOGY (4)

Lecture, 3 hours; laboratory and field, 3 hours. Characteristics, classification, physiological ecology, habitats, behavior, reproduction, distribution, and evolution of mammals. Prerequisite: BIOL 327 or 328.

BIOL 472 DEVELOPMENTAL BIOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Patterns of animal development. This course is designed to provide students with a comprehensive appreciation of the developmental process, presenting detailed descriptions of developmental mechanisms along with a conceptual framework for understanding how development occurs. Prerequisites: BIOL 121, 122, 123 and CHEM 335A.

BIOL 480 IMMUNOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. The cellular and molecular basis of the immune response. Topics include innate and adaptive immunity, hypersensitivity, autoimmunity, and cancer immunology. Prerequisites: one core course from the Molecular and Cell Biology core area.

BIOL 481 MEDICAL MICROBIOLOGY (5)

Lecture, 3 hours; laboratory, 6 hours. Mechanisms of infectious diseases caused by bacteria and fungi, host-parasite interactions in the disease process, therapeutic modalities, and infection control. Laboratory techniques for the cultivation, isolation, and identification of pathogenic bacteria and fungi. Emphasis is on methods and procedures currently utilized in diagnostic laboratories. Prerequisite: BIOL 343 or BIOL 340.

BIOL 484 HEMATOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Blood: the normal and abnormal structure and function of red cells, white cells, and hemostatic mechanisms. Prerequisite: BIOL 347 or BIOL 349.

BIOL 485 BIOMETRY (4)

Lecture, 3 hours; laboratory, 3 hours. Introduces students to quantitative analysis of biological data. The nature of biological data, principles of experimental design, and essential statistical tools used by biologists to analyze their results. Examples used in the course will be drawn from physiology, ecology, evolution, and medicine. Laboratory sections will involve computer exercises, discussions, and student presentations. Prerequisites: BIOL 123 and MATH 165.

BIOL 494 INDEPENDENT RESEARCH (1-3)

Directed study under the guidance of a Biology faculty member to design and conduct a research project in biology, including readings in the primary literature and application of information from relevant upper-division course work. Results must be given in a written report or presented in a public forum. May be repeated for up to a total of 4 units. Prerequisites: senior-level standing in the major with a cumulative GPA of 2.5, and approved petition to enroll.

BIOL 495 SPECIAL STUDIES (1-4)

Investigations to meet an advanced specialized study need beyond the department curriculum. The project should be planned and described in written form with consent of the faculty sponsor. Prerequisites: majors or minors in Biology, upper-division standing with a cumulative GPA of 3.0, and approved petition to enroll. May be repeated for credit.

BIOL 496 SENIOR RESEARCH (2)

Experimental or observational research for the B.S. Degree conducted under the guidance of one or more of the Biology faculty. A written report and an oral presentation of results in a public forum are required. Prerequisites: BIOL 494, senior-standing in the major.

BIOL 496A HONORS THESIS I (1-2)

Experimental or observational research for the B.S. degree conducted under the supervision of one or more of the biology faculty members. Prerequisites: senior-standing in the major with a minimum GPA of 3.0 and an approved application.

BIOL 496B HONORS THESIS II (2-3)

Completion of research for the B.S. degree conducted under the supervision of one or more biology faculty members. A research paper summarizing the results is required. Prerequisites: senior-standing in the major and completion of BIOL 496A.

BIOL 497 SELECTED TOPICS (1-4)

Intensive study of biological topics, which will vary from semester to semester. May be repeated for credit and may be applicable to the requirements for a major in Biology.

BIOL 498 BIOLOGY PRACTICUM (1-4)

Application of previously studied theory through supervised instructional work experience in biology. Intended for professional growth for undergraduates. Enrollees are required to write an evaluation of their course experience. May be repeated for up to a total of 4 units. Prerequisites: upper-division standing in Biology, consent of the instructor in whose course the student will be working, and an approved petition to enroll.

BIOL 499 INTERNSHIP IN BIOLOGY (1-4)

Work that provides training in the use of biological skills in the community. Requires written agreement by students, faculty sponsor, on-the-job supervisor, and field experience coordinators; please see department office for details. May be repeated for up to 7 units of credit; 3 hours per week for each unit. Cr/NC grading only.

BIOL 500S GRADUATE SEMINAR (1-2)

Advanced seminars exploring diverse topics in biological sciences. Topics vary from semester to semester, depending on faculty interest and expertise. This course may be repeated for credit.

BIOL 510 SELECTED TOPICS IN BIOLOGY (2-4)

Intensive study of biological topics, which will vary from semester to semester. Prerequisites: adequate undergraduate preparation in the topic under consideration and graduate or last-semester-senior standing with consent of instructor.

BIOL 511 CONSERVATION GENETICS (2)

Lecture, 1 hour; discussion, 1 hour. An examination of the scientific approaches applied to species conservation. Although molecular genetic approaches will be emphasized, a variety of other approaches will also be considered (e.g. captive breeding, population viability analysis, and translocation). Prerequisite: consent of instructor.

BIOL 512 CONSERVATION ECOLOGY (2)

Lecture, 1 hour; discussion, 1 hour. A seminar format with occasional lectures. An advanced exploration of current topics in the rapidly expanding field of conservation ecology. Specific topics considered will vary from semester to semester, depending on student interests. However, topics will commonly include habitat fragmentation and loss, global climate change metapopulation dynamics, biological invasions, restoration ecology, and design and management of preserves. Prerequisite: BIOL 333.

BIOL 513 SPECIATION (2)

Lecture, 1 hour; discussion, 1 hour. Examination of the theoretical and empirical approaches to defining species and a detailed survey of speciation modes and mechanisms. Lectures provide a framework for student-led discussion of specific topics and case studies. Prerequisite: consent of instructor.

BIOL 515 MACROEVOLUTION (2)

Lecture, 1 hour; discussion, 1 hour. A seminar format with occasional lectures. A topical and historical overview of the major macroevolutionary transitions that have occurred during the history of life. Particular attention will be given to broad patterns of change over time at higher levels of structural/organismic organization. Prerequisite: consent of instructor.

BIOL 516 BIOENERGETICS (2)

Lecture, 1 hour; discussion, 1 hour. A seminar format with occasional lectures. An in-depth examination of energy flow through living organisms at all levels of biological organization, from molecules to populations. Topics may include cellular metabolism, animal energetics, thermoregulation, fasting physiology, locomotion, foraging energetics, reproductive energetics, life history theory, community energetics, and population energetics. Prerequisite: consent of instructor.

BIOL 518 BIOTECHNOLOGY (2)

Lecture, 1 hour; discussion, 1 hour. A seminar format with occasional lectures. The field of biotechnology is moving at a rapid pace, and many of the molecular and biochemical techniques are being applied to a wide variety of biological disciplines. Topics include: structure-based approach to drug design, expressing recombinant proteins, DNA vaccines, and toxicity screening. Prerequisite: consent of instructor.

BIOL 544 ADVANCED CELL BIOLOGY (4)

Development and applications of major concepts in modern cell biology. Specific topics will include membrane structure and properties, metabolic pathways and physiology of energy conversion, cell signaling and principles of intercellular communication, and cell-cycle dynamics and macromolecular regulation of cell division. Prerequisites: BIOL 344.

BIOL 545 RECOMBINANT DNA LAB (4)

Laboratory, 9 hours; discussion, 1 hour. Techniques for the manipulation of DNA through gene cloning applicable in the study of all biological processes. Prerequisites: BIOL 342 or 344 and either BIOL 340 or CHEM 445.

BIOL 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC grading only.

BIOL 590 BIOLOGY COLLOQUIUM (1)

Lecture, 1 hour. A series of lectures by faculty, master's degree candidates, and invited guests on current research and contemporary issues in biology. All graduate students are encouraged to enroll each semester, although no more than 2 units are applicable to the M.S. degree. Cr/NC grading only.

BIOL 595 SPECIAL STUDIES IN BIOLOGY (1-3)

Investigations to meet highly specialized needs and to explore possible thesis topics. Project should be planned and described in writing with consent of faculty sponsor. Prerequisite: approved petition to enroll.

BIOL 598 GRADUATE PRACTICUM (1-4)

Application of previously studied theory to development and delivery of new instructional materials. Intended to provide professional growth for graduate students. Enrollees are required to write an evaluation of their course experience. Prerequisites: graduate standing in Biology, consent of the instructor in whose course the student will be working, and an approved petition to enroll.

BIOL 599 M.S. THESIS (1-3)

Original investigation based on laboratory or field research that meets the department and University standards. Prerequisites: admission to classified standing and advancement to candidacy.

Business Administration (BUS)

BUS 150 BUSINESS AND SOCIETY (3)

A survey of the major fields of management, designed to introduce students to the range of perspectives available in the discipline. Topics will include: accounting, finance, general management, health care management, human resources management, industrial relations, marketing, multinational management, organizational behavior, and systems analysis.

BUS 211 BUSINESS STATISTICS (4)

Topics include collection and presentation of data, discrete and continuous distributions, probability and sampling theory, statistical inference, and hypothesis testing. Parametric and nonparametric statistical tests will be examined, including t-tests, Chi-square, and ANOVA. Additional topics include regression, time series analysis and applications in business forecasting. Prerequisite: computer competency and pre-business math requirement.

BUS 219 E/U COMPUTING TOOLS FOR BUSINESS (3)

A laboratory-intensive course in which students gain a working knowledge of personal and mainframe computer operating systems as well as popular business applications such as spreadsheets and databases.

BUS 225 LEGAL ENVIRONMENT OF BUSINESS (4)

A study of the legal and ethical framework within which management decisions are made. The course emphasizes the sources, functions, and processes of law. It surveys a number of areas, including negligence, contracts, product liability, and constitutional law, and reviews government regulations in the areas of consumer protection, antitrust, labor, and employment law.

BUS 230A FINANCIAL ACCOUNTING (4)

A foundation course designed to provide a basic understanding of the theory and practice of accounting, with emphasis upon basic principles, concepts, and controls in relation to external reporting.

BUS 230B MANAGERIAL ACCOUNTING (4)

A foundation course designed to provide a basic understanding of the theory and practice of accounting, with emphasis upon basic principles, concepts, and controls in relation to internal reporting. Prerequisite: BUS 230A.

BUS 232 INTRODUCTION TO THE ACCOUNTING CYCLE (1)

An introduction to computer accounting applications, including forecasting, database management, and financial statement preparation using a spreadsheet program. Prerequisites: BUS 230A and 230B. Cr/NC only.

BUS 270 PERSONAL FINANCIAL PLANNING (3)

This course provides comprehensive coverage of personal financial planning in the areas of money management, career planning, taxes, consumer credit, housing and other consumer decisions, legal protection, insurance, investments, retirements, retirement planning, and estate planning. This course may not be used in the business major. Prerequisites: none.

BUS 290 SPONSORED CORPORATE TRAINING (2)

BUS 290 is designed for a situation in which a corporation will accept a volunteer into their unpaid "internship" program only if the student is enrolled at a university in conjunction with the corporate experience. Programs so offered do not meet department standards for internships, and do not qualify for 499 credit. BUS 290 may be used as free elective units only.

BUS 292 LIBRARY AND INFORMATION RESEARCH: BUSINESS (1-3)

Designed to teach business information research skills. Students will learn how to assess information, how to construct effective search skills, how to construct effective search strategies, how to find and retrieve information, and how to critically evaluate sources. Includes on-line research practice. Electronic and print sources for business research will be covered. Recommended for juniors who have completed most or all of the pre-business program. Cr/NC.

BUS 295 WORK EXPERIENCE (2-4)

Developed for students seeking an internship like experience but lacking the requisite academic experience for BUS 499, Internship. Cr/NC.

BUS 296 INSTRUCTOR-INITIATED RESEARCH PROJECT (1-4)

This course is designed to provide students the opportunity to participate in faculty sponsored research or study projects. It permits the student to pursue an area of interest that s/he would like to develop in close consultation with a faculty member. Cr/NC only. May be repeated for credit up to 7 times for a total of 16 units.

BUS 305W INTRODUCTION TO WINE BUSINESS (4)

An introduction to wine business principles and strategies applicable to the growing of grapes and the making, distribution, and marketing of wine. Additional topics include organizational, human resource, family business and financial management, government regulation, and social responsibility. For students not familiar with wine industry terminology, BUS 305W is recommended prior to enrollment in wine concentration or wine focus classes.

BUS 316 PRODUCTION OPERATIONS MANAGEMENT (4)

Production/operations management of manufacturing and service operations. Topics include analysis and decision techniques in the location, design, and layout of facilities and processes; work design and work measurement; line balancing; forecasting and scheduling; material requirements planning; and quality assurance. Inventory control, linear programming, project management, and queuing models and simulations are also examined. Prerequisite: BUS 211.

BUS 319 INTRODUCTION TO MIS (4)

Study of characteristics of computer-based information systems in organizations. Topics include MIS theory, concepts, and issues; systems, analysis, and design; database design using the relational database model; data communications and LAN; and specific implementation in areas of manufacturing, accounting, finance, human resources, and marketing. Prerequisite: computer competency.

BUS 330A INTERMEDIATE ACCOUNTING (4)

Current theory of accounting. Topics include the accounting process, design of financial statements, valuation of cash, receivables, inventories, plant and equipment, intangible assets, and current liabilities. Concepts such as present value, LIFO, and like-kind exchanges are covered. Prerequisites: BUS 230A and 230B.

BUS 330B INTERMEDIATE ACCOUNTING (4)

Current theory of accounting. Topics include the design of the statement of changes in financial position, valuation of capital stock, and retained earnings. Other special topics will include earnings per share computation, current cost and constant dollar accounting, liability, leases, pension plans, and price level accounting. Prerequisites: BUS 230A, 230B, and 330A.

BUS 334 ACCOUNTING INFORMATION SYSTEMS (4)

This course will present a thorough introduction to basic information systems theory, provide a working knowledge of systems analysis and design techniques, and introduce several fundamental accounting information flow patterns. In addition, it will examine the need for adequate systems controls, risks inherent in the controls, and refined systems output to support management decision-making processes. Prerequisites: computer competency, BUS 230A and 230B.

BUS 336W WINE INDUSTRY ACCOUNTING AND TAX (4)

This course incorporates current accounting theory within the following wine related areas: vineyard development, transfer pricing, long-term contracts, deferred income recognition, cost accounting, profit planning, net realizable value, inventory costing methods, cash flow projections, capital budgeting, leasing, construction, foreign currency translation and, throughout the various topics, corresponding income tax considerations. Prerequisites: BUS 230A and 230B.

BUS 340 SURVEY OF HUMAN RESOURCE MANAGEMENT (4)

Comprehensive introduction to the management of human resources. Topics include assessing human resource needs, job analysis, recruitment and selection, orientation and training, performance evaluation, compensation and benefits, safety and health, career development, labor relations, and government regulation. Prerequisites: BUS 211 and 225.

BUS 340W SURVEY OF HUMAN RESOURCE MANAGEMENT/WINE (4)

Survey of Human Resource Management/Wine examines the same subject matter as BUS 340 Survey of Human Resource Management. However the focus of BUS 340W is on the practice of human resource management in the wine industry and special issues encountered within that industry. There are frequent guest appearances by human resource professionals working in the wine industry. Credit may not be received for both BUS 340 and BUS 340W. Prerequisites: BUS 211 and BUS 225.

BUS 344 ORGANIZATIONAL BEHAVIOR (4)

The role of the individual and of groups in the organization is examined. Attention is directed to individual level characteristics such as learning and personality, to processes that affect attitudes, perceptions, and judgment. This course also covers applied theories of motivation, and career development and stress. Topics include group formation, development, structure, leadership, and dynamics as well as the processes of communication, decision-making, power, and conflict.

BUS 350 MANAGEMENT (4)

A management survey course will provide students with a framework for understanding the focus, function, and relevance of specific disciplines in business administration. The course will illustrate the integrative nature of business organizations, exemplifying the interdependence of functional areas in pursuing organizational goals. Prerequisite: BUS 225.

BUS 352 ORGANIZATIONAL THEORY (4)

Course examines the evolution of theories of organization and management and focuses on the effects of structural and contextual dimensions in organization structures. Emphasis is on the strategic implications of organization design and on the structural mechanisms available to facilitate organization goals. The effects of organizational change control, culture, decision-making, and conflict on structure are also considered. Prerequisite: BUS 350.

BUS 354 APPLIED BUSINESS ANALYSIS (4)

The course will focus on defining operational and tactical business problems, goals, and decision factors in quantitative terms. Emphasis is on structuring problem situations and on 1) determining appropriate requisite factors related to the problem, 2) quantifying those factors, and 3) choosing the appropriate quantitative decision-making techniques to arrive at an optimal solution. Primary consideration is given to the appropriate identification of problems and goals, generally through case studies, and to the effective choice and operationalization of decision-making techniques, generally through a project. Prerequisite: BUS 319 or BUS 334.

BUS 360 INTRODUCTION TO MARKETING (4)

Introduction to terminology and basic concepts, including product development; pricing; promotion; and distribution of goods, services, and ideas. Emphasis is on consumer orientation and managing the marketing function within an uncertain environment. Marketing information systems and other marketing foundations are applied to the consumer.

BUS 362 SERVICES MARKETING (4)

This course is designed to acquaint the student with the principles of service marketing and their application in a variety of service sectors ranging from banking to hospital services. Services marketing theory and principles will be applied to a firm's strategic marketing planning and the development of its service operation process within the service industry. Specifically, the course encompasses a) a developing competitive service model, b) managing the customer interface, and c) implementing sustainable service marketing strategies. Course Prerequisite: BUS 360 and Junior Standing required.

BUS 364 SPORTS MARKETING (4)

This course examines the integration of product, pricing, promotion, distribution, sales, sponsorship, advertising, and brand in the marketing and management of sporting teams/leagues/events and sporting goods. Also considers the use of sports by non-sports businesses to reach their target markets. Prerequisite: BUS 360

BUS 366 RETAIL MANAGEMENT (4)

Studies business activities that involve the sales of goods and services in the marketplace including retail institutions, merchandising, site selection, market information, and retail strategy and planning. Prerequisite: BUS 360.

BUS 367 CONSUMER BEHAVIOR (4)

Analysis of the cultural, social, and psychological factors that influence the consumer's decision-making processes including: learning, perception, information search and information processing, personality, lifestyle, motivation, and attitudes. Prerequisite: BUS 360.

BUS 368 INTERNATIONAL MARKETING (4)

Examines the marketing practices and customs of international markets, and their cultural, social, legal, and ethical differences. Emphasis on developing and adjusting the marketing mix of product, price, promotion, and distribution to compete in international settings. Prerequisite: BUS 360.

BUS 370 INTRODUCTION TO MANAGERIAL FINANCE (4)

An introduction to the conceptual and analytical framework guiding financial decision-making within the business firm. Emphasis is placed on financial analysis, the evaluation of investment opportunities available to the firm, working capital management, and the analysis of alternative means of financing the firm.

BUS 377 FINANCIAL INSTITUTIONS AND MARKETS (4)

Study of the structure and functions of the financial system in the U.S. economy. Topics include the role of financial intermediaries (including commercial banks), the money market, sources and uses of long-term funds, interest rates and security prices, the role of the Federal Reserve, monetary policy, and international capital markets.

BUS 385 SPECIAL TOPICS IN BUSINESS ADMINISTRATION (1-4)

This course provides for the teaching of special topics in business administration. Consult your advisor regarding application to your concentration. May be repeated up to 3 times for a total of 8 units.

BUS 385A SPECIAL TOPICS IN ACCOUNTING (3-4)

This course provides for the teaching of special topics in business administration, accounting. Consult your advisor regarding application to your concentration.

BUS 385F SPECIAL TOPICS IN FINANCE (3-4)

This course provides for the teaching of special topics in business administration, finance. Consult your advisor regarding application to your concentration.

BUS 385MG SPECIAL TOPICS IN MANAGEMENT (3-4)

This course provides for the teaching of special topics in business administration, management. Consult your advisor regarding application to your concentration.

BUS 385MK SPECIAL TOPICS IN MARKETING (3-4)

This course provides for the teaching of special topics in business administration, marketing. Consult your advisor regarding application to your concentration.

BUS 385W SPECIAL TOPICS IN WINE (3-4)

This course provides for the teaching of special topics in business administration, wine. Consult your advisor regarding application to your concentration.

BUS 388 SEMINAR IN PEER ADVISING (2)

Seminar and practicum in peer advising within the context of higher education. Topics will include general education, major and University degree requirements, the diversity of students' needs as well as the campus services and resources designed to meet them, and interpersonal communication skills needed for academic advising. Cr/NC only. May be repeated once for credit.

BUS 391 CROSS-CULTURAL COMMUNICATION AND NEGOTIATION (4)

The course provides students with techniques for becoming skillful cross-cultural communicators and negotiators. Topics include dimensions of culture and their implications in organizations, successful international business negotiation tactics, and managing cultural diversity in the workplace.

BUS 393 INTRODUCTION TO INTERNATIONAL BUSINESS (4)

A survey of theoretical and institutional aspects of international trade and investment. The course will address topics including international trade theory, the international money market, balance of payments, international sourcing, and management of international enterprises.

BUS 394 INTERNATIONAL BUSINESS STRATEGY (4)

This course will focus on understanding the political, economic, sociocultural and environmental factors affecting the development of options and strategies. Students gain appreciation of different forms of foreign involvement and which types are appropriate in view of national interests of host nations. Topics include the multinational corporation, exporting, importing, socioeconomic development, international economic order, the changing U.S. role in the international economy, and management styles in different cultures. Case studies will be analyzed. Prerequisite: BUS 391 or 393.

BUS 396W THE GLOBAL WINE INDUSTRY (3-4)

This survey course provides an overview of the global wine industry. Topics include the analysis of global trends affecting wineries, the nature of international competition, the importing and exporting of wine, and joint ventures and acquisitions in the wine industry involving partners from different countries. The course will discuss both consumption and production of wine around the world, with special emphasis placed on the impact of emerging new world wine producers. Because a two-week overseas field trip is a part of this course, it will be offered only during intersession or between semester breaks. Prerequisite: BUS 360.

BUS 397W GLOBAL MARKETPLACE FOR WINE (4)

The course provides an in-depth look at the global trends affecting the wine industry. Topics include the changes taking place in wine consumption in both established and emerging wine markets. The role played by imported wine in key markets will be discussed. Industry dynamics will be analyzed with a focus on the export strategy of wine firms and wine producing nations, the formation of joint ventures with international partners, and the potential for investment in foreign firms and vineyards. Topics related to the workings of the bulk market for wine will also be presented. Prerequisites: BUS 305W and BUS 360.

BUS 399A ADVANCED WORK EXPERIENCE IN ACCOUNTING (3-4)

Designed for upper-division students in business administration with a concentration in accounting who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 399F ADVANCED WORK EXPERIENCE IN FINANCE (3-4)

Designed for upper-division students in business administration with a concentration in finance who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 399FM ADVANCED WORK EXPERIENCE IN FINANCIAL MANAGEMENT (3-4)

Designed for upper-division students in business administration with a concentration in financial management who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 399MG ADVANCED WORK EXPERIENCE IN MANAGEMENT (3-4)

Designed for upper-division students in business administration with a concentration in management who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 399MK ADVANCED WORK EXPERIENCE IN MARKETING (3-4)

Designed for upper-division students in business administration with a concentration in marketing who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 399W ADVANCED WORK EXPERIENCE IN WINE BUSINESS STRATEGIES (3-4)

Designed for upper-division students in business administration with a concentration in wine business strategies who have an opportunity for an extraordinary on-the-job educational experience but are prohibited by the internship policy from taking BUS 499 (Internship) because of the prohibition against students turning existing jobs into internships. GPA in major of 2.0 is required and a student must have successfully completed either at least two courses in the area or at least sixteen (16) units of upper-division business courses prior to enrolling. Requests for BUS 399 must be approved by the student's faculty advisor and the department chair. A student may not receive credit for both BUS 499 (Internship) and BUS 399 (Advanced Work Experience) in a given concentration. A student may receive credit for BUS 499 in one concentration and credit for BUS 399 in another concentration based on a different work experience. No more than 8 units of BUS 399 and BUS 499 in total may be applied to the Business major. Cr/NC only. May be repeated 3 times for credit for a total of 16 units.

BUS 417 MANAGEMENT OF SERVICES (4)

The study of effective techniques and strategies applicable to the successful management of a service-based organization. The course provides the student valuable perspectives by contrasting different types of major service businesses. Students are expected to be able to apply basic quantitative tools to solve service management problems. Prerequisite: BUS 316.

BUS 420 BUSINESS DATA COMMUNICATIONS (4)

A lecture, literature, and case study-oriented survey course on the use of local and wide-area data communications in the business enterprise. Topics include LAN, WAN, EDI wide-band multimedia, distributed systems, and evolving system architectures and their impact on business organizations. Prerequisite: BUS 319 or BUS 334.

BUS 422 BUSINESS DATA MODELS (4)

Lecture, laboratory, 2 hours. A course in designing relational databases. The entity-relationship model is used to develop the conceptual data structure from which a normalized set of tables is extracted and implemented.

BUS 422W BUSINESS DATA MODELS (4)

Lecture, laboratory, 2 hours. A course in designing relational databases in the wine industry. Prerequisite: BUS 319 or BUS 334.

BUS 430 ADVANCED ACCOUNTING (4)

Advanced accounting, problems, and theory. Topics include consolidations, business combinations, fund accounting, partnerships, foreign exchange and other current issues. Prerequisites: BUS 330A and 330B, or consent of instructor.

BUS 433A INDIVIDUAL TAXATION (4)

Analysis of the Internal Revenue Code pertaining to individual and corporate income taxes. Topics include determination of taxable income, deductions and exemptions, accounting records, returns, computation of taxes, and tax planning. Subject matter to reflect the most recent tax law changes. Prerequisites: BUS 330A (may be taken concurrently).

BUS 433B CORPORATION AND ESTATE TAXATION (4)

Concepts and principles of federal taxation as they apply to business enterprise and fiduciaries, such as estates and trusts. Prerequisite: BUS 433A.

BUS 434 AUDITING (4)

Study of generally accepted auditing standards and procedures followed in the examination of financial statements and operating control reviews. Topics include evaluation and analysis of internal control, nature of and procedures for gathering audit evidence, professional ethics and legal liability, the standards of reporting financial information, and statistical sampling applications. Prerequisites: BUS 330A, BUS 330, and BUS 334.

BUS 435 COST ACCOUNTING (4)

To introduce applications for the accountant's role in the decision-making process. Topics include contribution margin analysis, job-order and process costing, standard costing, transfer pricing, profit planning, cost centers, cost volume, profit relationships, inventory control, and other current issues. Prerequisites: BUS 230B, 330A (330A may be taken concurrently).

BUS 436 BUSINESS LAW (4)

A study of areas of law of particular importance to business, including contracts, sales, negotiable instruments, secured transactions, agency, partnerships, and corporations.

BUS 437 GOVERNMENTAL ACCOUNTING (4)

Course deals with intricacies and peculiarities of fund accounting as it relates to governmental units, including preparing and recording the budget, the use of the encumbrances accounting, and the year-end closing of the budgetary accounts. Students will be exposed to GASB (Government Accounting Standards Board) standards, governmental financial statement requirements, and learn the different objectives and purposes of financial statements for nonprofit versus profit entities. Prerequisite: BUS 330A.

BUS 441 RECRUITMENT, SELECTION, AND PERFORMANCE APPRAISAL (4)

Fundamental issues dealing with the staffing of organizations and evaluating individual performance are covered. Topics receiving attention include legal issues, fundamentals of measurement, incorporating job analysis results into the selection process, and design of selection processes and procedures. Issues of performance appraisal will be examined. Common methods and pros and cons of each will be explored. Prerequisite: BUS 340.

BUS 442 TRAINING AND DEVELOPMENT (4)

Theory and practice of training for developing the human resources in the organization. Topics include adult learning theory and research, methods of assessing training needs and learning styles, design of effective training experiences, presentation skills, and evaluation methods. Prerequisite: BUS 340.

BUS 446 GOVERNMENT REGULATION AND HUMAN RESOURCES (4)

An examination of current legislation and executive orders affecting the human resource function. Laws, orders, guidelines, and regulations will be examined within the framework of the regulatory model, which presents an integrated framework for understanding the relation of societal problems, laws, agencies, guidelines, the courts, and management responses. Prerequisite: BUS 340.

BUS 447 LABOR MANAGEMENT RELATIONS (4)

A study of modern labor-management relations. Topics include the factors favoring the growth of labor organizations, the historical development of labor movements, labor economics and the labor movement, collective bargaining and the modern legal framework of organized labor, conflict resolution through grievance/arbitration, and other relevant labor topics. Prerequisite: BUS 340.

BUS 451 ENTREPRENEURSHIP / SMALL BUSINESS MANAGEMENT (4)

Intended for prospective entrepreneurs wishing to start a new business and/or participate in the management of a small, ongoing company during its early months. Also appropriate for students interested in consulting, banking, or investing in small companies. Emphasis on the preparation of realistic, action-oriented business plans necessary for presentations in organizing and financing. Prerequisite: BUS 360 or consent of the instructor.

BUS 452 LEADERSHIP (4)

The focus of this course is a comprehensive review of the writings and theories of leadership. Students will evaluate leadership traits and behavior, the effects of reciprocal influence, transformational leadership, the role of power versus authority, followership, and related matters. Applications of theory to practice will be emphasized. Prerequisites: BUS 344 and BUS 350.

BUS 453 SMALL BUSINESS ANALYSIS (4)

This course focuses on decision making in functional areas of marketing, production, and finance. Students will work in teams with faculty and with professional supervision consult with businesses to solve managerial problems. Prerequisites: BUS 360 or consent of the instructor.

BUS 455 ALTERNATIVE DISPUTE RESOLUTION (4)

This course will provide students with an understanding of the alternatives to litigation as a means of dispute resolution. The primary focus will be on two alternatives, mediation and arbitration. The first half of the course will focus on the mediation process and the basic problem solving skills that are a fundamental component of successful mediation. The second half of the course will emphasize the types of voluntary arbitration and the means to implement the process. Prerequisite: BUS 340.

BUS 458 ORGANIZATION CHANGE AND DEVELOPMENT (4)

Scholarly and practical study of how to implement effective change within organizations, such as re-organizing departments and business units, IT implementation, mergers and acquisitions, culture change and other change events that impact organizations. Topics include: organizational change theory, processes, and models; the role of change agents; organizational diagnosis and intervention; and culture, process, strategy, structure, and technology changes in organizations. Prerequisite: BUS 344.

BUS 461 PROMOTION MANAGEMENT (4)

Examines the planning, execution, and measurement of the organization's external communications with its environment. Analyzes the four promotion tools: advertising, personal selling, sales promotion, and public relations. Prerequisite: BUS 360.

BUS 462 MARKETING RESEARCH (4)

The theory and application of marketing research as a tool for management decision making. Emphasis is on problem identification and definition, research design, sampling procedure, primary and secondary data collection, statistical analysis, interpretation of data, and reporting of research findings. Prerequisites: BUS 360 and junior-level standing.

BUS 463 SALES MANAGEMENT AND PERSONAL SELLING (4)

Examines theory and practice in the principles and art of selling. Studies planning, organizing, leading, evaluating, and controlling of sales force activities. Prerequisite: BUS 360.

BUS 464W PRODUCTION, OPERATIONS, AND DISTRIBUTION (WINE) (4)

The study of effective operations management techniques and strategies from the perspective of the California wine industry. The course emphasizes the basic concepts of purchasing, operations, logistics, and supply chain management as they apply to the wine industry. More specific topics include value analysis, total quality management, make/buy decisions, negotiation, and supplier development.

BUS 465W WINE MARKETING (4)

An in-depth study of marketing from the perspective of the California wine industry. The course emphasizes wine marketing planning, including an analysis of wine consumer segments. The wine industry's economic, legal, social, and competitive environment; industry trends, major problems and opportunities; and strategic alternatives as related to wine varieties and brands, pricing, promotion, and distribution. Prerequisites: BUS 305W, BUS 360, and junior-level standing.

BUS 466 ORGANIZATIONAL COMMUNICATION (4)

This course teaches communication theory and skills as they are applied to management situations. Students will study the impact of the organizational environment on the practice of communication theory and the development of strategies for effectively relaying messages. Written and oral exercises will be stressed. Prerequisite: must have passed the WEPT.

BUS 467W WINE E-COMMERCE AND DIRECT SALES (4)

An in-depth study of electronic commerce aspects from the perspective of the California wine industry. Topics include opportunities and challenges associated with electronic commerce (e-commerce/e-business), and impacts of e-commerce with meeting strategic objectives of an organization in the wine industry. The course includes topics on database management, direct-to-consumer and government oversight/compliance issues, wine club management, and winery management software as they apply to the wine industry. Prerequisite: BUS 319.

BUS 468 MARKETING DECISION-MAKING (4)

Data analysis and "what if" marketing decision-making, using computer models and computer simulation. Emphasizes developing computer and analytical marketing skills. Prerequisites: BUS 360 and 367 (BUS 367 may be taken concurrently).

BUS 469 MARKETING MANAGEMENT (4)

Advanced study of marketing management, strategy, and decision-making through the use of marketing cases. Requires the integration of marketing concepts and theories from previous marketing course work. Prerequisites: BUS 360 and 367.

BUS 470 MANAGERIAL FINANCE (4)

Theory of managerial decision making in its financial and economic context. Topics include the decision-making environment, financial planning, budgeting and control, long-term investment decisions and capital budgeting techniques, working capital management, the cost of capital, valuation, rates of return, and choosing among alternative sources of funds. Prerequisite: BUS 370.

BUS 471 CASE STUDIES IN FINANCE (4)

The application of financial concepts and analytical methods to the development and evaluation of alternative financial strategies and opportunities available to the firm. Emphasis is placed on financial decision-making and analysis of the small and mid-size firms. Prerequisite: BUS 370.

BUS 472 INVESTMENTS (4)

A study of the characteristics of securities: valuation, sources, selection strategies, and theory of portfolio management. Stocks, bonds, options, and futures markets will be included. A major term project is required. Prerequisite: BUS 370.

BUS 473 INTERNATIONAL FINANCE (4)

The foundations of financial theory (capital budgeting, capital markets, EMH/CAPM/ portfolio theory, capital structure, short term financing) are set in an international/ MNC context where currency exchange rates, differences in accounting procedures, international trade, political risk, investments, and financing are examined. Prerequisite: BUS 370.

BUS 474 COMPUTER APPLICATIONS IN FINANCE (4)

A course in financial modeling, analysis, and research using computers. Emphasis is placed on the development of models required for the evaluation of financial alternatives. Prerequisite: BUS 370.

BUS 475W WINE ACCOUNTING AND FINANCE (4)

This course focuses on financing, investing, and accounting decisions facing managers of wine businesses. It explores the financial reporting issues that are unique to wine businesses and how these issues affect valuation. This course is directed to those interested in careers in accounting and finance as well as those interested in understanding relevant accounting and finance issues for wine business. Prerequisite: BUS 370.

BUS 476 RISK MANAGEMENT AND INSURANCE (4)

The course focuses on identifying and evaluating risk exposures for individuals and firms. Insurance products or financial products can mitigate the effects of risk related losses, and this course introduces students to a range of insurance products sold or used in financial markets. Additionally, the course provides an integrated approach to present the area of Enterprise Risk Management (ERM), which analyses traditional pure risks together with financial risks as a part of overall risk management of the firm. Prerequisite: BUS 370 or permission of the instructor.

BUS 491 SEMINAR IN MANAGEMENT STRATEGY AND POLICY (4)

Seminar covering current issues in managerial strategy and corporate policy that integrates concepts of organization theory and behavior, marketing, finance, human resources, production/operations, information systems, entrepreneurship, accounting, economics, and international business. This is the capstone for the business administration major and would be expected to be taken in the last semester prior to graduation. Prerequisites: all business core requirements, and application for award of degree.

BUS 491W SEMINAR IN MANAGEMENT STRATEGY AND POLICY IN THE WINE INDUSTRY (4)

Seminar covering current issues in managerial strategy and corporate policy that integrates concepts of organization theory and behavior, marketing, finance, human resources, production/operations, information systems in the wine industry, entrepreneurship, accounting, economics, and international business in the wine industry. This is the capstone for the business administration major and should be taken in the last semester prior to graduation. Prerequisites: all business core requirements, a passing score on the WEPT, and application for award of degree.

BUS 493 ADVANCED TOPICS IN PROFESSIONAL SALES (2)

BUS 493 offers students hands-on experiences in all aspects of the sales process, including prospecting, face-to-face or phone meetings with stakeholders, information gathering, and formal sales presentations. Students will practice persuasive communication and effective sales strategies that create valuable and viable solutions for organizations seeking products/services. Prerequisite: BUS 360.

BUS 495 SPECIAL STUDIES (1-4)

Student-designed and instructor-guided projects, to be arranged individually. Independent study credit will be granted only to students who have: 1) attained senior status, 2) minimum GPA in business administration of 3.0, and 3) substantial background in the field involved in the petitioned study. A maximum of 4 units are applicable to the business administration major. May be repeated once for credit.

BUS 499 INTERNSHIP IN BUSINESS (3-4)

Field experience in management and administration. For upper-division students in fields of their career or academic interest. Minimum of three hours per week per semester unit. Four units maximum are applicable to the business administration major. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. Prerequisite: prior arrangement with internship coordinator. May be repeated twice for a total of 12 units.

BUS 499A INTERNSHIP IN ACCOUNTING (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in accounting. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and BUS 499A may not be used as a concentration elective. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 499F INTERNSHIP IN FINANCE (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in finance. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and only one in any single concentration. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 499FM INTERNSHIP IN FINANCIAL MANAGEMENT (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in financial management. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and only one in any single concentration. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 499MG INTERNSHIP IN MANAGEMENT (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in management. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and only one in any single concentration. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 499MK INTERNSHIP IN MARKETING (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in marketing. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and only one in any single concentration. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 499W INTERNSHIP IN WINE BUSINESS STRATEGIES (3-4)

Field experience, for upper-division students, in management and administration with an emphasis in wine business strategies. All internships that may be used in a concentration shall be either 3 or 4 units. No internship may be counted in more than one concentration. No more than two internships may be used for credit in the B.S. in Business Administration program and only one in any single concentration. GPA of 2.0 is required in major plus two courses in the field of concentration. Cr/NC only. The internship requires a minimum of three hours per week per semester unit. Prerequisite: prior arrangement with internship coordinator.

BUS 501 PRINCIPLES OF ACCOUNTING (3)

A foundation course designed to provide a basic understanding of the theory and practice of accounting with emphasis upon basic principles, concepts, and controls in relation to external and internal reporting. Prerequisites: computer competency and a bachelor's degree.

BUS 504 HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL BEHAVIOR (1-3)

Topics from HRM will include equal employment opportunity/affirmative action, staffing, performance evaluation, job design, compensation administration, safety and health, employee rights and discipline, and labor relations. Behavioral topics will include individual and group behavior, motivation, decision-making, leadership, organization development, and culture. Project requires analysis and synthesis of relevant topics. Prerequisite: a B.A. or B.S. degree.

BUS 506 MARKET ANALYSIS (1-3)

The terminology and concepts of marketing including segmentation, product development, pricing, promotion, and distribution. A marketing plan, case, or similar application project is required. Prerequisite: a B.A. or B.S. degree.

BUS 507 FOUNDATIONS OF MANAGERIAL FINANCE (1-3)

BUS 507 is an abbreviated version of BUS 370 that is intended to prepare students for the M.B.A. level course BUS 570 Seminar in Managerial Finance. It provides an introduction to the conceptual and analytical framework guiding financial decision-making within the business firm. Emphasis is placed on time value of money and discounted cash flow calculations, valuation of stocks and bonds, the evaluation of investment opportunities available to the firm, the essentials of the risk return trade-off, and estimation of the firm's cost of capital. Prerequisite: a B.A. or B.S. degree.

BUS 508 MANAGERIAL STATISTICS AND THEIR APPLICATION (3)

Statistical data analysis with an emphasis on problems from manufacturing and service operations and their solution using Excel. Instruction will include spreadsheet analysis and a project involving the application of statistical methods. Prerequisite: a B.A. or B.S. degree.

BUS 516 OPERATIONS MANAGEMENT (3)

Production/operations management of manufacturing and service operations. Topics include forecasting and scheduling, material requirements planning, and quality assurance. Additional tools include inventory control, project management, and product development. Modern techniques such as Supply Chain Management, e-business, Just-in-Time, and Total Quality Management are illuminated.

BUS 516E OPERATIONS AND SUPPLY CHAIN STRATEGIES (1-3)

This course explores major decision areas involved in managing manufacturing and service organization operations. Topics include process selection and design, planning and control systems, quality management, inventory management and control, independent demand management, supply chain management, operations strategies, and developing world-class operations. Prerequisite: admission to the E.M.B.A. Program.

BUS 519 MANAGEMENT INFORMATION SYSTEMS (3)

Study of the fundamental role information systems and technologies play in organizations and management issues they raise. Topics include IS/IT'S strategic importance; technology, legislative, and industry trends; systems development issues and practices; project management; database design and management; and management of IS/IT assets.

BUS 519E INFORMATION AS CAPITAL (1-3)

The course covers major challenges that organizations confront while managing key technological resources as well as implementing technological innovations. The course examines critical links between an organization's business, cultural, and information technology (IT) strategies. This course provides current and future senior executives with the insights and frameworks necessary to make strategic decisions about information technology. The integration of digital and social media strategies into marketing and IT is also explored. Prerequisite: Admission to the E.M.B.A. Program.

BUS 525WA WINE BUSINESS EXPERIENCE A (1-3)

This course provides an opportunity to gain a winery general manager's perspective from vine to package. Through winery field trips during harvest and crush, students will get an executive's view of vineyard operations, winemaking and wine maturation. Then, students will develop a brand strategy to execute in BUS 525W B. Prerequisites: the four core M.B.A. courses: BUS 540, BUS 570, BUS 580, and BUS 535.

BUS 525WB WINE BUSINESS EXPERIENCE B (1-3)

This course expands the elective courses available to M.B.A.-Wine Business students and allows graduate students a for-credit opportunity to participate in an experiential learning activity in wine business packaging, marketing, and selling a brand, including gaining event planning and wine industry software sales technology experience. Prerequisites: BUS 540, BUS 570, BUS 580, BUS 535 and BUS 525W A.

BUS 530 FINANCIAL STATEMENT ANALYSIS (3)

Students learn to analyze financial statements for the purpose of valuing the firm. The course takes a user perspective, not a preparer's perspective. The course is an inter-disciplinary accounting and finance course. Students learn the limitations and complexities of the numbers used in valuing major components of the financial statements. Significant emphasis is placed on the current American regulatory environment, impending changes within that environment, as well as on international and global regulatory issues. Prerequisites: BUS 501 or BUS 230A and 230B, and BUS 507.

BUS 530E FINANCIAL STATEMENT ANALYSIS (1-3)

This course provides a critical analysis of the role of regulation in the measurement and reporting of the results of economic activities to enable a more effective and efficient use of financial information for decision-making purposes. This course explains the "management assertions" embodied in the financial statements and its relationship with an independent audit of financial information. There is also discussion of strategic cost concepts and ethics in recordkeeping; methodology of short and long-term decision analysis; planning and control of organizational activities, transfer pricing methods, and performance evaluation and their related behavioral implications; and critical analysis of long term decisions. Prerequisite: admission to the E.M.B.A. Program.

BUS 535 COST ANALYSIS AND CONTROL (3)

The course focuses on concepts and managerial uses of financial information with a strong emphasis on management decision-making and the strategic effects of decisions, ethics, and new management accounting trends to prepare students for the challenges of today's workplace.

BUS 540 MANAGING HUMAN CAPITAL (3)

Blending theory and application, this course is aimed at understanding the development of human capital. It focuses on the strategic development of talent in the context of talent leadership. It views the arena of talent management as a critical means to achieve competitive advantage in the context of business strategy.

BUS 540E TALENT MANAGEMENT (1-3)

This course examines human resources with an emphasis on the role of the top executives and leadership to establish an effective HR system. Specific topics include: strategic human resources in a globally competitive environment; financial implications of HR; strategic staffing and interviewing; training and development; creating a motivational work environment for employees; designing an effective compensation and benefits systems; safety and environmental issues in the workplace; and a review of ethical, legal, and international HR issues. Prerequisite: admission to the E.M.B.A. Program.

BUS 545W GLOBAL WINE BUSINESS (3)

Current theory and practice of how wine businesses have evolved to become a global industry. Students analyze and debate cutting-edge issues in strategic management, leadership, organization, human resources, entrepreneurship, family business, government regulation, management of technology, financial management, and socially responsible practices. Prerequisite: classified graduate status in the Wine M.B.A. Concentration.

BUS 546E GLOBAL BUSINESS OPERATIONS (1-3)

A course that investigates strategic opportunities and challenges in a global marketplace, specifically the macroeconomic and microeconomic forces that face businesses as the world has flattened. This course investigates how fiscal, monetary, and trade policies affect any business, and may focus on a specific country or trade area. Case studies provide comparisons and contrasts for different business and socioeconomic environments in today's global economy. Prerequisite: admission to the E.M.B.A. Program.

BUS 550 SEMINAR IN ORGANIZATION BEHAVIOR AND MANAGEMENT THEORY (3)

An examination of the business organization with reference to management, design, change, and organizational behavior. Prerequisite: BUS 504 or equivalent.

BUS 552 LEADERSHIP AND TEAM BUILDING (3)

Leadership and Team Building go hand in hand and represent critical elements of the managerial process. This course examines theoretical formulations of leadership and combines that with study of exemplar leaders. Specific topics include: use of power, authority and persuasion, characteristics of effective leaders, comparison of alternative leadership styles, and entrepreneurial leadership. The role of leaders in molding teams is an underlying theme. Prerequisite: BUS 504 or equivalent, or consent of instructor.

BUS 552E LEADERSHIP INTELLIGENCE (1-3)

Leadership is about making a difference for the organizations in which we work, and for the communities in which we work and live. The focus is on building a core of three critical skill sets: a foundation of financial, operational, and strategic business acumen; the emotional intelligence to effectively engage people; and the execution discipline to deliver results and get things done. This course is connected to BUS 554E and includes the orientation weekend and team-building experiences.

BUS 554 SOCIAL ENTREPRENEURSHIP IN THEORY AND PRACTICE (3)

This course examines the theory and practices of social entrepreneurship. The course will examine how entrepreneurial solutions can be fashioned and applied to job creation, workforce development, and meeting other social needs. Specific topics include: social responsibility, venture philanthropy, opportunity assessment, market analysis, financial principles of sustainability, micro enterprises, and nonprofit organizations.

BUS 554E LEADING SUSTAINABLE ENTERPRISES (1-3)

When business results are measured by long-term profitability, the creation of vibrant communities, and the sustainable use of natural resources, how do executive leaders achieve success? Leading Sustainable Enterprises is an intensive leadership development experience which provides executives with the tools and strategies necessary for delivering results in a complex multi-stakeholder business environment. Course topics encompass leading for results, business intelligence, leadership intelligence, execution competence, and sustainability strategies. This course includes an offsite leadership development program and the completion of a sustainability plan for a business. Prerequisite: admission to the E.M.B.A. Program.

BUS 555W SUSTAINABILITY IN THE WINE HOSPITALITY INDUSTRY (3)

Current theory and practice of how wine and hospitality businesses can become sustainable business. Course content includes business rationale for adopting environment and social equity practices for improved business performance and success. Students analyze and debate cutting-edge issues in sustainability including a review of global wine and hospitality businesses using sustainable practices, audit and compliance, energy management systems, ISO standards, creation of sustainable business strategies, development of policies and practices for sustainable practices for operations, success measures, and cost-benefit analysis. Prerequisite: classified graduate status in the Wine M.B.A. Concentration.

BUS 559 SEMINAR IN ADVANCED MANAGEMENT TOPICS (3)

Graduate study of a current or emerging management topic of special interest. May be repeated for credit with the consent of the M.B.A. coordinator. Prerequisites to be determined by the instructor.

BUS 559E LEADERSHIP NORTH BAY (1-3)

This course gives students an opportunity to review case studies of local firms and analyze what unique challenges exist for businesses in the North Bay. Discussion of local government, labor force, and other business environment factors adds to the analysis. Further, economic trends in the North Bay are discussed in the context of what business opportunities exist within those trends. Prerequisite: admission to the E.M.B.A. Program.

BUS 559W SEMINAR IN ADVANCED WINE BUSINESS TOPICS (3)

Graduate study of a current or emerging topic of interest in Wine Business. May be repeated for credit with the consent of the M.B.A. coordinator. Prerequisites to be determined by the instructor.

BUS 560 SEMINAR IN MARKETING MANAGEMENT (3)

Study of marketing situations, development of marketing plans, and evaluation of marketing programs. Careful consideration of the conceptual background of marketing including trends and emerging developments. Prerequisite: BUS 506 or equivalent.

BUS 560E STRATEGIC MARKETING (1-3)

Study of the current marketing environment, analysis of cutting-edge marketing programs, and the development of strategic marketing plans. Careful consideration of the conceptual background of marketing including trends and emerging developments. The integration of digital and social media into marketing strategies is also discussed. Prerequisite: admission to the E.M.B.A. Program.

BUS 563 STRATEGIC BRANDING (3)

This course offers a solid, proven theoretical foundation with practical insights to assist managers in their day-to-day and long-term brand decisions. Specifically, a number of key concepts related to brand management, such as brand equity and brand positioning, are incorporated with a series of case studies to optimize students' learning. Prerequisites: completion of the four core M.B.A. courses: BUS 540, BUS 570, BUS 535, and BUS 580.

BUS 565W MARKETING AND SALES STRATEGIES FOR WINE (3)

Study of wine marketing and sales on a global basis. Focus on branding, research, positioning, and promotion of wine. Consideration of distribution alternatives and sales strategies for wine. Development of marketing plans for wine products. Prerequisite: classified graduate status in the Wine M.B.A. concentration.

BUS 570 SEMINAR IN MANAGERIAL FINANCE (3)

Financial theory and applied financial analysis. Topics may include security analysis, portfolio management, financial accounting, corporate financial policy, investment banking, and international finance. Prerequisites: ECON 501, BUS 501, BUS 507 or BUS 370, and BUS 508, or equivalent preparation.

BUS 570E FINANCIAL MARKETS AND BUSINESS STRATEGY (1-3)

This course examines the relationship between corporate finance theory and business strategy employed by corporate executives. The intent of the course is to improve executive decision-making by applying modern corporate finance theory to current business issues. Topics to be covered include time value of money analysis, capital budgeting techniques such as net present value and internal rate of return, cost of capital, capital structure, market efficiency, and international finance. The course will blend theory and practice by employing a combination of lecture and discussion of corporate finance theory with case studies to emphasize practical application. Prerequisite: admission to the E.M.B.A. Program.

BUS 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the M.B.A. graduate coordinator. Cr/NC only.

BUS 580 BUSINESS INTELLIGENCE (3)

The course introduces students to methods of data-driven decision-making. This is a hands-on data intensive course where we analyze topics related to management, marketing, and finance such as pricing, promotion, branding, estimating return on investments, and forecasting. The course will make extensive use of modern data-driven analytical methods, including simple and multiple regression models.

BUS 581 RESEARCH METHODS FOR MANAGERS (3)

Practical approaches to the design, execution, and interpretation of applied business research activities. Development of analytical skills and research techniques, including an understanding of the assumptions, limitations, and appropriate uses of various research designs and strategies. Prerequisite: BUS 508.

BUS 581E RESEARCH FOR STRATEGIC PLANNING (ONLINE COURSE) (1-3)

This course explores the business professional's role in retaining and incorporating data into the strategic planning process. It will delve into the research options of today's business environment as well as the research process, and discuss current issues in business research, from global to ethical concerns. This class guides executives through identifying their greatest information needs and directs them how to best address their strategic questions. Prerequisite: admission to the E.M.B.A. Program.

BUS 590E LEADING CHANGE IN ORGANIZATIONS (1-3)

This course explores change management theories and practical methods to implement change within organizations. Specific topics include: overview of major change management models, building a case for change; evoking change leadership and the role of the change agent, building commitment to change analyzing processes, designing and implementing the change plan, establishing measures, managing transitions, and developing a learning organization that embraces change. The role of leaders in implementing successful change efforts in different sized organization is a main theme of this course. Prerequisite: admission to the E.M.B.A. Program.

BUS 591 SEMINAR IN STRATEGIC MANAGEMENT (3)

A consideration of the entire organization from the viewpoint of the chief executive officer. Topics to be covered include strategy formulation, the development of competitive advantage strategy implementation, and the management of strategic change. Prerequisites: BUS 540, 560, 570.

BUS 591E STRATEGY IN PRACTICE (1-3)

This is a seminar requiring active contribution of participants to identify and evaluate decisions determining the long-range future of a business or nonprofit organization. Strategic management entails generating choices to be made among competing alternatives to produce a competitive advantage and earn above-average returns. Rapid technological change mergers and acquisitions, increasing pressures for globalization, and changing local environments for organizations have heightened the urgency to ask the right questions about the future, such as: (1) Which distinctive competencies should we be developing for our businesses? (2) Where and how should we compete? (3) How do we balance among competing priorities of and communicate our strategy to our stakeholders? Prerequisite: admission to the E.M.B.A. Program.

BUS 592 ENTREPRENEURSHIP AND NEW VENTURE CREATION (3)

Entrepreneurship focuses on new venture creation and venture feasibility analysis. Working in teams, students will learn to identify, conceptualize, plan, finance, launch, manage and harvest new ventures. Entrepreneurship, the application of entrepreneurial methods of management to established organizations, will also be discussed. Prerequisites: BUS 540, 560, 570.

BUS 592E BUSINESS PLAN (1-3)

This is primarily a field-study course in which students describe, evaluate, and recommend a well-supported strategy to the top management team and/or board of directors of an organization. Working in teams, participants will observe how strategic opportunities are identified, conceptualized, planned, financed, implemented, managed, and harvested. Learning tools include field research, compilation of primary and secondary data, class dialogues, readings, sample case analyses, guest lectures from local business leaders, and a final project that involves writing a case study and analysis describing the evolution of an organization's strategy, how resources and capabilities will be acquired to implement the strategy, and how results may be monitored and controlled. The ultimate output of this course is a business plan that students may use in future business ventures. Prerequisite: admission to the E.M.B.A. Program.

BUS 593 SEMINAR IN INTERNATIONAL BUSINESS (3)

Comprehensive view of the international economic environment as it relates to international business. Topics include the multinational corporation, subcontracting, counter trade, and international institutions such as the World Bank and GATT. Prerequisite: ECON 501.

BUS 595 SPECIAL STUDIES IN BUSINESS ADMINISTRATION (1-3)

Supervised independent study. A maximum of 3 units may be applied toward the requirements for the M.B.A. degree. Prerequisites: consent of faculty member under whom the individual work is to be conducted, consent of the M.B.A. coordinator, and approved "Application for Special Study 495/595."

BUS 596 GRADUATE INTERNSHIP (1-3)

Field experience for qualified graduate students in business administration. A maximum of 3 units may be applied toward the requirements for the M.B.A. degree. Students must establish with the M.B.A. coordinator that the work involved is clearly integral to the student's graduate studies. Cr/NC only.

BUS 597W COUNTRY INTENSIVE WINE BUSINESS ANALYSIS (3)

This course provides in-depth analyses of a foreign country's wine industry. Topics may include general business and economic issues as well as wine-specific issues focusing on production, sales, and marketing (within country and for export); human resource management; environmental concerns; and regulations. This course includes a required international field trip.

BUS 599 MASTER'S DEGREE DIRECTED RESEARCH (1-3)

Research directed by the student's committee on a project. An Advancement to Candidacy Form GSO 1 must be filed with the M.B.A. Coordinator before the student registers for this course.

Chemistry (CHEM)

CHEM 102 CHEMISTRY AND SOCIETY (3)

Lecture, 2 hours; laboratory, 3 hours. An introductory course in chemistry for non-majors. Covers the basics of chemistry related to everyday life. The laboratory will consist of experiments covering chemical principles and phenomena discussed in the lecture. Satisfies GE Area B1 (Physical Sciences) and the GE laboratory requirement.

CHEM 105 ELEMENTS OF GENERAL, ORGANIC, AND BIOCHEMISTRY (5)

Lecture, 4 hours; laboratory, 3 hours. A survey of the principles of chemistry, with emphasis placed on those that apply to living organisms. The course is designed for students in Nursing and majors that do not require further courses in Chemistry. Course is not a prerequisite for any chemistry course. Satisfies GE Area B1 (Physical Sciences) and the GE laboratory requirement. Fall only.

CHEM 107 INTRODUCTION TO PHYSICAL SCIENCE FOR TEACHERS (3)

Lecture, 3 hours. A non-mathematical course designed to introduce students to a range of topics in physics and chemistry that are required by the California Science Standards for grades K-8, including the laws of motion, energy, the structure of matter, the states of matter, electricity and magnetism, and light and optics. Lectures include many demonstrations to illustrate physical science principles and students will be asked to think about how they would demonstrate or explain various concepts.

CHEM 110 INTRODUCTORY GENERAL CHEMISTRY (3)

Lecture, 3 hours. Develop fundamental knowledge and necessary skills in General Chemistry for students who plan to major in science or pre-health programs. Recommended for students with no prior chemistry background or as a refresher course to enhance an insufficient chemistry background. Topics covered include the scientific method, word problem analysis, significant figures, scientific notation, unit conversion, periodic table, chemical equations, fundamental laws of matter and energy, the mole concept, and stoichiometry. Satisfies GE Area B1. Fall only.

CHEM 115A GENERAL CHEMISTRY (5)

Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours. Principles of chemistry for students in science, pre-health, and related areas of study. This course will introduce students to science and scientific thought by using problem-solving strategies in both a conceptual and mathematical manner. First semester topics include atomic and molecular structure, states of matter, chemical reactions, stoichiometry, and thermodynamics. Second semester topics include kinetics, equilibrium, buffers, and electrochemistry. Prerequisite: GE math placement. Satisfies GE Area B1 (Physical Sciences), and laboratory requirements.

CHEM 115B GENERAL CHEMISTRY (5)

Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours. Continuation of CHEM 115A. Prerequisite: CHEM 115A. Satisfies GE Area B1 (Physical Sciences), and laboratory requirements.

CHEM 120A THINKING LIKE A SCIENTIST (2)

First course of a two-course series. Topics include logic, critical thinking, the scientific method, data analysis, statistics, ethics, science and society, problem solving, and college transition elements. Students must be GE math eligible and be concurrently enrolled in CHEM 125A and either Math 160, Math 161, or Math 161X. Upon completion of CHEM 120B in the spring, the course will satisfy the GE Area A3 requirement.

CHEM 120B THINKING LIKE A SCIENTIST (2)

Second course of a two course series. Topics include logic, critical thinking, the scientific method, data analysis, statistics, ethics, science and society, problem solving, and college transition elements. Students should be concurrently enrolled in CHEM 125B. Upon completion of CHEM 120B, the course will satisfy the GE Area A3 requirement. Prerequisite: CHEM120A.

CHEM 125A QUANTITATIVE GENERAL CHEMISTRY (5)

Lecture, 3 hours; discussion 1 hour; laboratory 3 hours (5 units). This one-year analytical general chemistry course is designed for freshmen Chemistry majors, Biochemistry majors, or others interested in chemical fields who have taken High School Chemistry or equivalent. This first semester course (CHEM 125A) will focus on: statistics, atomic structure, stoichiometry, gas laws, redox reactions, equilibrium, and acid/base reactions. Prerequisites: high school chemistry or equivalent and GE math placement. Taken concurrently with CHEM 120A.

CHEM 125B QUANTITATIVE GENERAL CHEMISTRY (5)

Lecture, 3 hours; discussion, 1 hour; laboratory, 3 hours (5 units). The second semester (CHEM 125B) starts by applying the topics covered in the first semester to chemical literature, chromatography, spectroscopy, biological chemistry, thermodynamics, electrochemistry, quantum mechanics, bonding, and kinetics. After completion of this course students will receive credit for the full year of general chemistry and one semester of quantitative analysis (CHEM 255). Prerequisite: CHEM 125A and concurrent enrollment in CHEM 120B.

CHEM 255 QUANTITATIVE ANALYSIS (4)

Lecture, 2 hours; laboratory, 6 hours. Theory and practice of methods of analysis, including volumetric, gravimetric, and selected instrumental techniques. Prerequisite: CHEM 115B.

CHEM 275 INSTRUMENTAL ANALYSIS (2)

This course focuses on the theory behind commonly used chemistry instruments. Lecture will focus on analysis of spectroscopic data (molecular transitions), an overview of instrumental hardware, and principles of chromatography. Topics include basic electronics, statistics, optics, signal to noise detectors, IR, optical, NMR and fluorescence spectroscopy, mass spectrometry, atomic absorption, and chromatography. Prerequisite: CHEM 335B.

CHEM 310A FUNDAMENTALS OF PHYSICAL CHEMISTRY (3)

Lecture, 3 hours. Development and applications of the concepts of thermodynamics, equilibrium, kinetics, quantum mechanics, and spectroscopy to chemical systems. Prerequisites: CHEM 115B or CHEM 125B; MATH 211.

CHEM 310B FUNDAMENTALS OF PHYSICAL CHEMISTRY (3)

Lecture, 3 hours. Continuation of CHEM 310A. Prerequisite: CHEM 310A required; or consent of instructor.

CHEM 315 INTRODUCTION TO RESEARCH METHODS IN CHEMISTRY (1)

Chemistry 315 is designed for Chemistry majors but may be taken by others. Students will learn about research in Chemistry at SSU and then will choose a research project with a faculty mentor. This course will focus on preparation of a proposal to be performed in the subsequent semester. Topics such as scientific ethics, literature, and writing will also be covered.

CHEM 316 RESEARCH METHODS IN CHEMISTRY (2)

Chemistry 316 is the second part of a year-long course designed for Chemistry majors. Students will execute the research proposal developed in CHEM 315. Research will be done under the mentorship of faculty. Students will meet weekly to discuss research progress. Students will conclude the semester with a research manuscript. Prerequisite: CHEM 315.

CHEM 325 INORGANIC CHEMISTRY (3)

Lecture, 3 hours; Atomic structure, symmetry, and group theory of small molecules and the relationship of these concepts to bonding theory and molecular spectroscopy. Applications of symmetry and group theory to coordination chemistry of transition metal complexes in organometallic, environmental, bioinorganic, and materials chemistry. Other topics include kinetics and reaction mechanisms of inorganic and organometallic compounds including electron transfer. Prerequisite: CHEM 310B and CHEM 401, or concurrent enrollment.

CHEM 335A ORGANIC CHEMISTRY (3)

Lecture, 3 hours. A study of the fundamental principles of organic chemistry including bonding, electrophilicity, nucleophilicity, and molecular shapes and geometry for organic compounds. Applies these concepts to the study of the properties, syntheses, and reactions of major classes of organic compounds. A special emphasis is given to reaction mechanisms. Prerequisite: CHEM 115B or CHEM 125A (with department consent), or consent of instructor.

CHEM 335B ORGANIC CHEMISTRY (3)

Lecture, 3 hours. Continuation of CHEM 335A. Prerequisite: CHEM 335A.

CHEM 336A ORGANIC CHEMISTRY LAB I (2)

Laboratory lecture, 1 hour; laboratory, 3 hours. Fundamental techniques in organic chemistry, emphasizing separation techniques, modern instrumental methods, and qualitative organic analysis. Designed to complement CHEM 335A. Prerequisite/co-requisite: CHEM 335A.

CHEM 336B ORGANIC CHEMISTRY LAB II (2)

Laboratory lecture, 1 hour; laboratory, 3 hours. Fundamental techniques of organic chemistry, emphasizing synthetic organic chemistry, modern instrumental methods, and qualitative organic analysis. Designed to complement CHEM 335B. Prerequisite or corequisite of CHEM 335B required.

CHEM 397 CHEMISTRY PRACTICUM (1-6)

Supervised chemistry work experiences that involve practical application of previously studied theory. Intended for professional growth and/or collection of data for future theoretical interpretation. Not applicable toward the Chemistry major or minor. May be repeated for up to a total of 6 units. Two hours of work per week for each unit of credit. Cr/NC only. Prerequisite: consent of instructor.

CHEM 401 SENIOR INTEGRATED LAB (3)

This course focuses on making connections between the sub-disciplines of chemistry by performing experiments that cross over between these sub-disciplines in this capstone course. Students will perform experiments independently. Students will learn to properly write up their results in a format similar to published papers. This course is for graduating seniors and is the capstone for B.A. Chemistry majors. Prerequisite: CHEM 255, CHEM 275, and CHEM310A. CHEM 275 and CHEM 310A may also be taken concurrently.

CHEM 402 ADVANCED SYNTHESIS AND INSTRUMENTAL ANALYSIS (3)

Lecture, 1 hour; laboratory, 6 hours. Project-based synthesis, purification, and characterization of inorganic, organic, and organometallic molecules. Capstone course for the B.S. chemistry degree. Topics will include air-sensitive syntheses, standard Schlenk line techniques, characterization through IR, optical and NMR spectroscopy, mass spectrometry, and electrochemistry. This course is for graduating seniors and is the capstone for BS Chemistry majors. Prerequisite: CHEM 401.

CHEM 441 BIOCHEMICAL METHODS (3)

Project based course involving characterization of proteins from natural sources utilizing biochemical methods and experimental design techniques common in biotechnology and research. This course is for graduating seniors and is the capstone for B.S. Biochemistry majors. Offered in spring only. Prerequisites: CHEM 445 or 446 (may be concurrent), CHEM 255, and a foundation in spectroscopy; kinetics strongly recommended.

CHEM 445 STRUCTURAL BIOCHEMISTRY (3)

Lecture, 3 hours. A study of the structure-function relationships of amino acids, proteins, enzymes, carbohydrates, lipids, and nucleic acids. Also includes topics such as enzyme kinetics, membrane transport, and signaling. Only offered in the fall. Prerequisites: CHEM 335B or CHEM 232, and a foundation in kinetics and thermodynamics, or consent of instructor.

CHEM 446 METABOLIC BIOCHEMISTRY (3)

Lecture, 3 hours. A study of bioenergetics and the metabolism of biological molecules including carbohydrates, lipids, nucleic acids, and proteins. This course is only offered in the spring. Prerequisites: CHEM 335B or CHEM 232; CHEM 445 or BIOL 123; and a foundation in kinetics and thermodynamics, or consent of instructor.

CHEM 492 CHEMISTRY SEMINAR SERIES (1)

Invited speakers from universities and industry will present on current topics in the chemical and biochemical fields. May be repeated; does not count towards the major.

CHEM 494 UNDERGRADUATE RESEARCH (1-6)

Under supervision by the Chemistry faculty, students will participate in individual investigations of student- or faculty-initiated chemical problems. May be taken only by petition to the Chemistry Department. May be repeated. Prerequisite: consent of instructor.

CHEM 495 SPECIAL STUDIES (1-3)

Investigation of existing information on a specific or general topic of interest to the student. Prerequisites: consent of instructor; upper-division standing in chemistry, or closely related science.

CHEM 496 SELECTED TOPICS IN CHEMISTRY (1-6)

A study of an advanced topic in chemistry. May be repeated for credit with new subject matter.

CHEM 497 RESEARCH SEMINAR (1)

Laboratory, 3 hours. Capstone course for B.A. and B.S. degrees. The course will focus on techniques involved in the preparation and delivery of technical seminars. This final project will be a formal oral presentation to the Chemistry department on a research paper from the chemical literature or the student's undergraduate research project. Instruction includes the appropriate coverage of the selected topic, use of the chemical literature, and the preparation and use of PowerPoint, graphic, and web-based applications to create an informative talk. Prerequisite: CHEM 401 required, or consent of instructor.

CHEM 499 INTERNSHIP (1-4)

Chemistry field experience in industrial, hospital, or similar laboratory settings. Enrollment by prior arrangement with supervising faculty member and community sponsor. Please see department advisor for details. Three hours of work per week for each unit of credit. Internship assignments may be paid. Cr/NC only. May be repeated.

Chicano and Latino Studies (CALS)

CALS 160A HUMANITIES LEARNING COMMUNITY (4)

CALS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

CALS 160B HUMANITIES LEARNING COMMUNITY (4)

CALS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

CALS 219 THE LATINO EXPERIENCE (3)

A survey of the Chicano and Latino experience in the United States. The course serves as an introduction to Chicano and Latino studies through the social sciences in order to explain the individual's status and place within the group and society. This includes how Chicano Latinos and other Latinos have adapted to the various cultural, social, economic, and political elements of U.S. society as compared to other groups. Satisfies the Ethnic Studies requirement in GE Area D1 (Individual and Society).

CALS 220 LATINA/O ARTS AND HUMANITIES (4)

This course considers how individuals and communities define and are defined by their cultural practices by focusing on the ways these dynamics play out in Latina/o communities. It surveys Latina/o contributions to literature, drama, theater, cinema, mass media, popular and fine art, music, and dance and considers how these contributions reflect and challenge the nature and meaning of race and ethnicity in the United States. This course satisfies the C3 and Ethnic Studies GE requirements.

CALS 225 SPANISH FOR BILINGUALS (4)

This course is designed to systematically develop a confidence in native speakers' ability to write and communicate effectively in the Spanish language. The class will be conducted entirely in Spanish. Prerequisite: native fluency in Spanish. Satisfies GE Area C3 (Comparative Perspectives and/or Foreign Languages). This course does not satisfy the GE Ethnic Studies requirement.

CALS 225L LANGUAGE LABORATORY/FIELD WORK (1)

At least two hours per week of practice in the language laboratory or in an approved fieldwork setting such as a Spanish-speaking organization, community agency, or bilingual classroom. Cr/NC only. Prerequisite: concurrent enrollment in CALS 225.

CALS 301 CALS LEADERSHIP AND MENTORING (1)

A supervised, guided process where senior-level majors in CALS coach and mentor newly declared majors after having been coached by a senior student the previous semesters. Elective units. May be enrolled more than once.

CALS 310 CHICANO/LATINO ARTS AND CRAFTS WORKSHOP (1)

Analysis of and workshop on providing Chicano Mexican and other Latino arts and crafts. Includes village and folk arts, with particular emphasis toward adapting these arts to the public school curriculum. Course projects require a public exhibit.

CALS 314 LITERATURE IN TRANSLATION (4)

This course is designed for students who have studied little or no Latin American literature previously, and are interested in exploring the rich and diverse make-up of a people of both indigenous and Hispanic background, to understand how it is a part of their everyday lives. Students will develop an understanding of regional areas through the readings, and study the manner in which writers from Latin America weave struggles related to ethnicity, cultural traditions, and historical events into their creative works with a focus on important figures of Latin American narrative. Satisfies upper-division GE Area C2 (Literatures, Philosophies, and Values) and the Ethnic Studies requirement.

CALS 339 LATINOS AND THE U.S. LABOR MARKET (3-4)

This course is designed as an overview of major theories, trends, and debates on the topic of Latinos and labor market inequality in the United States. Topics include urban poverty, discrimination in employment, how jobs and workers are matched, and over-arching issues as globalization and place affects the labor force. Particular attention is given to the interaction between race and class as determinants of the life chances of minorities and specifically Latinos in the United States. Satisfies upper-division Ethnic Studies in GE Area D1 (Individual and Society).

CALS 350 LATINO CULTURAL STUDIES (4)

This course focuses on the theoretical debates that have shaped the field of Chicano and Latino studies. In the tradition of Américo Paredes' *With His Pistol in His Hand*, the class will emphasize the role that counter-cultural narratives and traditions play in relation to Chicano/Latino identities and identity-based activism/politics.

CALS 352 CHICANO/LATINO PHILOSOPHY (4)

This course addresses the development of Chicano/a and Latina/o thought from the pre-Columbian era to the present from a materialist perspective. We will endeavor to contextualize the rise of different attitudes, definitions, and worldviews concerning Chicano/Latino identity and politics within the specific historical conditions in which they developed. Our study will include the writings of Latin American thinkers like Simón Bolívar, José Martí, and José Vasconcelos as well as ethnic nationalisms, Chicana/Latina feminist theories, and contemporary Latina/o political theory. Satisfies Ethnic Studies and upper-division GE Area C2 (Literatures, Philosophies, and Values).

CALS 365 CHICANO/LATINO THEATRE (2)

A review of the development of drama in literary Chicano/Latino culture from a variety of sources: anthropological, sociological, and historical as well as contemporary developments. Course includes a workshop leading to the performance of a term play, along the lines of the Teatro Campesino. May be repeated once for credit.

CALS 366 MEXICAN FOLK AND TRADITIONAL DANCE (1-2)

An introduction to folk and traditional dances of Mexico; this is a performance course requiring active student involvement. Basic steps and three to five ballet folklorico dances will be taught, leading to a public performance. Dances include Norteno, Jarabes de Jalisco, Jarochos de Veracruz, and one or more indigenous dances. May be repeated once for credit.

CALS 368 CHICANO/LATINO MUSIC (4)

This course explores Chicano/Latino musical practices with a special focus on their historical origins. The social, cultural, and political significance of Chicano/Latino musical forms will also be addressed in this class. The class will acquaint students with Chicano/Latino musical traditions and an understanding of their significance within a multicultural society. Satisfies Ethnic Studies and upper-division GE Area C1 (Fine Arts).

CALS 374 LATINO LITERATURE (4)

A course designed to identify, analyze, and appreciate current literary themes and forms in works focusing on the experiences of Latinas/os in the United States. The course includes analyses of distinct ethnic, national, racial, regional, and gendered voices through the study of novels, short stories, essays, poetry, and plays. Satisfies upper-division GE Area C2 (Literatures, Philosophies, and Values) and the Ethnic Studies requirement.

CALS 393 CHICANO/LATINO CINEMA (4)

An introduction to Chicano/Latino cinema, its history, and its relationship with the film industry in Hollywood and in Latin America. Special attention will be given to the emergence of Latina/o-produced films, tracing the evolution of alternative aesthetic, and narrative strategies. Satisfies Ethnic Studies and upper-division GE Area C1 (Fine Arts).

CALS 395 COMMUNITY INVOLVEMENT PROGRAM (CIP) (1-4)

Provides students with practical experience in school classrooms, various ethnic community organizations, and health and social service agencies, including recreation programs, day care centers, and senior citizen centers. One unit is equivalent to 30 hours of volunteer work per semester. Units are not applicable to the CALS major. Meets field experience requirements for the CALS waiver program. May be repeated for credit.

CALS 398 MECHA (1-2)

Movimiento Estudiantil Chicano de Aztlan involves students in experimental projects that will orient them to problems faced by the Chicano/Latino student community and the greater Hispanic community in the campus service area. May be repeated for credit.

CALS 400 SELECTED TOPICS IN CHICANO STUDIES (1-4)

Offered occasionally, based on student interest and faculty availability: Chicano/Latino Art Workshop, Chicano Perspectives on Mexican History, Chicana, Feminisms, La Frontera: Border Studies, and Economics and the Chicano Small Business Development: Chicano/Latino Community. May be repeated once for credit with a different topic.

CALS 403 CHICANO/LATINO YOUTH AND ADOLESCENTS (3-4)

General psychological principles and theories of growth and human development as they apply to Chicano/Latino youth. Course will focus on Latino adolescents and their adjustment to the life cycle and American society and its impact on the self, peer group relations, family life, and other sources of conflict. Satisfies Ethnic Studies and upper-division GE Area E.

CALS 405 THE CHICANO/LATINO FAMILY (3-4)

Examines the Latina/o family in a psychological and sociological context. The role of international and internal migration and acculturation on Latino family structure and functioning, contemporary gender roles and sexualities, variations in family structure, race and class identity, and the impact of economic and cultural dislocation are examined. Family violence, addiction, mental and physical health, family resilience, and coping strategies are also examined. The class is designed to prepare students to work in social service environments (including family and individual therapy, public policy, social welfare, health services, community advocacy, and education), with applicable understandings of the contemporary Latino family.

CALS 426 CHICANO/LATINO SOCIOLINGUISTIC (4)

A seminar that examines the role language plays in structuring the social interactions of Latino populations. The class includes an overview of multiple varieties of Spanish and English, and explores issues such as language maintenance, policy planning, and bilingual education. Satisfies GE Area C3 (Comparative Perspectives) and the Ethnic Studies requirement.

CALS 432 LATINAS/OS AND GLOBALIZATION (4)

This class will explore the effect that late-stage capitalist globalization has upon Latino workers. How do changes in the world economic system, including the advent of global free trade regions (NAFTA, FTZs) affect the composition and opportunities open to Latino populations in the United States? Examines the development of transnational economic and cultural networks as a result of globalization. Satisfies the Ethnic Studies requirement in GE Area D5 (Contemporary International Perspectives).

CALS 442 RACE, CLASS, AND GENDER AMONG LATINOS (4)

A course centered on the institutional, cultural, and psychological components of race, class, and gender relations among Latinos and their effect on different communities. Institutional inequality, questions of assimilation and identity, attitudes, and effects of inequality on community activism and politics will be explored.

CALS 445 CHICANO/LATINO HISTORY (4)

An analysis of Chicano/Latino history, from the exploration and settlement of the Southwest to the present. To include an examination of such themes and topics as: the Chicano heritage the Mexican War and Treaty of Guadalupe Hidalgo, the land question, social banditry and other forms of resistance, the Chicano in the 20th century, and contemporary Chicano/Latino issues, organizations, and movements.

CALS 450 CHICANO/LATINO CHILDREN'S LITERATURE (3-4)

An analysis of children's literature written about and for Chicano/Latino children both in the U.S. and abroad. Students will review and analyze the literature for style and content. Includes the study of nontraditional literature collections from the Spanish-speaking community. Prerequisite: functional Spanish language skills.

CALS 451 LATINA/O HUMANISMS (4)

A comparative analysis of the nature and meaning of race and ethnicities in the United States from its origins in Latin America to its cultural manifestations and social concepts. Discussion and study will be focused from interdisciplinary perspectives. Satisfies GE Area C3 (Comparative Perspectives) and Ethnic Studies categories. Prerequisite: upper-division standing.

CALS 456 SOCIOLOGY OF EDUCATION/LATINOS AND EDUCATION (4)

This course introduces students to some key theoretical and empirical work in the sociology of education and Latinos. Because this is such a large field of research, the course will focus on the question of stratification and how systems of schooling maintain or alleviate inequality among Latino communities. We will examine classical approaches to schooling; schools as organizations; schools and their effects on social mobility; class, race, and gender stratification in achievement and attainment; tracking/ability grouping; theories and empirical work on social and cultural capital; school choice; and cross-national expansion of education. Our readings will cover both qualitative and quantitative studies in the field. Note: restricted to upper-division students. Prerequisite: CALS 458.

CALS 458 CALS RESEARCH AND METHODOLOGY (4)

This course introduces students to advanced research theories and methodologies. Students will develop and refine their research and information literacy competencies as they complete a semester-long original research project. This course can be substituted for AMCS 480 Research and Methodology.

CALS 460 CROSS-CULTURAL MATH AND SCIENCE FOR TEACHERS (3)

Taught in bilingual format, this course helps prospective teachers prepare for the classroom, providing linguistic and cultural depth and strategies in basic science areas and math concepts including number systems and problem-solving, metrics, geometry, probability, and statistics. Prerequisites: functional Spanish language skills and completion of GE math and science (GE Areas B1 and B2) requirements.

CALS 474 MAJOR AUTHORS IN CHICANO AND LATINO LITERATURE (4)

A detailed study of representative authors, genre, period, or region, in consideration of socio-economic, political, and cultural contexts. Requires critical discussion in class, annotated bibliography, and senior-level term paper. Not in core.

CALS 479 CHICANO/LATINO ART HISTORY (4)

An analysis of art as expressed in the historical culture of Chicanos and Latinos, from ancient times to the present. A cultural art history approach. Field trips. Includes a studio practicum when offered for 4 units. Satisfies Ethnic Studies in GE Area C1 (Ethnic Studies in the Fine Arts).

CALS 480 LATIN AMERICAN MIGRATION TO THE UNITED STATES (4)

This course provides a broad overview of international migration to the United States, paying particular attention to Latin American migrants. The course attempts to understand what life is like for Latinos involved in migration to and from the United States. Attention is given to the diversity of today's Latin American migrants, their social origins, their adaptation experiences and exits, and contexts of incorporation. The course also analyzes the experiences of different Latin American immigrant groups in the state of California.

CALS 495 SPECIAL STUDIES (1-4)

Independent study on a special topic for upper-division students. Prerequisite: completion and approval of a special studies form. May be repeated for credit.

CALS 499 INTERNSHIP (1-4)

An internship in Chicano and Latino Studies must combine: 1) service in a school or an agency where activity is related to the Latino community; 2) the selection of a topic for observation and study; 3) preparation of a bibliography and a reading list related to the internship activity; 4) a term paper that reflects both the internship work experience and appropriate research. The internship must be proposed and arranged ahead of time with the professor in CALS who will supervise the internship. Prerequisites: senior-level standing and completion of most CALS core classes. This course may be repeated once for credit.

CALS 595 SPECIAL STUDIES (1-4)

Directed study for graduate students. Prerequisite: completion and approval of a special studies form.

Communication Studies (COMS)

COMS 160A HUMANITIES LEARNING COMMUNITY (4)

COMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

COMS 160B HUMANITIES LEARNING COMMUNITY (4)

COMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

COMS 200 PRINCIPLES OF MASS COMMUNICATION (4)

An introduction to the history of mass communication, the mechanics of the mass communication industries, and theories of mass communication as a social, cultural, and political phenomenon.

COMS 201 STORY TELLING VIA VIDEO (4)

Designed for beginning video students. Assignments include creating skits and music videos and conducting interviews using DV camcorders. Students also do a final creative project of their own.

COMS 202 METHODS OF MEDIA CRITICISM (4)

A survey of ways to analyze mediated texts, with a focus on film, television, magazines, music, news, and advertising. Methods and concepts include semiotics, structuralism, ideology, psychoanalysis, feminism, and postmodernism.

COMS 210 WRITING FOR THE MEDIA (4)

Introduction to a wide range of writing styles and formats, from hard news and features to press releases. Students learn to write for newspapers, magazines, television, radio, and the internet, as well as for public relations.

COMS 240 INTRODUCTION TO PUBLIC RELATIONS (4)

An overview of the history, structure, and organization of public relations. Students also learn the basic public relations tactics of writing, presentation, event organization, and web communication.

COMS 265 INTRODUCTION TO RADIO BROADCASTING (4)

History of broadcasting; evolution of broadcast technology; introduction to basic theories and techniques of radio broadcasting. Overview of radio station organization, programming, and operation. Experience in radio program development and production techniques.

COMS 301 MASS COMMUNICATION THEORY AND RESEARCH (4)

Intermediate-level study of the key research events that contributed to the development of communication theories, government policy, and the emergence of communication as an academic discipline. Prerequisites: COMS 200, 202, and COMS majors with junior-level standing.

COMS 302 MEDIA ETHICS (4)

Students analyze real-life ethical issues that media professionals face on TV, radio, newspapers, the internet, in public relations, and in the music and entertainment industries. Classroom exercises involve discussion, debate, critical thinking and reasoning, and practical application of ethical principles. Prerequisites: COMS 200, 202, and COMS majors with junior-level standing.

COMS 315 MEDIA LAW (4)

An intensive exploration of the rules and regulations governing media and communication in the United States. The focus is on the First Amendment. Students take exams, write papers, and participate in moot trials on issues of libel, privacy, copyright, obscenity, and the right to a fair trial. Prerequisites: COMS 301, 302, and senior-level standing.

COMS 316 ADVANCED DIGITAL FILMMAKING (4)

Intensive production for filmmakers. In fall semester, students work on biography, news, and multi-camera talk shows. In spring, students work on screenplays, scenes with actors, and images for songs. Beginning students use DV camcorders and Stet. Advanced students use 3-chip cameras and edit on Final Cut. Prerequisite: COMS 201.

COMS 317 ADVANCED RADIO BROADCASTING (4)

This course encourages students in their individual interests in Radio/Sound Recording. Students will learn more about the application of sound to all aspects of the media world, from the producing or hosting of live radio shows to the use of sound in promotions and DVD production. Prerequisite: COMS 265.

COMS 318 ADVANCED MEDIA WRITING (4)

Writing for different media, including Blogs, magazines, radio, websites, newspapers, and investigative reporting. Emphasis on development of sources, proposals, pitches, working in teams, and writing in-depth features and columns on issues, trends, and complex ongoing stories. Prerequisite: COMS 210 or consent of instructor.

COMS 320 SELECTED TOPICS IN COMS (4)

Intensive study of various topics and trends in the mass media, including advertising, propaganda and persuasion; children and the media; technical and scriptwriting; environmental and international communication; and film. May be repeated for additional credit with new subject matter.

COMS 321 INTERNATIONAL COMMUNICATION (4)

Course develops a basic understanding of current issues related to the field of international communication. Surveys readings and videos on global media (MTV, CNN, ESPN, theme parks, video games, advertising, media campaigns for social change computer hackers, Sesame Street, etc.). Overseas job and volunteer opportunities discussed.

COMS 322 BROADCAST JOURNALISM (4)

Introductory class on the art and craft of Journalism, print, video, and radio, by career professionals. Designed to give students a taste of real world media experience.

COMS 323 ENVIRONMENTAL COMMUNICATION (4)

Course will focus on research, reporting skills to produce magazine articles, or video/radio documentaries on health, science, and the environment. Other assignments include press releases, profiles, and memos. Lecture, videos, and field trips help to critique news, public relations, advertisements, PSAs, campaigns, film, television, music, and the internet on related issues. Junior-level standing required.

COMS 324 SCRIPTWRITING FOR VIDEO (4)

Course focuses on fundamentals of writing professional-level scripts for video, television, and film productions. Assignments include lab work and homework producing scripts and storyboards for Public Service Announcements (PSAs), commercials, news packages, documentaries, corporate and educational training programs, and dramatic screenplays. Junior-level standing required.

COMS 326 ADVANCED PRESENTATION TECHNIQUES (4)

Course involves intensive self-evaluation of both verbal and non-verbal elements of presentation. Interviews, group communications, and presenting with multimedia are covered. Theories of communication are discussed as they relate to presentation styles. Junior-level standing required.

COMS 327 MEDIA AND CHILDREN (4)

Students learn about the latest research in child development, media design, and marketing. Students then apply these ideas to the creation of a media message for a specific age group. Junior-level standing required.

COMS 328 AMERICA AT THE MOVIES (4)

An examination of the sociopolitical meanings and significance of American film from the silent era to the present. To better understand how films can potentially reflect and affect society, students read about American history and analyze dozens of films in their particular historical contexts.

COMS 329 "REALITY" TV AND FILM (4)

How is "reality" mediated in film and television? In this course students examine the truthfulness, ethics, and sociopolitical implications of such forms and genres as the documentary, neorealism, Dogme 95, tabloid talk shows, voyeurism/confession shows, crime shows, freak shows, and contest/game shows.

COMS 332 SCREENING VIOLENCE (4)

Violence in media and popular culture has been the subject of great concern and voluminous research for many years. In this course students examine the history, meaning, and real-world implications and effects of media violence, with a focus on film, television, literature, news, sports, comics toys, and video games.

COMS 333 COMMUNICATION, POWER, AND SOCIAL CHANGE (4)

How does power operate through communication to delay or to advance social progress? Analyze history, film, documentary, news, corporate PR, government propaganda, and cultural myth. Craft short messages from comic books to posters to radio or video spots. Design and get feedback for messages students create on issues of choice.

COMS 340 ADVANCED PUBLIC RELATIONS (4)

A hands-on class for students who are planning to work in the field of public relations. Students work as consultants with clients to develop plans for public relations campaigns. Prerequisite: COMS 240 or an introductory public relations course. Junior-level standing required.

COMS 368 NEWSPAPER WRITING/EDITING (STAR) (4)

The faculty advisor offers a comprehensive evaluation — oral and written — of the most recent edition of the campus newspaper, the STAR. Instruction is provided on a wide variety of journalism topics, from editing and reporting to ethics and law. Students are required to read the STAR and the written evaluation by the advisor. May be repeated for up to 12 units.

COMS 369 SSU-TV (4)

This is an essential class for students who will work in the Broadcasting Industry. Students will learn about the history, structure, and operations of local broadcasting. Students will be expected to work in a specific department of SSU-TV during the semester. May be repeated for credit up to 12 units.

COMS 385 MEDIA LAB: RADIO (KSUN) (4)

A media lab to develop a range of skills in the production of radio programs. Work focuses on the production of live and prerecorded pieces for KSUN, SSU's internet radio station (www.sonoma.edu/ksun). The lab also serves as the staff meeting of the radio station. May be repeated for up to 12 units.

COMS 402 SENIOR SEMINAR (4)

Students will share at least one critical analysis of a specific media message and complete a senior-level project/portfolio/study, which is the culmination of their major experience. Prerequisites: COMS 301 and 302; seniors only. Cannot be repeated for credit.

COMS 435 SEMINAR IN MASS MEDIA (4)

Seminar provides an opportunity to gain new insights into social problems through an intensive analysis of the role and impact of mass communication in contemporary society. Emphasis is on exploring, through a major research project, social issues that should be, but are not, fully covered by the mass media. Prerequisite: COMS 301, SOCI 300, SOCI 331, or consent of instructor. Cross-listed as SOCI 435.

COMS 460 TEACHING ASSISTANT IN COMMUNICATION STUDIES (1-4)

Intended to give students experience assisting instructors. Teaching Assistants help teach, do research, and tutor students in classes. Consent of instructor and department contract required. May be repeated for credit.

COMS 470 RESEARCH ASSISTANT IN COMMUNICATION STUDIES (1-4)

Intended to give selected students experience in the construction and implementation of a professor's research project. Consent of instructor and department contract required.

COMS 495 SPECIAL STUDIES (1-4)

Supervised study of a particular problem or area of interest in the media selected by the student in consultation with a sponsoring faculty member. Meetings will be arranged for discussions and progress evaluations. May be repeated for credit. Consent of instructor and Special Study 495 contract required.

COMS 497 JOURNALISM FIELD STUDY (1-3)

Students will travel to the national journalism conference where they will attend educational seminars in all aspects of journalism from writing, to design photography, to media convergence. They will attend lectures and speeches by both nationally and internationally renowned journalists and scholars. To be taken with COMS 368. May be repeated for up to 3 units of credit.

COMS 499 MEDIA INTERNSHIP (1-4)

This class provides students with an opportunity to discover how to make an effective transition from the classroom to the workplace. For a semester, individuals work in a media firm, business, newspaper, radio, or TV station. On the job, students learn networking and negotiating skills. Assignments for class include: a resume, workplace lingo, self-evaluation, profile of supervisor, and album with photos and text that describe the experience. There is also an interview for a job. Seniors only. Consent of instructor, internship agreement form, and department contracts required. Can be taken for up to 12 units only.

Computer Science (CS)

CS 101 INTRODUCTION TO COMPUTERS AND COMPUTING (3)

Lecture, 2 hours; laboratory, 2 hours. This course is an introduction to the concepts, techniques, uses, applications, and terminology of computers, computing, and networking. Emphasis is on the possibilities and limitations of computers and computing in a wide range of personal, commercial, and organizational activities. Topics include computer types, history of computing, computer organization and operation, computer languages, program development, computer applications (word processing, database, graphics, spreadsheets, etc.), basic networking, and computers in society. Weekly hands-on experience with a variety of operating systems, applications, and computer programming. Not applicable to the CS major. Recommended for all students. Satisfies GE Area B3.

CS 115 PROGRAMMING I (4)

Lecture, 3 hours; laboratory, 3 hours. This course gives an overview of computer organization; arithmetic and logical expressions, decision and iteration; simple I/O; subprograms; principles of good programming style, readability, documentation, and structured programming concepts; top-down design and refinements; techniques of debugging; and testing. Use of the above concepts will be implemented in a standard high-level programming language. Satisfies GE Area B3. Prerequisite: GE math and English eligibility, or consent of instructor.

CS 115W PROGRAMMING I WORKSHOP (1)

A workshop designed to be taken with CS 115. Exploration of programming concepts through problem solving in a group setting. Co-requisite: CS 115.

CS 175 INTRODUCTION TO COMPUTER GRAPHICS (3)

Lecture, 2 hours; laboratory, 2 hours. This is the first course in computer graphics hardware and software. Topics include graphics hardware, microcomputer graphics, presentation and business graphics, graphics for artists, computer mapping, CAD/CAM (drafting and environmental applications), animation, 3-dimensional graphics, and desktop publishing. Students will have hands-on experience using a variety of graphics programs on microcomputers. Not applicable to the CS major. Prerequisite: previous computer courses or consent of instructor.

CS 185 SPECIAL TOPICS IN COMPUTER SCIENCE (1-4)

Content will be indicated by the specific topic. Prerequisite: consent of instructor.

CS 210 INTRODUCTION TO UNIX (1)

Laboratory, 3 hours. This course is an introduction to the use of Linux/Unix as a programming environment. Communicating with a Unix host, shells and shell commands, files and directories, Gnome desktop, jobs and processes, scripting, programming utilities (compiler, linker, debugger, make, hex dump, etc.). Prerequisites: CS 115 and previous or concurrent enrollment in CS 215, or consent of instructor.

CS 215 PROGRAMMING II (4)

Lecture, 3 hours; laboratory, 3 hours. This course is the sequel to CS 115. Topics include: pointers and dynamic allocation of storage linked lists, an introduction to the object oriented programming (OOP) paradigm, classes and objects, encapsulation, member variables and member functions, inheritance and polymorphism, scoping, templates, iterators, and error handling techniques. Prerequisites: CS 115 and previous or concurrent enrollment in CS 210, or consent of instructor.

CS 242 DISCRETE STRUCTURES FOR COMPUTER SCIENCE (4)

Lecture, 4 hours. This course covers fundamental mathematical concepts blended with their applications in Computer Science. Topics include: sets, functions and relations, Boolean algebra, normal forms, Karnaugh map and other minimization techniques, predicate logic, formal and informal proof techniques, relational algebra, basic counting techniques, recurrence relations, and an introduction to graph theory. Prerequisites: CS 115 and MATH 161 or 161X, or consent of instructor.

CS 252 INTRODUCTION TO COMPUTER ORGANIZATION (4)

Lecture, 3 hours; laboratory 3 hours. This course looks at the interface between computer hardware and software by introducing computer architecture and low-level programming. Topics to be covered include: data representations, digital logic, combinational and sequential circuits, computer system organization from the machine language point of view, and assembly language implementation of high-level constructs. Prerequisites: CS 215 and CS 242, or consent of instructor.

CS 285 SELECTED TOPICS IN COMPUTER SCIENCE (1-4)

This lower-division course may be repeated with different subject matter. Content will be indicated by the specific topic. Prerequisite: as indicated in the specific topic description or consent of instructor.

CS 315 DATA STRUCTURES (4)

Lecture, 3 hours; laboratory, 3 hours. This course introduces the concept of the organization of data into different structures to support the efficient implementation of computer algorithms. The emphasis of the course is on the internal representation of the elementary and intermediate data structures, their time and space requirements, and their applications. A second component of the course is the study of more advanced features of object-oriented programming. Prerequisite: CS 210, CS 215, and CS 242, or consent of instructor.

CS 330 INTRODUCTION TO GAME PROGRAMMING (3)

Lecture, 2 hours; laboratory, 2 hours. This course is an introduction to the theory and practice of video game design and programming. Video games combine, in real-time, concepts in computer graphics, human-computer interaction, networking, artificial intelligence, computer aided instruction, computer architecture, and databases. This course introduces students to a variety of game engines and frameworks and explores artificially intelligent agents. Students will work as part of a team to create a complete description document for a computer game and implement a prototype of the game. Prerequisite: CS 315 or instructor consent.

CS 340 COMPUTER SECURITY AND MALWARE (3)

Lecture, 2 hours; laboratory, 2 hours. Current methods for increasing security, protecting privacy, and guaranteeing degrees of confidentiality of computer records; ensuring computer installation safety; protecting software products; preventing and dealing with crime; value systems, ethics, and human factors affecting use; and misuse of computers. Discussion of recent technical, legal, and sociopolitical issues influencing computer security problems, with an emphasis on malware. Prerequisites: CS 215 and CS 252, or consent of instructor.

CS 349 PROBLEM SOLVING IN A TEAM ENVIRONMENT (1)

Laboratory, 2 hours. This course focuses on problem solving and program development in a team programming environment. Topics include: techniques for problem analysis and algorithm design, rapid implementation and pair programming methods, use of standard container classes, and library functions. Different types of problems will be selected each semester. May be repeated for credit. A maximum of 3 units can be applied to the Computer Science major. Prerequisite: CS 315 or consent of instructor. SSU students taking this course participate in regional and national programming competitions.

CS 351 COMPUTER ARCHITECTURE (4)

Lecture, 4 hours. This course is the sequel to CS 252 and includes the following topics: instruction set design; stages of instruction execution: data, and control path design; pipelining; program optimization techniques; memory hierarchy; cache models and design issues; virtual memory and secondary storage; and I/O interfacing. Advanced topics to include some of the following: parallel architectures, DSP or other special purpose architecture, FPGA, reconfigurable architecture, and asynchronous circuit design. Prerequisites: CS 215 and CS 252, or consent of instructor.

CS 355 DATABASE MANAGEMENT SYSTEMS DESIGN (4)

Lecture, 4 hours. This course focuses on the theoretical as well as the practical aspects of modern database systems. Topics include the study of the entity-relationship (E/R) model, relational algebra, data normalization, XML as a semi-structured data model, data integrity, and database administration. Current tools and technologies are used to create and manipulate sample databases. Prerequisite: CS 215 or consent of instructor.

CS 360 OBJECT-ORIENTED PROGRAMMING (3)

Principles of object-oriented programming, including encapsulation, inheritance, polymorphism, and design patterns. Specific applications are developed in one or more object-oriented programming languages and will cover the use of application frameworks and graphical user interfaces based on object-oriented principles. Prerequisites: CS 315, or consent of instructor.

CS 365 COMPUTER NETWORKING AND THE INTERNET (3)

Lecture, 2 hours; laboratory, 3 hours. This course introduces the theory and practice of computer networking, with coverage of key theories in data communication and how these theories relate to current practices and will drive future practices. Network hardware implementations of local area networks, wide area networks, telephone networks, and wireless networks are investigated. Network software implementations of switches and routers, peer-to-peer networking, and hosted applications are investigated with exercises in writing and debugging network protocols in the laboratory. Prerequisites: CS 215 and CS 252, or consent of instructor.

CS 370 SOFTWARE DESIGN AND DEVELOPMENT (4)

Lecture, 4 hours. This course discusses techniques of software design and development such as software lifecycle, requirements, formal specification, metrics, design, functional and structural testing, rapid prototyping, complexity, version control, and team management. Software metrics, tools for component-based software development. Team-based, agile, and scrum methodologies emphasized. Prerequisite: CS 215 or consent of instructor.

CS 375 COMPUTER GRAPHICS (3)

Lecture, 2 hours; Laboratory, 2 hours. An introduction to computer graphics. Survey of the fundamental algorithms and methodologies, including, but not limited to, polygon fill, line-drawing, antialiasing, geometric transformations, viewing and clipping, spline representation, occlusion and visible surface detection, illumination, texturing, color models, rendering, shaders, animation, and emerging techniques. Prerequisites: CS 215 and MATH 161, or consent of instructor.

CS 380 ETS MAJOR FIELD TEST (1)

The focus of this course is preparation for the Major Field Test in Computer Science. Students will review material in the basic knowledge areas of computer science including: discrete structures, programming, algorithms and complexity, systems, software engineering, and information management. The course will culminate with students taking the Major Field Test in Computer Science administered through Educational Testing Services. This course is intended for students whom have completed the majority of required coursework in the CS major and are within one semester of graduation.

CS 385 SELECTED TOPICS IN COMPUTER SCIENCE (1-4)

This course may be repeated with different subject matter for credit in the CS major. Prerequisites: upper-division standing with consent of a CS advisor and consent of instructor.

CS 390 COMPUTER SCIENCE COLLOQUIUM (1)

Series of lectures on current developments in computer science. A maximum of 3 units can be applied to the CS major. Students will be required to attend all presentations, take notes, and research each of these presentations. Contact the department for specific information. Cr/NC only. May be repeated for credit.

CS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems. The most common task for a CS student will be tutoring at a local school. Not applicable to the CS major. Prerequisites: CS 115 and consent of instructor.

CS 415 ALGORITHM ANALYSIS (4)

Lecture, 4 hours. This course provides a systematic approach to the design and analysis of algorithms with an emphasis on efficiency. Topics include algorithms for searching and sorting, hashing, exploring graphs, and integer and polynomial arithmetic. Foundations in recurrence relations, combinatorics, probability, and graph theory as used in algorithm analysis are covered. Standard design techniques such as divide-and-conquer, greedy method, dynamic programming, heuristics, and probabilistic algorithms along with NP-completeness and approximation algorithms are included. Prerequisite: CS 315, or consent of instructor.

CS 450 OPERATING SYSTEMS (4)

Lecture, 4 hours. This course covers the fundamental concepts of operating system design and implementation; the study of problems, goals, and methods of concurrent programming; and the fundamentals of systems programming. Topics include resource-management, process and thread scheduling algorithms, inter-process communication, I/O subsystems and device-drivers, memory management including virtual memory, segmentation, and page-replacement policies. These topics will be covered in theory and in practice through the study of the source-code of a working operating system. Prerequisites: CS 252 and CS 315, or consent of instructor.

CS 452 COMPILER DESIGN AND CONSTRUCTION (3)

Lecture, 2 hours; laboratory, 2 hours. Application of language and automata theory to the design and construction of compilers as well as Lexical scanning, top-down and bottom-up parsing, semantic analysis, code generation, and optimization. Design and construction of parts of a simple compiler using compiler generation tools. Prerequisites: CS 315 and 252, or consent of instructor.

CS 454 THEORY OF COMPUTATION (4)

Lecture, 4 hours. Overview of various kinds of computability, unsolvability, and decidability. The P versus NP problem. Abstract mathematical models of computing devices and language specification systems with focus on regular and context-free languages. Classification of computer-solvable problems. Prerequisite: CS 315, or consent of instructor.

CS 460 PROGRAMMING LANGUAGES (4)

Lecture, 4 hours. This course provides a survey of the syntactic, semantic, and implementation features of functional, procedural, object-oriented, logic, and concurrent programming languages. Prerequisites: CS 252 and CS 315, or consent of instructor.

CS 465 DATA COMMUNICATIONS (3)

Lecture, 2 hours; laboratory, 3 hours. The ISO reference model, theoretical basis for data communications, data transmission theory and practice, telephone systems, protocols, networks, internetworks, with examples. Prerequisite: CS 351, or consent of instructor.

CS 470 ADVANCED SOFTWARE DESIGN PROJECT (3)

Lecture, 3 hours. This course is a project-based course designed to provide a "real world, team oriented" capstone experience for Computer Science majors. Coursework will be organized around large programming projects. The content of the projects may vary depending on the interests of the instructor and may include industry, government, nonprofit organization, or other affiliations. Prerequisites: CS 315, CS 370, and senior-standing in the major; or consent of instructor.

CS 480 ARTIFICIAL INTELLIGENCE (3)

This course is a survey of techniques that simulate human intelligence. Topics may include: pattern recognition, general problem solving, adversarial game-tree search, decision-making, expert systems, neural networks, fuzzy logic, and genetic algorithms. Prerequisite: CS 315 or consent of instructor.

CS 495 SPECIAL STUDIES (1-4)

This course is intended for students who are doing advanced work in an area of computer science (e.g., a senior project). Prerequisites: an upper-division CS course in the area of interest and consent of instructor. May be repeated for credit.

CS 496 SENIOR RESEARCH PROJECT (3)

Students, under the direction of one or more faculty members, undertake a substantial research project that is based on multiple upper-division CS courses. The result of the research is presented by the students in one of the Colloquium (CS 390) meetings. Senior-standing and approved contract are required.

CS 497 INTERNSHIP (1-3)

Student projects conceived and designed in conjunction with an off-campus organization or group. The internship is intended to provide on-the-job experience in an area of computer science in which the student has no prior on-the-job experience. Computer hardware or computer time required for the internship, as well as regular supervision of the intern, must be provided by the off-campus organization. Prerequisite: student must be within 30 units of completion of the CS major. May be taken Cr/NC only. No more than 3 units can be applied to the CS major.

Computer and Engineering Science (CES)

CES 400 LINEAR SYSTEMS THEORY (3)

Lecture, 3 hours. Analysis of linear time-invariant systems, correlation, convolution, impulse response, complex variables, Fourier series and transform, sampling, filtering, modulation, stability and causality, feedback and control systems, Laplace and Z-transform, fast Fourier transforms. Prerequisite: MATH 241 or consent of instructor. Cross-listed as MATH 430 and ES 400.

CES 430 PHOTONICS (3)

Lecture, 3 hours. Lasers, diode lasers and LED's, fiber optics, and optical radiation detectors. Prerequisites: a course in modern Physics (such as PHYS 314) and electromagnetism (such as PHYS 430). Cross-listed as PHYS 445 and ES 445.

CES 432 PHYSICS OF SEMICONDUCTOR DEVICES (3)

Lecture, 3 hours. Semiconductor materials, crystal structure and growth, energy bands and charge carriers, conductivity and mobility, metal semiconductor and p-n junctions, p-n junction diodes, bipolar junction transistors, field effect transistors, CCD's, and photonic devices and integrated circuits. Projects in photolithography, conductivity, and contact resistance measurements; I-V and C-V characteristics of diodes; and characterization of transistors may be assigned. Prerequisite: ES 230 or PHYS 314 or consent of instructor. Cross-listed as PHYS 475 and ES 432.

CES 440 INTRODUCTION TO NETWORKING AND NETWORK MANAGEMENT (3)

Lecture, 2 hours; laboratory, 3 hours. The major topics covered in this course are: ISO reference model, theoretical basis for data communications, data transmission theory and practice, telephone systems, protocols, networks, internetworks, with examples. Prerequisites: ES 440 or consent of instructor. Cross-listed as ES 465.

CES 490 SELECTED TOPICS IN CES (1-3)

This course focuses on special topics to introduce new emerging fields, provide foundation for advanced graduate level courses, or augment other courses in computer and engineering science. Prerequisite: consent of instructor.

CES 494 DIRECTED READINGS (1-3)

Independent study under a faculty member. The proposal must be approved by the graduate advisor if the course is to apply towards degree requirements. Prerequisite: consent of instructor.

CES 500 QUEUEING AND TRANSFORM THEORY (3)

Lecture, 3 hours. Topics include review of probability theory, fundamentals of transform theory, Fourier, and Z-transforms. Markovian and discrete time queueing systems, single and multi server queueing networks, and their applications. The course may require significant lab and/or project activity. Prerequisite: ES 314 or consent of instructor.

CES 506 OPERATIONS MANAGEMENT (3)

Production/operations management of manufacturing and service operations. Topics include forecasting and scheduling, material requirements planning, and quality assurance. Additional tools include inventory control, project management, and product development. Modern techniques such as Supply Chain Management, e-business, Just-in-Time, and Total Quality Management are illuminated. Cross-listed as BUS 516.

CES 510 INTELLIGENT SYSTEMS DESIGN (3)

Lecture, 3 hours. Introduction to adaptive systems: neural networks, genetic algorithms (GAs), fuzzy logic, simulated annealing, tabu search, etc. Specific topics include perceptions, backpropagation, Hopfield nets, neural network theory, simple GAs, parallel GAs, cellular GAs, schema theory, mathematical models of simple GAs, and using GAs to evolve neural networks. Prerequisites: ES 314 and CES 400, or consent of instructor.

CES 512 THEORY OF SOFTWARE SYSTEMS (3)

Lecture, 3 hours. Review of data structures and basic algorithms for sorting, searching, and string processing. Basics of logic, formal systems, grammars, and automata. Applications to some of the following areas: design of language processing tools (editor, translator etc.), software specification, testing and verification, and non-numerical problem solving. The course may require significant lab and/or project activity. Prerequisite: ES 314 or consent of instructor.

CES 514 DATA MINING (3)

Lecture, 3 hours. This course is an introduction to data models, data warehousing, association-rule mining, searching the Web, and Web Mining: Clustering. AI techniques (neural networks, decision trees), applications, and case studies. The course may require significant lab and/or project activity. Prerequisite: ES 314 or consent of instructor.

CES 516 HIGH-PERFORMANCE COMPUTING (3)

Lecture, 3 hours. The major topics covered in this course are: algorithmic tools and techniques for problems hard to solve on a standard uniprocessor model such as problems involving large data sets or real-time constraints; development of computational models to analyze the requirements and solutions and special hardware based solutions; and case studies to illustrate the developed models, tools, and techniques. The course may require significant lab and/or project activity. Prerequisite: ES 314 or consent of instructor.

CES 520 EMBEDDED SYSTEMS (3)

Lecture, 3 hours. Three major topics covered in this course are: controlling specialized I/O devices with particular attention to bit patterns and priority interrupts; waveshapes and measurement tools, both hardware and software; and real time operating systems. Prerequisites: ES 230, 231, and 310, or consent of instructor.

CES 522 VLSI DESIGN (3)

Lecture, 3 hours. The major topics covered in this course are: IC technology review, hardware description languages and describing hardware using one of the languages, modern VLSI design flow, circuit partitioning, and clustering. Floorplanning, placement, global routing, area efficient design, and area-time trade-offs are also covered. The course may require significant lab and/or project activity. Prerequisite: CES 530 or consent of instructor.

CES 524 ADVANCED COMPUTER ARCHITECTURE (3)

Lecture, 3 hours. The major topics covered in this course are: concept of advanced computing architectures, pipelining, multiprocessing, multiprogramming, single- and multi-stage interconnection networks, applications/algorithms for parallel computers, local and system bus architectures, CPU, and computer system performance analysis. The course may require significant lab and/or project activity. Prerequisite: ES 310 or consent of instructor.

CES 530 ANALOG AND DIGITAL MICROELECTRONICS (3)

Lecture, 3 hours. Introduction to analog/digital integrated circuits, bipolar and MOS transistor models, analysis and design of monolithic operational amplifiers, frequency response, non-linear circuits and CMOS, and Bipolar Logic Circuits. The course requires lab and/or project activity. Prerequisites: ES 230, ES 231 and CES 432, or consent of instructor.

CES 532 ADVANCED PHOTONICS DEVICES (3)

Lecture, 3 hours. The major topics covered in this course are: optical resonators, interaction of photons with materials, LEDs, laser diodes, optical amplifiers, optical noise, photoconductors, electrooptic modulators, photonic switches, and nonlinear optical materials and devices. The course requires lab and/or project activity. Prerequisite: CES 430 or equivalent.

CES 540 DIGITAL DATA TRANSMISSION (3)

The major topics covered in this course are: characteristics of base-band and band-pass channels, optimum signaling sets, and receivers for digital communications; effect of noise and intersymbol interference on probability of error; channel capacity; introduction to phase-locked loop analysis for timing; and carrier synchronization. Prerequisites: CES 400, and CES 440 or consent of instructor.

CES 542 DIGITAL SIGNAL PROCESSING (3)

Lecture, 3 hours. The major topics covered in this course are: time/frequency analysis of discrete-time signals and systems; fast implementations of the DFT and its relatives; IIR and FIR digital filter design, implementation, and quantization error analysis; and decimation, interpolation, and multirate processing. Prerequisite: CES 400 or consent of instructor.

CES 543 OPTICAL FIBER COMMUNICATIONS (3)

Lecture, 3 hours. The major topics covered in this course are: lightwave fundamentals; optical fiber as transmission media, losses and bandwidth; fiber cables; optical sources; detectors; optical components such as switches, access couplers, wave-length multiplexers and demultiplexers; analog and digital transmission techniques; line coding techniques; optic heterodyne receivers; thermal and shot noise; bit error rates; optical transmission system design; Optical T-carrier systems; SONET; and future directions. The course may require significant lab and/or project activity. Prerequisite: PHYS 230, PHYS 231 and CES 440, or consent of instructor.

CES 544 WIRELESS COMMUNICATION (3)

Lecture, 3 hours. Introduction to mobile/wireless communication systems, cellular communication, data transmission and signaling, noise and intelligence, analog and digital techniques, multiple-access architecture. The course requires lab and/or project activity. Prerequisites: ES 230-231 and CES 440, or consent of instructor.

CES 546 DATA COMPRESSION (3)

Lecture, 3 hours. The major topics covered in this course are: information theory; models; lossless compression (statistical, dictionary, static, dynamic, huffman, arithmetic, context-modeling); lossy compression (scalar quantization, vector quantization, differential encoding, subband transform, predictive); and compression standards (JPEG, MPEG). Prerequisite: ES 314 or consent of instructor.

CES 547 DIGITAL SWITCHING:TECHNIQUES AND ARCHITECTURES (3)

Lecture, 3 hours. This course is a review of switching techniques, synchronous and asynchronous transfer modes (i.e., STM and ATM), various switch architectures, multirate and multipoint-to-multipoint switching, ATM switching, signaling and call set-up, ATM switch-architectures and their performance evaluation, and multicasting techniques. VLSI implementation considerations, future directions. The course may require significant lab and/or project activity. Prerequisites: MATH 345, ES 230, ES 231, and CES 440, or consent of instructor.

CES 550 INTEGRATED DIGITAL NETWORKS (3)

Lecture, 3 hours. The major topics covered in this course are: information types and signals, definitions of services and integration, narrow ISDN and frame relay protocols, broadband ISDN concept and protocol, Integrated environment and ATM, principles of SONET and ATM transmission, broadband ATM networking, and future trends. The course may require significant lab and/or project activity. Prerequisite: CES 440 or consent of instructor.

CES 552 NETWORK ARCHITECTURE AND PROTOCOLS (3)

Lecture, 3 hours. The major topics covered in this course are: ISO model, review of the physical and data link layers, network layer and routing including for internet, multicast routing, TCP and UDP protocols and their characteristics, performance and limitations, TCP/IP stack, applications such as FTP, e-mail and DNS, and voice over IP. The course may require significant lab and/or project activity. Prerequisite: CES 440 or consent of instructor.

CES 554 BROADBAND ACCESS TECHNOLOGY (3)

Lecture, 3 hours. The major topics covered in this course are: review of ISDN and B-ISDN Protocols; digital subscriber loops; digital modems; the xDSL technology; xDSL family of protocols; ADSL standardization, its architecture, operation, implementation, and management; ATM; TCP/IP; Ethernet transmissions using ADSL; and optical access. The course may require significant lab and/or project activity. Prerequisite: CES 440 or consent of instructor.

CES 558 MULTICASTING ON THE INTERNET (3)

Lecture, 3 hours. The major topics covered in this course are: multicasting fundamentals; multicast routing algorithms; IP multicast; architecture and operation of MOSPF, PIM, CBT, OCBT, HDVMP, HPIM, BGMP; Mbone protocols; Real-time transport protocol and scalable reliable multicast; reliable multicast transport protocols; multicasting in ATM networks; and IP multicast over ATM, future directions. The course may require significant lab and/or project activity. Prerequisite: CES 552 or consent of instructor.

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)**

Special topics to augment regularly scheduled graduate courses in communications and photonics will be presented. Prerequisites depend on subject material.

CES 591 INTERNSHIP (1)

Internship will be done at an industry, R&D laboratory, government organization, or a laboratory or center at an academic institution to gain professional training, teamwork experience, communication skills, and project opportunities that will prepare students for a successful career.

CES 592 SELECTED TOPICS IN HARDWARE AND SOFTWARE SYSTEMS (3)

Special topics to augment regularly scheduled graduate courses in hardware and software systems will be presented. Prerequisites depend on subject material.

CES 592B SELECTED TOPICS IN BIOENGINEERING (3)

Lecture, 3 hours. Special topics to augment regularly scheduled graduate courses in bioengineering will be presented. Prerequisite: consent of the instructor.

CES 593 LABORATORY AND TECHNOLOGY REPORT EXPERIENCE (3)

Lecture, 1 hour; laboratory, 6 hours. In this course, students will learn to operate state-of-the art equipment in at least 6 laboratories, perform experiments, and write lab reports. In addition, students will write a technical report on a state-of-the art topic within the scope of the master's program of at least 3000 words excluding figures and tables. (The course cannot be taken to meet 30-unit requirement under thesis or project option unless approved by the Program Director.) Prerequisite: permission of student's advisor.

CES 594 DIRECTED READINGS (1-3)

Independent study under a faculty member. The proposal must be approved by the graduate advisor if it is to apply towards degree requirements. Prerequisite: consent of instructor.

CES 595 DESIGN PROJECT (1-3)

The project plan, timetable, necessary resources, and the expected outcome must be approved by a faculty project advisor and the program advisor at least one semester before taking the course. Prerequisites: admission of candidacy for the Master's degree and approval of the faculty advisor.

CES 596 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or design project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: consent of faculty thesis/project advisor.

CES 597 GRADUATE SEMINAR (1)

Series of lectures presented by experts from academia and industries.

CES 598 COMPREHENSIVE EXAMINATION (1)

In this four-hour examination, the student's overall understanding of important concepts of the core courses and the main subjects of each track will be tested. Prerequisites: advancement to candidacy for the master's degree and approval of the graduate advisor.

CES 599 RESEARCH AND THESIS (1-6)

Prerequisites: admission of candidacy for the master's degree and approval of the thesis advisor.

Counseling (COUN)

COUN 496 MIGRANT-EDUCATION ADVISOR PROGRAM (1-4)

School-based counseling experience supervised by Counseling department faculty. Under the guidance of the instructor, undergraduate students advise, counsel, and mentor K-12 students with a migrant background. Prerequisites: participation in the Migrant Education Advisor Program (MEAP) and consent of the instructor.

COUN 501 COUNSELING THEORIES AND PROFESSIONAL ORIENTATION (4)

An orientation to professional counseling focusing on standards of practice, major counseling theories, and essential concepts in the practice of counseling including attention to concepts of resilience and recovery-based models. Advocacy, systems of care, services, support for the severely mentally ill, and collaborative treatment are addressed in both counseling and case management. Mental health principles, the history and philosophy of counseling, consultation, self-care, cultural competence, roles of professional organizations and governing bodies, and ethical standards of the discipline are presented. This course also includes focus on 1 unit of special topics toward the CA LPCC license.

COUN 502 WHOLE LIFESPAN DEVELOPMENT (4)

This course offers a developmental perspective on counseling interventions appropriately undertaken with children, adolescents, and adults. Objectives include: (1) providing students with an introduction to basic intervention strategies for counseling children and adolescents, taking into account cultural and socio-economic influences; (2) familiarizing students with special topics, e.g., impact of divorce on children, child maltreatment, and effects of domestic violence; (3) consideration of family, peer, school, and community contexts in treatment planning (i.e., integrative case formulation) with children and adolescents; (4) identifying basic intervention strategies that facilitate adaptive change in adults' lives, particularly in the context of significant transitions and life events; (5) addressing long term care and elder abuse; (6) consideration of gender, sexual orientation, and ethnicity issues; and (7) examination of changes in career, interpersonal relationships, family structure and dynamics with an emphasis on their interdependence. This course also incorporates focus on 1 unit of special topics toward the CA LPCC license. Course restricted to Counseling M.A. students only.

COUN 502P WHOLE LIFESPAN DEVELOPMENT, CHILD & ADOLESCENT DEVELOPMENT (2)

This course offers a developmental perspective on counseling interventions appropriately undertaken with children and adolescents. Objectives include: (1) providing students with an introduction to basic intervention strategies for counseling children and adolescents taking into account cultural and socio-economic influences; (2) familiarizing students with special topics, e.g., impact of divorce on children, child maltreatment, effects of domestic violence; and (3) consideration of family, peer, school, and community contexts in treatment planning (i.e., integrative case formulation) with children and adolescents. Course restricted to Counseling MA students only.

COUN 502Q WHOLE LIFESPAN DEVELOPMENT, ADULT DEVELOPMENT (2)

This course offers a developmental perspective on counseling interventions appropriately undertaken with adults. In this course students will discuss basic intervention strategies that facilitate adaptive change in adults' lives, particularly in the context of significant transitions and life events (e.g., marriage, parenthood, illness or disability, menopause, retirement, aging, loss, and bereavement). Long term care and elder abuse will also be addressed. Gender, sexual orientation, and ethnicity issues will be integrated into both didactic and experiential learning. Changes in career, interpersonal relationships, and family structure and dynamics will be examined over the life span with an emphasis on their interdependence. This course also incorporates focus on 1 unit of special topics toward the CA LPCC license. Course restricted to Counseling MA students only.

COUN 503 CLINICAL DIAGNOSIS AND TREATMENT PLANNING (4)

A course designed to cover psychopathology and sociopolitical-related issues of diagnosis and treatment. Attention is given to: (1) understanding the variability of psychopathology in community counseling settings; (2) the application of evaluation methods and diagnostic classification systems of the Diagnostic and Statistical Manual of Mental and Emotional Disorders (DSM); (3) development of appropriate treatment plans; (4) the relationship of class, gender, and ethnic background to diagnosis and treatment; (5) mental health recovery-oriented care; (6) principles of collaborative treatment; and (7) the impact of co-occurring disorders. This course also includes a focus on 1 unit of special topics toward the CA LPCC license. Course restricted to Counseling M.A. students only.

COUN 510A APPLIED COUNSELING TECHNIQUES AND ASSESSMENT (4)

This course helps students to develop necessary basic multiculturally competent assessment and counseling skills to prepare them for field based training experiences in a wide variety of settings. Students will learn interview and assessment methodologies including intake interviewing, crisis assessment, and suicide assessment. Training is done through the use of videotape feedback and in-class practice demonstrations involving personal disclosure, role-play, and group and instructor feedback. This course is normally taken in the first semester by new students. This course also includes focus on 2 units of special topics toward the California LPCC license. Course restricted to Counseling M.A. students only.

COUN 510B APPLIED COUNSELING PRACTICUM AND ADVANCED TECHNIQUES (4)

This course provides students with an opportunity to continue the development of multiculturally-competent counseling skills necessary for advanced field training during the 514A/B Supervised Field Experience sequence. There are different sections for CMHC (MFT & LPCC) and School Counseling (PPS) students: CMHC students see clients in a structured fashion on campus and School Counseling students work in school settings under the instructor's supervision. This course also expands on principles of counseling clients in crisis and clients who have experienced trauma. Cr/NC only. Prerequisite: COUN 510A.

COUN 511F CAREER COUNSELING: FOUNDATIONS, MEASUREMENT AND ASSESSMENT, AND ISSUES THROUGHOUT THE LIFESPAN. (3)

Counseling 511F focuses on academic and career awareness and support for individuals and families throughout the lifespan, including the following objectives: (1) coverage of learning and career development theory, system support, K-12 academic and career guidance, and career information resources; (2) overview of major theoretical career models and practice guidelines; (3) study of the impact of diversity issues and counselor personal needs/values on ultimate career and educational choices; (4) exploration of interrelationships among and between work, family, and other life roles and factors; (5) development of hands-on career assessment and interviewing skills including skills for group and individual clients; (6) skills with print and computer-based career counseling materials; (7) familiarizing students with available information resources; and (8) coverage of career issues of adulthood, including such job maintenance, advancement, retirement, job-loss, avocation and leisure, and secondary career status.

COUN 511G ACADEMIC AND CAREER PLANNING AND COUNSELING ISSUES OF K-12 POPULATIONS (1)

COUN 511G is an introductory course in K-12 academic counseling and career development. Course content includes the foundations of learning theory, cradle to career development and academic guidance models, and print/internet based academic/career counseling materials. The course explores the impact of personal needs, values, cultural variables, aptitudes, abilities, and interests on academic progress and career/vocational choices.

COUN 512 THEORY AND PRACTICE OF GROUP COUNSELING (4)

This didactic and experiential course provides students with an introduction to the concepts and practices of group counseling, supplemented by lectures and readings. The dynamics and procedures involved in working with groups will be examined with students functioning as both group participants as well as group leaders. The course also examines basic group counseling skills, stages of group formation, confidentiality, trust issues, co-counseling in groups, group dynamics and structure, groupwork with families, and groupwork from a systemic perspective. Cultural factors related to group work are identified didactically and experientially. Practical approaches to group counseling include psycho-educational groups, interpersonal problem-solving groups, and task/work groups, among others. This course also includes focus on 1 unit of special topics toward the CA LPCC license. Prerequisite: course restricted to Counseling M.A. students only.

COUN 513 RESEARCH, EVALUATION, AND ASSESSMENT IN COUNSELING (4)

A survey of the principles of research design, program evaluation, and assessment as applied to counseling in school and community settings, with a focus on using these skills to improve individual and programmatic counseling efficacy. Students will develop an understanding of key issues in assessment, including test development, administration and scoring, test reporting and interpretation, and test evaluation and selection. In addition, students will develop an understanding of research design and how it can be utilized for data-based counseling program planning and evaluation. The course will increase students' awareness of the ethical and cultural dilemmas that are inherent in assessment, research, and evaluation. Prerequisites: Counseling M.A. students only; demonstrated competence in basic statistical analysis.

COUN 514A SCHOOL COUNSELING SUPERVISED FIELD EXPERIENCE I (4)

This seminar provides a group discussion and supervision format in conjunction with advanced field based training, in school settings. The class meetings are designed to supplement the individual and group supervision provided by site supervisors, and the goal of the seminar is to help students develop a model of professional functioning through the integration of theory, pragmatic strategies, and personal development. Aspects of cultural diversity that influence counseling practice in school settings will be addressed. Integral to this experience is the exchange of feedback and support among seminar participants. This course also addresses techniques for working with clients and situations involving crisis/trauma. Prerequisites: 510A, 510B and 520; 501 is highly recommended. Evaluations are by letter grade. Course restricted to Counseling M.A. students only.

COUN 514B SCHOOL COUNSELING SUPERVISED FIELD EXPERIENCE II (4)

This seminar provides opportunities to build upon and consolidate the field based training skills addressed in COUN 514A. A group discussion and supervision format continues to provide supplemental support relative to counseling field work in school settings. The class meetings are designed to supplement the individual and group supervision received from site supervisors. The goal of the seminar is to help students develop a model of professional functioning through the integration of theory, pragmatic strategies, and personal development. Aspects of cultural diversity that influence counseling practice in school settings will be addressed. Significant attention is paid to working with clients in crisis, experiencing trauma, and how to respond as part of a crisis team. Students will complete a culminating case study project, with both oral and written components. Prerequisites: 510A, 510B, 514A, 520, and 501 is highly recommended. This is a graded course. Course restricted to Counseling M.A. students only.

COUN 515A CMHC SUPERVISED FIELD EXPERIENCE I (4)

This seminar provides a group discussion and supervision format in conjunction with advanced field based training, which may be in community counseling settings (CMHC students). The class meetings are designed to supplement the individual and group supervision provided by site supervisors. The goal of the seminar is to help students develop a model of professional functioning through the integration of theory, pragmatic strategies, and personal development. Aspects of cultural diversity that influence counseling practice in community and school settings will be addressed didactically and experientially. Integral to this experience is the exchange of feedback and support among seminar participants. This course also addresses techniques for working with clients and situations involving crisis/trauma. Students will initiate a culminating case study project, with both oral and written components. Prerequisites: 510A, 510B, and additional coursework in the M.A. program. Course restricted to Counseling M.A. students only.

COUN 515B CMHC SUPERVISED FIELD EXPERIENCE II (4)

This seminar provides opportunities to build upon and consolidate the field based training skills addressed in COUN 515A. A group discussion and supervision format continues to provide supplemental support relative to counseling field work in community counseling settings (CMHC, MFT, and LPCC). The class meetings are designed to supplement the individual and group supervision received from site supervisors. The goal of the seminar is to help students develop a model of professional functioning through the integration of theory, pragmatic strategies, and personal development. Aspects of cultural diversity that influence counseling practice in community and school settings will be addressed didactically and experientially. Integral to this experience is the exchange of feedback and support among seminar participants. Significant attention is paid to working with clients and systems in crisis and experiencing trauma. Students will complete a culminating case study project, with both oral and written components. Prerequisites: 510A, 510B, 514A, and additional courses in the M.A. program. This is a graded course. Course restricted to Counseling M.A. students only.

COUN 520 INTRODUCTION TO SCHOOL COUNSELING (4)

This course provides a conceptual overview and orientation to the practice of school counseling. Emphasis will be placed on school counseling programs as critical components of the education enterprise, the ASCA national model of school counseling, and the expanding and changing role of the school counselor.

COUN 521 SEMINAR: PUPIL PERSONNEL SERVICES - CONCEPTS AND ORGANIZATION (4)

A seminar in organizing, supervising, and administering comprehensive service-based and data-driven Pupil Personnel Programs in elementary and secondary schools; legal and financial aspects; and laws affecting children and child welfare are covered. Students learn how to create a developmental school counseling program that is an integral part of the entire educational program in a school. Prerequisite: COUN 520.

COUN 523 WORKING WITH FAMILIES IN SCHOOL SETTING (4)

This course has as its focus a study of family systems and how they impact and interact with all the systems that involve the child including educational and cultural systems. Basic to this is the study of the students' own family of origin and its impact on the student. Each student is required to lead or co-lead a parent education group in a school setting during the last half of the course. Prerequisite: COUN 510A/B is required.

COUN 524 COUNSELING CHILDREN AND ADOLESCENTS (4)

This course provides an overview of the theories and techniques of child and adolescent counseling with a focus on youth development in a socio-cultural context. Counseling interventions used in schools and common concerns of school-aged students are emphasized. Methods for establishing rapport, goal setting, and case formulation are highlighted. Special emphasis will be placed on applying theory to practice in a developmentally appropriate manner.

COUN 526 GROUP COUNSELING IN THE SCHOOLS (4)

This didactic and experimental course examines the concepts and practices unique to group counseling in the schools. Psycho-educational strategies in the school settings are emphasized. Particular attention is given to processes and challenges involved in the implementation of these strategies. Cultural context, effectiveness, and evaluation issues will be explored. The dynamics and procedures involved in working with small and large groups will be studied with members as participants and as leaders. Prerequisites: COUN 510A (Pre-practicum) and COUN 520.

COUN 527 LAW AND ETHICS FOR SCHOOL COUNSELORS (3)

This course examines the legal and ethical responsibilities of the school counselor. Course topics include: educational counseling, child abuse reporting, confidentiality, record keeping, and attendance and truancy laws. This course also provides an overview of special education law, including: the different federal categories of disability, Individualized Educational Program (IEP) procedures, suspension and expulsion of students with disabilities, and Section 504 Accommodation Plans.

COUN 528A CONSULTATION (3)

This course provides a general framework for understanding and practicing culturally and contextually sensitive consultation, collaborative problem solving, and systems level intervention in educational settings. An exploration of the stages of consultation and the major models of consultation are covered. Students will gain experience in the delivery of consultation services.

COUN 528B CRISIS INTERVENTION (1)

This course focuses on prevention, response, and recovery during a crisis; and the counselor's role as part of a school-based crisis intervention team. Crises include school violence, accidents, and the death or suicide of a student or faculty member. Maintaining the safety and security of the school community emphasized.

COUN 540 COUNSELING DIVERSE COUPLES AND FAMILIES (4)

This course offers theoretical, principle, and methodological foundations for understanding diverse couple and family relationships by providing an overview of historical and contemporary models of conceptualization, assessment, and intervention. Attention is devoted to important legal, ethical, and clinical considerations unique to working with families and couples including partner abuse assessment, intervention and dynamics, child abuse reporting, and roles of families and systems in substance abuse and dependence. Throughout, cultural factors such as the role of poverty, sexual identity, blended families/step-parenting, and multi-racial families are addressed. This course also includes focus on 3 units of special topics toward the CA LPCC license.

COUN 545 COUNSELING ORIENTATION, LAW AND ETHICS, AND CASE MANAGEMENT PRACTICES (4)

This course is designed to clarify the legal and ethical responsibilities of the Clinical Mental Health Counselor (CMHC). Legal standards related to counseling practice will be surveyed, including issues related to dissolution; child care, custody, and abuse; confidentiality; involuntary hospitalization; mandatory reporting requirements; detection, assessment, and treatment of domestic violence; and other issues related to the relationship between law and counseling. Ethical standards, which often overlap with legal standards, will be surveyed. This course also addresses case management practices commonly employed by clinicians. Cultural considerations will be examined as they impact counseling and case management practices. This course satisfies the educational requirements for licensure as a Marriage and Family Therapist and as a Licensed Professional Clinical Counselor in California. It also includes focus on 1 unit of special topics toward the CA LPCC license. Course restricted to Counseling M.A. students only.

COUN 570 SEMINAR MULTICULTURAL COUNSELING (4)

This course is designed to provide students with an understanding of how different forms of diversity (ethnicity, culture, sexual orientation, socioeconomic status, age disability, religion, and gender) can affect counseling processes. Students will identify and explore their own unique ethnic and cultural worldview and see how it affects their counseling approaches in both community and school counseling settings. Students will explore theories of multicultural counseling and development. Students will also become knowledgeable about various minority groups in California and in the United States and how majority culture influences the minority individuals' daily lives and their responses to counseling. The seminar will address multicultural aspects of counseling children, youth, and adults including advocacy and use of culturally appropriate counseling modalities. This course includes focus on 4 units of special topics toward the CA LPCC license. Course restricted to Counseling M.A. students only.

COUN 580 COUPLES AND SEXUALITY COUNSELING (4)

This course provides students with theoretically-based knowledge about and skills in conducting counseling for couples, including addressing sexuality issues. Assessment and counseling interventions covered will reflect the pluralistic needs of couples who are embedded in complex social systems (e.g., legal, health). Issues such as intimate partner violence, infertility, gender roles, sexual function/dysfunction, and cross-cultural considerations will be incorporated throughout all topics. Students will also have opportunities to explore their own world-views as they relate to coupling and sexuality, to increase their effectiveness with a diversity of clients. This course also includes 4 units of special topics and populations toward the California LPCC license.

COUN 581 INTRODUCTION TO CHEMICAL DEPENDENCY (1)

A survey course designed to provide a broad conceptual base regarding the major dimensions of dependence upon drugs/alcohol. Emphasis is on practical issues from the standpoint of the family and the community. The course explores historical and current modes of treatment, intervention, and prevention of alcoholism and alcohol-related problems. Students are expected to have a basic understanding of psychopathology and family systems prior to enrollment. This course is designed to provide specific instruction in alcoholism and other chemical substance dependence, and is designed to meet the requirements issued by the Board of Behavioral Sciences, State of California.

COUN 582 PSYCHOPHARMACOLOGY FOR COUNSELORS (3)

This didactic course explores basic principles and applications of psychopharmacology in the mental health field. Emphasis is paid to neurotransmitter systems in the nervous system, principles of drug action, and clinical pharmacology (the use of medications to treat behavioral, psychological, and psychiatric conditions such as eating disorders, depressive disorders, hyperactivity, anxiety disorders, psychotic disorders, and dementia). Attention will be paid to the community counselor's role in the effective, multicultural-competent, and ethical use of psycho-active medications (e.g., referral, consultation, monitoring) when psychopharmacological interventions are part of treatment as well as to the historical and sociopolitical contextual issues surrounding the prescription of psychiatric medication.

COUN 583 SUBSTANCE ABUSE AND DEPENDENCE (2)

A didactic course designed to provide a broad conceptual base regarding major dimensions of alcohol and drug abuse and dependence disorders. The course explores theories of addiction; co-occurring disorders; and medical aspects, effects, and approaches to prevention, assessment, and treatment of alcohol and drug abuse/dependence disorders. The contextual role of the family and larger systems, including the legal system, are addressed. Risk factors, community resources, referral, and prevention information is discussed from developmental and cross-cultural perspectives.

COUN 595 SPECIAL STUDIES (1-4)**COUN 596 SUPERVISED FIELD EXPERIENCE (1)**

This seminar will provide a group discussion and supervision format in conjunction with the field experience/traineeship. This seminar's weekly small group meetings are designed to supplement on-site supervision, using case presentation and group discussion. A key aim of the seminar is the development of a model of professional functioning through the integration of theoretical, practice, and personal material. Integral to this experience is the exchange of feedback and support among group members. The course is designed to provide an opportunity for continuing evaluation of student growth and counseling efficacy. This component will include evaluation from faculty and site-supervisors, as well as student's ongoing self-assessment.

Criminology and Criminal Justice (CCJS)

CCJS 201 CRIMINAL JUSTICE AND PUBLIC POLICY (4)

A systematic analysis of the effectiveness and influence of criminal justice policy and practice throughout the criminal justice system. The focus is on the development and implementation of crime control policy. Satisfies GE Area D1 (Individual and Society).

CCJS 330 GOVERNMENT AND THE RULE OF LAW (4)

The major topics covered in this course are: nature and development of law and legal institutions from philosophical, historical, comparative, and contemporary perspectives; interrelationships of law, morality, and custom; social control, legal change and social change; and the legal profession.

CCJS 340 LAW ENFORCEMENT AND DRUG LEGISLATION (4)

An examination of issues and problems posed by the licit and illicit use of drugs for the administration of justice and corrections. It critically examines social theories and social policies in relation to drugs. Topics to be covered include: the origins of the contemporary drug crisis in the United States; the development of criminal justice policies regarding drug use; and the varieties of drugs and the destructive problem created by each for law enforcement, adjudication, and corrections. Some emphasis will be placed on economics, politics, and international relations as a factor in enforcement policies.

CCJS 350 DRUGS AND SOCIETY (4)

Analyzes drug use, misuse, and abuse in society using sociological theories. Explores drug policies and control of drug use, current sociological drug research, and how the media shapes drug perceptions. Highlights various legal and illegal drugs and their societal consequences. Cross-listed as SOCI 340.

CCJS 365 MANAGEMENT IN PUBLIC AGENCIES (4)

Central concerns are the formation and administration of the managerial policies of public agencies. Focus is on such vital issues as the allocation of public resources; public accountability; and the description, analysis, solutions, and synthesis of contemporary managerial problems in criminal justice agencies. Cross-listed as POLS 430.

CCJS 370 SEMINAR IN RESEARCH METHODS (4)

A consideration of the methods used by criminal justice researchers in a variety of basic and applied settings. Topics include the choice of a problem, ethical issues, the logic of science, measurement, sampling procedures, surveys, coding, experimentation, observation, and summarizing findings.

CCJS 375 CURRENT ISSUES IN CRIMINOLOGY AND CRIMINAL JUSTICE (4)

An in-depth examination of selected topics and issues in criminal justice. Specific course topic varies by semester. May be repeated for credit.

CCJS 399 LECTURE SERIES (2)

A weekly meeting or meetings offering presentations and discussions by guest lecturers on issues of current interest and importance. May be repeated for a total of 4 units.

CCJS 404 INTRODUCTION TO CONSTITUTIONAL LAW (4)

A survey of selected areas of constitutional law and Supreme Court decision-making, considering the political and social influences as well as doctrinal forces which have produced various policies and interpretations. Cross-listed as POLS 423.

CCJS 405 RIGHTS OF THE ACCUSED (4)

Leading constitutional cases in criminal justice including: search and seizure, death penalty, electronic surveillance, privilege against self-incrimination, jury trial, right to counsel, and double jeopardy, will be studied in detail.

CCJS 407 POLICE, COURTS, AND COMMUNITY RELATIONS (4)

Provides a comprehensive introduction to policing in the United States. Examines the process of policing, police behavior, organization, operations, and their historical perspectives. Covers the relationship between the police and the public as well as the role of courts in controlling and guiding police behavior. Reviews critical issues confronting the police and the best policies and practices in policing.

CCJS 420 SEMINAR IN CRIMINOLOGY (4)

An in-depth analysis of theories of criminal behavior; psychological, sociological, and biological factors; professional criminals; white collar crimes; and other selected examples of deviant behavior and their relationship to agencies of social control.

CCJS 430 WOMEN AND CRIME (4)

An in-depth analysis of women/girls and crime in the field of criminology and criminal justice. The class examines the significance of gender in pathways to crime as well as the nature and extent of female offending, victimization, and incarceration. The course focuses on feminist theory and methodology.

CCJS 441 DEVIANT BEHAVIOR (4)

The social causes and consequences of delinquency, criminality, addiction, insanity, social unconventionality, and other "deviant" behavior. Examines the conversion and commitment to deviant worldviews, and the social processes involved in the transformation to a deviant identity. Cross-listed as SOCI 314.

CCJS 450 PUNISHMENTS AND CORRECTIONS (4)

Provides an in-depth analysis of the correctional system, including prisons, jails, probation, parole, and community corrections. Examines the history and purpose of punishment and the goals of corrections. Reviews contemporary issues and policies affecting corrections. Cross-listed as SOCI 450.

CCJS 470 MEDIA, CRIME, AND CRIMINAL JUSTICE (4)

Examines the role and significance of mass media in the field of criminology and criminal justice, including lawmaking, law breaking, and the responses to rule violations. The course covers the historical and contemporary media coverage of crime and criminal justice; the structure and content of media coverage of crime and related information; as well as the role and importance of media in the formation of citizen attitudes and behavior, decision-making, and public policy.

CCJS 480 WHITE COLLAR CRIME (4)

Examines the various forms, causes, and consequences of white collar crime compared to other crime; reviews relevant theory and research; considers the reason for the difficulties in detection and prosecution and issues surrounding punishment; and examines the efficacy of prevention strategies.

CCJS 489 CIVIL LIBERTIES AND THE CONSTITUTION (4)

An examination of fundamental principles of constitutional law that govern and constrain the powers and operations of criminal justice agencies and their personnel. The rights and immunities guaranteed by the Constitution in general, and the civil liberties, rights, and freedoms protected by the Bill of Rights will be covered. Rights of the accused will also be considered. Cross-listed as POLS 424.

CCJS 490 SENIOR SEMINAR IN CRIMINOLOGY AND CRIMINAL JUSTICE STUDIES (4)

A comprehensive synthesis and examination of the theoretical concepts and empirical findings of other courses in the major curriculum. Areas of special interest to the instructor and the students will be closely studied. Prerequisites: senior-level standing and/or consent of instructor. Graduation Application submitted to Admissions and Records.

CCJS 494 INTERDISCIPLINARY SEMINAR (1-4)

An exploration of selected criminal justice topics from an interdisciplinary perspective. Themes and topics may vary. May be repeated for credit.

CCJS 495 SPECIAL STUDIES (1-4)

The supervised study of a particular problem or area of interest selected by the student in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations, and a term paper is required. May be repeated for up to 12 units of credit.

CCJS 497 JUVENILE JUSTICE (4)

An exploration of the nature and extent of juvenile delinquency, including serious or violent crime. The major theories of delinquency causation are reviewed. The course will be devoted to the juvenile justice system and how it processes youths accused of crime. The nature and function of all major segments of the juvenile justice system will be discussed, including law enforcement, juvenile court, and corrections. The legal rights of juveniles will also be reviewed. Finally, the current policy issues in juvenile justice will be explored. Cross-listed as SOCI 366.

CCJS 499 INTERNSHIP (4)

In consultation with the internship coordinator, the student selects a public, private, or community agency; gains field experience under the supervision of agency heads; and meets with the internship coordinator to discuss progress. Cr/NC only. May be repeated for a total of 8 units.

Economics (ECON)

ECON 204 INTRODUCTION TO MACROECONOMICS (4)

An examination of the basic characteristics of the American economy and the principles that determine its performance. Emphasis is given to those factors that determine the levels of production, employment, prices, interest rates, and inflation. Satisfies GE Area D5 (Contemporary International Perspectives).

ECON 205 INTRODUCTION TO MICROECONOMICS (4)

An examination of the basic principles that determine the behavior of individual consumers and firms in the United States economy as they respond to changing economic conditions. Topics include demand, supply, pricing, production, cost, competition, and industrial structure. This course may be taken before ECON 204. Satisfies GE Area D1 (Individual and Society).

ECON 217 STATISTICS FOR ECONOMICS AND BUSINESS (4)

Microsoft Excel based statistics. Topics include the collection and presentation of data, discrete and continuous distributions, probability and sampling theory, statistical inference, and hypothesis testing. Parametric and nonparametric statistical tests will be examined, including t-tests, Chi-square, and ANOVA. Additional topics include regression, time series analysis, and applications in business forecasting. Prerequisites: computer competency and pre-business math requirement.

ECON 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

A community service course allowing students the opportunity to earn credit for volunteer activities pertaining to their academic program. Requires 30 hours of service per unit and approval by an Economics Department advisor. Cr/NC only.

ECON 303 INTERNATIONAL ECONOMICS (4)

A study of issues, theories, and policies regarding international trade and finances, international movements of capital and labor, economic development, external debt, and foreign aid. Prerequisites: ECON 204 and 205 or consent of instructor.

ECON 304 INTERMEDIATE MACROECONOMIC THEORY (4)

A study of economic theories that explain the levels and fluctuations in production, employment, income, money, and prices in an economic system, with an emphasis on the macroeconomic framework of the U.S. economy. Topics include national income accounting, models of short-run equilibrium and long-run growth, macroeconomic aspects of international economics, labor markets, monetary policy, and fiscal policy. Prerequisites: ECON 204, ECON 205, and MATH 165 or BUS 211 or ECON 217 or equivalents.

ECON 305 INTERMEDIATE MICROECONOMIC THEORY (4)

A study of theories that explain consumer behavior and managerial decision-making in organizations and firms in the economy. Deals with theories of demand, pricing, production, cost analysis, and competition. Prerequisites: ECON 204, ECON 205, and MATH 165 or BUS 211 or ECON 217 or equivalents.

ECON 311 PUBLIC ECONOMY (4)

A basic introduction to the economics of the public sector designed to give the student a broad overview of the economic roles of government in our society. Emphasis will be on understanding current public policy issues and the effects of government policies on resource allocation (efficiency) and income distribution (equity). Prerequisites: ECON 205 and ECON 317 or consent of instructor.

ECON 317 INTRODUCTION TO ECONOMETRICS (4)

Statistical techniques, based on linear regression, most frequently employed in economics. Topics include multiple regression, Gauss-Markov Theorem and its violations, cross-sectional techniques, time series analysis, simultaneous equation modeling, and forecasting. Applying widely-used computer programs to economic phenomena is emphasized. Prerequisites: ECON 204, ECON 205, and MATH 165 or BUS 211 or ECON 217, or equivalents or consent of instructor.

ECON 319 MANAGERIAL ECONOMICS (4)

Economic analysis applied to the management decisions of public or private firms. The course is oriented to case studies that illuminate the content and applicability of such basic economic concepts as marginality, opportunity costs, and market structure. Topics include: demand analysis, resource allocation, production economics, and cost analysis; profitability analysis; price and nonprice competition; capital budgeting; and long-range strategy formulation. Prerequisites: ECON 305 and 317.

ECON 321 LABOR ECONOMICS (4)

A study of economic and social issues in U.S. labor markets. Topics will include U.S. labor history, market structure, labor laws, gender and race, education and training, and collective bargaining. Prerequisite: ECON 205.

ECON 322 URBAN ECONOMICS (4)

An exploration of issues facing communities and regions in their attempts to manage growth and enhance the quality of life. Microeconomic tools are applied in a spatial context to solve problems associated with land use, firm location, transportation, housing, congestion, open space, and environmental protection. Prerequisite: ECON 204 and 205.

ECON 330 SEMINAR IN GAME THEORY (4)

Analytical approach to studying rational behavior in interactive situations. This course develops basic theory, including Nash equilibrium, mixed strategies, credibility, coalitional games, and the core. Applications may include public goods, voting, auction design, bargaining, and the competitive market mechanism. Prerequisites: ECON 305 and MATH 165 or BUS 211 or ECON 217. MATH 161 recommended.

ECON 375 MONEY AND BANKING (4)

An examination of financial institutions, monetary theory, and the rapidly changing domestic and international banking system. Topics will include alternative theories of monetary policy, the determination of interest rates and price levels, and the influence of financial institutions on inflation, recession, and growth. Prerequisites: ECON 204 and ECON 205, or consent of instructor.

ECON 381 NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS (4)

A study of public and private sector strategies for achieving the optimal use of natural resources and the control of pollution. Topics include: energy, water, minerals, forests, air pollution, climate change and the valuation of environmental benefit and costs. Prerequisites: ECON 204 and 205, or consent of instructor.

ECON 388 ECONOMICS AND LAW OF BUSINESS REGULATION (4)

An analysis of the regulatory environment of American business. Studies the way the legal system resolves economic conflicts among business, consumers, labor, and government. Topics include: constitutional law, administrative law, regulation of monopoly and competition, labor law, and international law. Prerequisite: ECON 205; and ECON 305 preferred.

ECON 403A SEMINAR IN INTERNATIONAL ECONOMIC DEVELOPMENT (4)

Review of current issues and study of conceptual frameworks for thinking about economic development with a global perspective. Focuses on sources of economic growth, poverty alleviation, resource sustainability, and reform of economic institutions in Latin America, Africa, Asia, and ex-socialist economies. Prerequisites: ECON 303 and 304, or consent of instructor.

ECON 403B SEMINAR IN INTERNATIONAL TRADE (4)

This course covers international trade, foreign direct investment, and immigration. Topics include international trade under imperfect competition and policies to regulate international trade. Vertical and horizontal foreign direct investment models and the relationships among direct foreign investment, immigration, and international trade will be examined. Prerequisites: ECON 303 and ECON 305.

ECON 403C SEMINAR IN INTERNATIONAL FINANCE (4)

The goal of this course is to explain movements in the trade balance, exchange rates, national output, and inflation. The first portion of the course develops building blocks regarding these movements. The second part of the course develops a theoretical framework which we will use to analyze policy issues such as the sustainability of the U.S. trade deficit, the Asian currency crisis, the Argentine crisis, the European Monetary Union and the Euro, the debt crisis, the international monetary system, and capital market integration. Prerequisites: ECON 303, 304, and 317 or equivalents with consent of instructor. Do not take this class without these prerequisites.

ECON 404 SEMINAR IN MACROECONOMIC THEORY (4)

A study of theories dealing with inflation, unemployment, macro-economic policies, equilibrium, and disequilibrium. Topics may include: investment, growth theory, monetary theory, international trade, aggregate demand and supply, comparative statics, post-Keynesian economics, and recent theoretical developments and policy issues. Prerequisites: ECON 304 and MATH 165, or equivalents.

ECON 405 SEMINAR IN MICROECONOMIC THEORY (4)

This course is devoted to explorations of economic theory and policy issues and is designed to deepen student understanding of economic theory learned in ECON 305. Prerequisites: ECON 305 and MATH 165, or equivalents or consent of instructor.

ECON 408 SEMINAR IN MATH APPLICATIONS IN ECONOMICS (4)

Applications of mathematical techniques in economics. Construction of micro- and macroeconomic models using calculus and linear algebra. Topics include: optimization, competition, supply and demand, national income, growth theory, general equilibrium, disequilibrium, and dynamics. Recommended for students considering graduate study in economics or business. Prerequisites: ECON 304, ECON 305, and MATH 161, or equivalents or consent of instructor.

ECON 411 SEMINAR IN PUBLIC ECONOMICS (4)

Applications of economic theory to public project analysis for students seeking careers in the public sector. Topics include: resource allocation, modeling and simulation, decision theory, fiscal impact analysis, benefit-cost analysis, government investment criteria, and project evaluation. Prerequisite: ECON 304 and 305, or consent of instructor.

ECON 417 SEMINAR IN ECONOMETRICS AND FORECASTING (4)

This course is devoted to explorations of statistical applications and theory used to analyze economic phenomena and is designed to deepen the student's understanding of econometric and forecasting techniques learned at a basic level in ECON 317. Prerequisites: ECON 317, 304 or 305, or consent of instructor.

ECON 419 SEMINAR IN MANAGERIAL ECONOMICS (4)

An exploration of the problems facing American firms in competing in a global economy. Topics include: product markets, production efficiency, technology, competitive markets, generic industry environments, and competitive strategies. Students will write and present case studies of firms and industries. Prerequisites: ECON 304, 305, 317.

ECON 421 SEMINAR IN LABOR ECONOMICS (4)

An analysis of the theory of labor supply and demand. Topics include: wage determination and the theory of human capital, labor force participation, antipoverty programs, the causes and consequences of wage inequality, theories of race and gender discrimination, the role and effects of labor unions, and the effects of the minimum wage on employment and income. Prerequisites: Econ 305 and 317, or consent of instructor.

ECON 426 SEMINAR IN HISTORY OF ECONOMIC THOUGHT (4)

The interaction of economic thought, economic policy, and political ideology from mercantilism to the present day. The works of Smith, Malthus, Ricardo, Marx, Marshall, Keynes, and the post-Keynesians are discussed in the context of the economic problems of their times. Satisfies GE Area D5 (Contemporary International Perspectives). Prerequisites: ECON 204 and 205, or consent of instructor.

ECON 432 SEMINAR IN U.S. ECONOMIC HISTORY (4)

Economic development of the United States since the American Revolution. Topics to be covered include: capital formation and the growth of business concentration; the distribution of national income; problems of agriculture, growth of the labor movement, patterns of inflation and depression; and the impact of international relationships on U.S. economic development. Prerequisite: ECON 204 or 205 or consent of instructor.

ECON 440 SEMINAR IN INDUSTRIAL ORGANIZATION (4)

Economists understand firm behavior by applying a simple rule for profit maximization: Marginal Revenue equals Marginal Cost. Models of perfect competition and monopoly are the simplest applications of this rule, but fail to explain many of the things firms do in real markets. Industrial Organization (IO) is motivated by observed deviations from the classical models of perfect competition and monopoly. Topics include models of price discrimination, product differentiation, oligopoly, entry deterrence, collusion, etc. in order to understand how different market institutions lead to different restatements of the profit maximization rule. Prerequisites: ECON 204, 205, 304, 305, and 317.

ECON 447 SEMINAR IN GENDER AND ECONOMICS (4)

The course explores feminist and neoclassical economic contributions to gender analysis. The main focus will be on work, development, and globalization. Topics explored in depth will include the environment, the family, and methodological issues. The diversity of women's experience, due to their differing racial, class, geographical, and cultural positions will also be emphasized. Prerequisites: ECON 204 and 205, or consent of instructor.

ECON 481 SEMINAR IN ECOLOGICAL ECONOMICS (4)

An exploration of the sustainable use of three types of capital: natural, human, and financial. Public and private sector solutions are developed to promote the long-term viability of market-based economies. Topics include pollution control, fishery management welfare measurement, performance metrics, and product design. Prerequisites: ECON 204 and 205, or consent of instructor.

ECON 488 SEMINAR IN ECONOMICS AND LAW OF BUSINESS REGULATION (4)

Advanced topics in economic and legal aspects of business regulation. Prerequisites: ECON 204 and 205.

ECON 494 SPECIAL TOPICS IN ECONOMICS (1-4)

Course of lectures on a single topic or set of related topics not ordinarily covered in the economics curriculum. May be repeated for credit with a different topic. Prerequisite: consent of the instructor.

ECON 495 SPECIAL STUDIES (1-4)

Open to economics majors only. Prerequisite: consent of the instructor. May be repeated once for credit.

ECON 496 TUTORING ECONOMICS (2)

Intended for advanced students working as tutors in Economics courses. Cr/NC only. Prerequisite for first semester of tutorial work: concurrent enrollment in ECON 497.

ECON 497 SEMINAR IN TEACHING ECONOMICS (2)

A faculty-directed seminar in teaching methods and concepts for students tutoring in economics. Cr/NC only. May be repeated up to 8 times for credit.

ECON 499 INTERNSHIP (1-4)

May be repeated twice for credit.

ECON 501 ECONOMICS OF MARKETS AND INDUSTRIES (3)

Price theory and resource allocation as applied to the analysis of market demand behavior and firm/industry production decisions. For the purpose of market demand estimations and forecasts, the course covers basic macroeconomic concepts (GDP and Price indexes, etc.). For the purpose of understanding industry performance, the course covers the basics of regulations. Prerequisite: a B.A. or B.S. degree.

ECON 595 SPECIAL STUDIES (1-4)

Independent study designed in consultation with instructor. Subject matter variable. Students must complete the standard SSU form. Prerequisite: consent of instructor. Education (EDUC)

Education (EDUC)

EDUC 150 PROSPECTIVE TEACHERS (3)

Focuses on realities of the classroom from the teacher's point of view. Includes child development, teachers' roles and responsibilities, and the culture of schools in a changing society. Includes an apprenticeship with a teacher. Grade only. Prerequisite: consent of instructor.

EDUC 250 TEACHING IN A CHANGING WORLD (3)

This course is designed to provide an introduction to the classroom from teachers' points of view. Areas of content include child and adolescent development, teachers' roles and responsibilities, the culture of schools in a changing society, as well as an apprenticeship with a practicing teacher. Particular emphasis will be on teacher decision-making. Institutional changes that could improve teacher and student performance will also be explored. Each student will spend 30 hours observing and participating in an assigned public school classroom. Grade only.

EDUC 291 MENTORING IN SCHOOL BASED PROGRAMS (4)

Open to students who are tutoring in the community. Focus is on the profiles of mentors and mentees and how their individual and mutual relationships are affected: learning styles and strategies, self-esteem, perceived locus of control, communication, stress/anxiety, use/misuse of tutoring strategies, diversity, and social/family and educational systems. A wide variety of techniques and skills are used and developed by class participants to empower their tutees and to enhance their own effectiveness as a tutor/human being. Cr/NC only. Certificate received upon successful completion of training. Instructor permission required to enroll in the course. May be repeated for credit.

EDUC 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in the community, performing such tasks as tutoring. Students receive 1 to 4 units, depending on the specific tasks performed. A total of 6 units of CIP credit may be applied toward a degree. Cr/NC only. Recommend to have EDUC 250 as prerequisite, but not required. Thirty hours of fieldwork is mandatory. May be repeated for credit.

EDUC 329 THE MIGRANT EXPERIENCE (2)

An examination of the migrant plight in our society and educational system through study of the literature and by a direct, active contact with the migrant community. Grade only. Prerequisites: functional Spanish language skills and participation in the mini-corps program, or consent of instructor.

EDUC 390 SELECTED TOPICS IN EDUCATION (1-4)

May be repeated for credit under different topic.

EDUC 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in the community, performing such tasks as tutoring, coaching, and reading for the blind. Students receive 1 to 4 units, depending on the specific tasks performed. A total of 6 units of CIP credit may be applied toward a degree. Cr/NC only.

EDUC 417 SCHOOL AND SOCIETY (3)

A critical examination of current issues in today's schools and future directions in education through the perspectives of history, philosophy, sociology, anthropology, and the politics of education. Content includes: trends, movements, and issues of the development of our present-day school systems and current educational practice; development of an individual philosophy of education through examination and evaluation of educational philosophies from early Greek through modern/post-modern thought; analysis of American society and its effect on the functioning of schools; the role of explicit and implicit cultural assumptions in educational contexts; the influence of federal, state, and local governing agencies; the knowledge industry, and special-interest groups on education. Grade only. Satisfies GE Area D1 (Individual and Society).

EDUC 443A OBSERVATION/PARTICIPATION IN MULTICULTURAL SETTINGS (2)

EDUC 481 DEVELOPMENT OF A CREATIVE CLASSROOM (3)

EDUC 484 INTRODUCTION TO MULTIMEDIA AND WEB AUTHORING (3)

Students learn to use technology to improve teaching and learning in any setting or organization where education and communication are critical. Multimedia authoring and Web design using graphics, text, and sound to convey information and ideas is an integral part of the class. These technology tools include HyperStudio, PhotoShop, Netscape, Claris Home Page HTML, Macintosh computers, and scanners. Teaching and learning projects that are innovative and consistent with exemplary instruction practices form the core activities of the class. These projects focus on the development of learning and information modules created with HyperStudio and the design of educational Web sites. Grade only. Prerequisite: permission of the instructor.

EDUC 490 SELECTED TOPICS IN EDUCATION (1-4)

A course designed according to the interest of a particular faculty member, providing opportunities for diversification in content and reading. Grade only. May be repeated for credit under different topic.

EDUC 495 SPECIAL STUDIES (1-4)

May be repeated for credit.

EDUC 509 ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF READING (3)

EDUC 510 SDAIE IN CONTENT-AREA CLASSES (3)

EDUC 511 PROFESSIONAL INDUCTION PLAN: SUPERVISED DEVELOPMENT (1)

EDUC 538 DEVELOPMENT OF LANGUAGE AND THINKING: INFANCY-MIDDLE CHILD (3)

EDUC 568 EVALUATION IN EDUCATION (3)

EDUC 570 THE REFLECTIVE EDUCATOR (3)

This is the first in a series of three graduate core courses in the School of Education. Students will take this course at the beginning of the M.A. program. The focus of this course is on philosophical, historical, social, and psychological perspectives in education. Students will examine these perspectives while being encouraged to examine and reflect upon their own professional practices in education. In this course, students will begin to construct a reflective program portfolio that they will continue to modify throughout their M.A. program. The portfolio is intended to be cumulative throughout the graduate core courses. Grade only. Prerequisite: admission to M.A. in Education Program.

EDUC 571 RESEARCH PARADIGMS IN EDUCATION (3)

This is the second in the series of three graduate core courses, and is designed to be taken midway in the master of arts degree program. This course focuses on students as critical consumers of research and includes among its goals the development of skills in the analysis and critique of educational research. The course addresses research and field needs of practicing educators as opposed to the needs of professional researchers and serves to acquaint students with basic principles and techniques of educational research. It also provides students with an opportunity to integrate knowledge of these principles through analyses of action research projects that may serve as the foundation for the culminating master of arts degree project. Grade only. Prerequisite: EDUC 570.

EDUC 572 SUPERVISED STUDY FOR COGNATE PROJECT (3)

EDUC 573 SUPERVISED STUDY: INDIVIDUAL EXAM (3)

EDUC 574 INTRODUCTION TO CLASSROOM RESEARCH AND NATIONAL BOARD CERTIFICATION (1-3)

This is an introductory course that supports teachers preparing for the National Board for Professional Teaching Standards certification. National Board (NB) certification is available for general and special education teachers and counselors of students from preschool through grade 12 in a variety of areas. The purpose of this course is to provide an overview of the NB certification process. Specifically, students become familiar with the National Board's five core propositions, certificate area standards, and assessment measures and procedures required for certification. In addition, students will learn about the application process and potential sources of funding. The units from this course can be applied to an M.A. degree in Education at Sonoma State University.

EDUC 575A CONDUCTING RESEARCH ON TEACHING (3)

This is a second of three courses that support teachers working toward National Board certification. It is also intended for any student interested in conducting action research in schools and classrooms. Students examine exemplary teaching practices and learn about strategies for action research, self-assessment, and reflection on teaching practice. Using their own classrooms as sites for ongoing action research, students apply various research methodologies and engage in data collection through observation, videotaping, and examination of artifacts. In addition, students analyze data and share findings through descriptive, analytical, and reflective writing. Those pursuing National Board certification will also focus on analysis and assessment of National Board portfolio entries, and develop action plans for their National Board portfolios. The units from this course can be applied to an M.A. degree in Education at Sonoma State University.

EDUC 575B CONDUCTING RESEARCH ON TEACHING (4)

This is a second of three courses that support teachers working toward National Board certification. It is also intended for any student interested in conducting action research in schools and classrooms. Students examine exemplary teaching practices and learn about strategies for action research, self-assessment, and reflection on teaching practice. Using their own classrooms as sites for ongoing action research, students apply various research methodologies and engage in data collection through observation, videotaping, and examination of artifacts. In addition, students analyze data and share findings through descriptive, analytical, and reflective writing. Those pursuing National Board certification will also focus on analysis and assessment of National Board portfolio entries, and develop action plans for their National Board portfolios. The units from this course can be applied to an M.A. degree in Education at Sonoma State University.

EDUC 576 RESEARCH, REFLECTION, AND PROFESSIONAL PRACTICE (4)

This course is designed for teachers to enhance their professional practice through research and reflection. Working collaboratively, teachers complete their portfolios required for National Board certification. In preparation for Assessment Center exercises, teachers engage in extensive review of current and historical perspectives on teaching and learning in their certificate areas. The units from this course can be applied to an M.A. degree in Education at Sonoma State University.

EDUC 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

EDUC 588 EDUCATIONAL CURRICULUM (3)**EDUC 595 SPECIAL STUDIES (1-4)**

Independent study designed in consultation with an instructor. Grade only. Prerequisites: students must complete the standard SSU form and secure the required approvals during the first week of classes.

EDUC 598 DEVELOPING A THESIS/PROJECT (3)

This is the final course in the graduate core courses in Education. This course develops students' abilities to carry out a thesis or project and provides basic information for planning and implementing the master of arts degree proposal. The main goal is to provide students with knowledge to begin their thesis or project. Time is provided for students to assess progress in the program and to complete portfolio development. Grade only. Prerequisites: completion of all M.A. coursework or taken in final semester of M.A. coursework.

EDUC 599 SUPERVISED RESEARCH FOR THESIS/PROJECT (3)

Supervised Research provides students with guidance in the completion of their research project. Under the direction of the committee chair, and in consultation with all committee members, students will complete the thesis or project that was developed in EDUC 598 Developing a Thesis/Project. Following completion of the research project, students will participate in a formal presentation of their work to faculty and colleagues. Cr/NC. Prerequisite: completion of EDUC 598. Advancement to candidacy approved.

Education: Curriculum and Teaching (EDCT)

EDCT 544 CURRICULUM, TEACHING, AND LEARNING IN THE CONTENT AREAS (3)

Examination of curriculum, teaching, and learning in the context of a particular content area as taught in K-12 schools. This course extends and applies the more general theories, practices, and research in curriculum, teaching, and learning established in EDCT 585 and 586. Intended for students in the appropriate Subject Area Cohort Track in the Curriculum, Teaching, and Learning M.A. program. Prerequisites: EDCT 585 and 586. Open to grad students only.

EDCT 552 EDUCATIONAL TECHNOLOGY PRAXIS (1-3)

Educational Technology Praxis requires students to take a reflexive stance towards the initiation and integration of technological skills and knowledge in authentic instructional contexts and settings. The practical application of technology will be grounded within current perspectives and trends of new media technologies and take into account educational frameworks of learning, design, and pedagogical practice.

EDCT 556 TECHNOLOGY, PEDAGOGY, AND SOCIETY (3)

This course relates pedagogical theories to technology integration strategies at various levels of education. The content is focused on how technology and learning are situated — how socio-cultural issues relate to and influence technological access, use, power, and privilege. AGE gender, race/ethnicity, social class, sexual orientation, language and social capital and its intersections will also be analyzed.

EDCT 557 PROJECT MANAGEMENT FOR EDUCATIONAL TECHNOLOGY (3)

This course considers how a small-scale Educational Technology research project can be conducted in an education environment. Case studies will be reviewed to offer practical tools and applied research strategies to students prior to conducting their own Educational Technology thesis or cognate project.

EDCT 559 EDUCATION MEDIA AND INTERNET RESOURCE DEVELOPMENT (3)

This course focuses on critical media literacy and issues related to researching, evaluating, and publishing online. Prerequisite: EDCT 551 or instructor approval.

EDCT 585 CURRICULUM DEVELOPMENT: THEORY, PRACTICE, AND EVALUATION (3)

Analyses of sociopolitical, economic, and cultural influences on curriculum development, instructional processes, and learner achievement in a variety of instructional settings. Study of the structures of various disciplines, the roles of participants, and other variables in staff and curriculum development. Evaluation of alternative theoretical models for constructing and changing curricula. This course is required in the Curriculum, Teaching, and Learning and the Preliminary Administrative Services Credential programs. Prerequisites: consent of instructor and approval of the School of Education. Grade only.

EDCT 586 TEACHING AND LEARNING: RESEARCH AND APPLICATION-CLASSROOM (3)

An analysis of teaching and learning strategies and instructional variables as they relate to diverse groups of learners. Research will be analyzed in terms of the major paradigms of the field of education. Also included is a review of recent developments in the evaluation of classroom performance and achievement. This course is required for the Curriculum, Teaching, and Learning program. Prerequisites: consent of instructor and approval of the School of Education. Grade only.

EDCT 595 SPECIAL STUDIES (1-4)

Education: Early Childhood Education (EDEC)

EDEC 201 FOUNDATIONS OF EARLY CARE AND EDUCATION (4)

This course provides an introduction to the theory and research that underlie professional work with young children. Topics include: historical views on childhood and play, influential theorists, historical and contemporary models of early childhood education, principles of developmentally and culturally appropriate practice, contemporary issues in early care and education, professional ethics, and professional career development.

EDEC 220 OBSERVING CHILD DEVELOPMENT IN THE FIRST 8 YEARS (4)

Students will learn the major developmental milestones, research findings, and theories covering the social, emotional, physical, and cognitive development of children from conception through eight years old. Students will concurrently study observation techniques for documenting and assessing children's growth and development. Students' growing knowledge of observation and child development will be applied through supervised field work in an early care and education setting. Course open to sophomores and above.

EDEC 237 CREATING ENVIRONMENTS FOR YOUNG CHILDREN (4)

This course presents an overview of knowledge and skills related to planning and implementing developmentally and culturally appropriate curriculum and environments for young children from birth to eight years old. Students examine how to create and use the physical environment as the foundation for promoting activities that support learning and development, with an emphasis on language and literacy development and the essential role of play. Each student will spend about 24 hours observing and participating in an infant/toddler, preschool, transitional kindergarten, or kindergarten classroom that has been approved by the instructor. Course open to sophomores and above.

EDEC 270 FAMILIES AND CHILDREN IN DIVERSE SOCIETIES (4)

Class participants will study the dynamic interactions of race, culture, gender, socioeconomic status, and other factors as they relate to the care and education of children from diverse populations. Students will explore the diversity of family systems, sociocultural factors affecting the child's development, and the socializing influences of community. The coursework helps students become more informed and effective professionals and community members by promoting the development of the knowledge dispositions, and skills needed to work effectively with families and children in a pluralistic society. Course restricted to Sophomores and above.

EDEC 420 CHILD DEVELOPMENT IN FAMILY, SCHOOL, AND COMMUNITY (3)

Students will explore the physical, cognitive, social, emotional, moral, and language development of children from birth through adolescence. The course covers major theories of child development, including critiques and application of the theories as they relate to children from a variety of cultural and family backgrounds. The impact of child-rearing beliefs, poverty, gender issues, and language development are studied as they relate to developmentally-based practices in educational settings. Students will learn effective school-family communication practices for a diverse society, individualized curriculum to meet the needs of diverse learners, and community resources available to support families. This course is a pre-requisite to the Multiple Subjects credential program, can be applied to the Child Development Permit, and satisfies GE Area E (the Integrated Person). Grade only.

EDEC 431 CHILD STUDY AND CURRICULUM PRACTICE-PRESCHOOL AND KINDERGARTEN (3)

Classroom observation and participation in preschool and kindergarten settings. Twelve hours per week for seven weeks in each setting. Topics include classroom environment, lesson planning, teaching strategies, discipline, and child study and observation. Prerequisite: admission to Multiple Subject CLAD Early Childhood Emphasis Credential program or consent of instructor. Must be taken concurrently with EDUC 476 for Multiple Subject CLAD ECE Emphasis students. Grade only.

EDEC 435 LEADERSHIP ON BEHALF OF CHILDREN AND FAMILIES (4)

In this course, students will study and apply the principles and strategies that underlie effective administration of programs for young children and families and effective advocacy on behalf of young children and families. Students will build and use leadership skills in the areas of identifying priorities, organizational planning, guiding staff, communicating clearly, and working collaboratively with community partners. Present-day early childhood advocacy issues will be explored and students will engage in leadership efforts that engage their newly developed understandings and skills. Prerequisite: junior- or senior-level standing.

EDEC 437 INTEGRATED CURRICULUM IN EARLY CHILDHOOD CLASSROOMS (4)

In this course, students will learn to plan and implement developmentally and culturally appropriate curriculum for children in early childhood classrooms. Through study of professional resources and participation in an instructor-approved classroom, students will create learning and assessment opportunities that enable young children to construct knowledge through an integrated approach that includes all curriculum areas and that aligns with relevant state and professional standards. Prerequisite: EDEC 237.

EDEC 460 STUDYING CHILDREN IN CONTEXT (4)

This course provides an overview of quantitative and qualitative research methods commonly used to study young children. Topics will include research methods, the role of context in research, common early childhood psychological measurement tools, observational techniques, research ethics, library research strategies, and evaluating research reports.

EDEC 478 EARLY CHILDHOOD STUDIES PORTFOLIO (1)

In this seminar, students will compile and reflect upon their work in the Early Childhood Studies major. Final products will be presented to faculty and students in the Early Childhood program. Prerequisite: senior in the Early Childhood Studies major.

EDEC 490 SPECIAL TOPICS IN EARLY CHILDHOOD STUDIES (1-4)

A course designed according to the interests of a particular faculty member, providing opportunities for diversification in content and reading. Grade only. May be repeated for credit under a different topic.

EDEC 495 SPECIAL STUDIES (1-4)

Independent study completed under the supervision of a faculty member. May be repeated for credit.

EDEC 505 ACTION RESEARCH IN PRESCHOOL AND ELEMENTARY CLASSROOMS (3)

Techniques for conducting ethnographic action research in preschool and elementary settings. Theory and research relating to children's construction of friendships and peer group processes are discussed. Special emphasis is placed on inclusion and exclusion in classroom peer cultures. Grade only.

EDEC 530 TEACHING TO DIVERSITY (3)

Since most aspects of education are influenced by culture, this course is designed to analyze education as a cultural process. The multicultural nature of today's society in California and the United States makes it imperative for educators to include multiple approaches to teaching and learning. This course reviews theoretical and practical perspectives of cultural diversity, cross-cultural contact, and culturally sensitive pedagogy, particularly for limited English proficient students. Grade only. Prerequisite: permission of instructor.

EDEC 531 THE ROLE OF PLAY IN DEVELOPMENT AND LEARNING (3)

Students will examine theories from developmental psychology, education, and anthropology to look at the role of play in human experience, from infancy to adulthood. Topics include play's relationship to learning in all areas of development and academic disciplines, history of play, effects of technology and culture on children's play, gender development and play, play environments, play therapy, and play as a tool for developmentally and culturally sensitive curriculum and assessment. Grade only. Prerequisite: graduate student in Education or permission of instructor. Taught fall semester of odd years.

EDEC 532 SOCIAL-MORAL DEVELOPMENT IN ECE (3)

Students will explore theories and research addressing social and moral development from infancy through middle childhood. Topics include: attachment and its role in social and moral development, research on the development of prosocial behavior and the ability to take the perspective of others, cultural value differences, gender identity and gender role socialization, development of friendships, resiliency and at-risk children, curriculum that promotes children's social and emotional development, and working with parents to promote children's social and emotional development. Students will plan, implement, and report on action research projects that answer specific questions dealing with social, moral, and emotional development in early childhood education. Prerequisite: graduate student in Education or permission of instructor. Taught fall semester of even years. Grade only.

EDEC 534 FIRST AND SECOND LANGUAGE CURRICULUM IN PRESCHOOL AND PRIMARY (3)

Students explore the nature and development of developmentally and culturally appropriate practice in schools with diverse populations, including the development of listening, speaking, reading, and writing in first and second languages. From observations of children's language play, and projects in a variety of settings, students will explore the socio- and psycholinguistic underpinnings of communicative competence, emerging literacy, and conceptual development in both home and second languages. Strategies for linking children's home and school experiences with holistic, interactive and integrated curriculum will be emphasized as well as a variety of strategies for specially designed academic instruction in English (SDAIE). Grade only.

EDEC 535 LEAD ADV FOR CHILDREN AND FAMILIES (3)

Students will critically examine research, theories, and policies related to administration of programs that serve children and families. Students will develop leadership skills in the areas of teaching adults, administering programs, and advocating effectively for children and families within and outside of early care and education programs.

EDEC 537 AUTHENTIC ASSESSMENT IN PRESCHOOL AND PRIMARY PROGRAMS (3)

This course examines how and what we can learn about children from birth through the primary grades in terms of their cultural backgrounds; physical, cognitive, social, and emotional development; language and literacy development; and academic performance. Different methods of studying and assessing children in both their first and second languages are explored, including observational techniques, clinical interviews, ethnographic methods, and portfolio development. The integration of curriculum and assessment to meet the needs of children and families from diverse cultural, linguistic, and economic backgrounds is stressed. Prerequisite: graduate student in Education or permission of instructor. Grade only. Taught spring semester of odd years.

EDEC 538 THE DEVELOPMENT OF LANGUAGE AND THINKING: INFANCY THROUGH MIDDLE CHILDHOOD (3)

This course addresses the development of children from birth through middle childhood with emphasis on the relationships between language development and cognitive development. We will study the ideas of major theorists — Piaget, Erikson, Bruner, Vygotsky, Mead, and others — who address the development of children's representational thinking, language and cross-cultural and family influences on development and learning. We will also explore current research on brain development in the first five years of life from a critical perspective and with an emphasis on practical implications. We will study current research and theories of cognitive, social, and emotional development as related to oral, written, and spoken language development in home and in school/care environments, including in environments where children are learning more than one language. Grade only. Prerequisite: graduate student in Education or permission of instructor. Taught spring semester of even years.

EDEC 539 RESEARCH EARLY CHILDHOOD EDUCATION (3)

Critical analysis and evaluation of qualitative and quantitative research in early childhood education and implications for curriculum in schools and care programs serving children infancy through the primary grades of elementary school are addressed. Research and policy studies addressing quality indicators in programs for young children across all areas of curriculum are included, as well as factors such as the physical environment, schedules, and teachers' professional development. The focus is on integration of research findings and methodologies to improve the quality of programs designed to serve young children and their families. Grade only. Prerequisite: permission of instructor or acceptance to Master of Arts in Education program.

EDEC 578 PROJECT CONTINUATION (1-3)**EDEC 593 APPROACHES TO SCHOOLING ECE (3)**

Historical and philosophical perspectives on the care and education of young children from early centuries to the present day including models from Europe, China, Japan, Africa, and Latin America. Topics include the roles of the child and the teacher, design of curriculum and environments for learning, and approaches to diversity in classrooms and communities. Grade only.

EDEC 595 SPECIAL STUDIES (1-4)**Education: Leadership (EDEL)**

EDEL 580A INTRODUCTION TO EDUCATIONAL LEADERSHIP AND SCHOOL MANAGEMENT (3)

This course is the introductory course for the Sonoma State University Preliminary Administrative Services Credential program. Candidates examine concepts of leadership, school culture, the dynamics involved in change democratic decision-making and school governance, diversity, frames of reference, and the roles of an educational leader. Current practices are examined with a view of rethinking schools for the 21st century based on developing educational leadership values. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 580B ADVANCED EDUCATIONAL LEADERSHIP AND SCHOOL MANAGEMENT (3)

This course is designed as the culminating course in the Preliminary Administrative Services Credential Program. The goal of the course is to learn successful strategies and approaches involved in school improvement and ways to develop the school as an organization. Candidates engage in a self-assessment of their skills and abilities and personal theory of leadership in preparation for administrative positions. Grade only. Prerequisites: admission to the Preliminary Administrative Services Credential Program and EDEL 580A.

EDEL 581 MANAGEMENT OF EDUCATIONAL PERSONNEL: POLICIES AND PROCEDURES (3)

Candidates examine human resource administration as it relates to educational leadership and develop an understanding of the importance and dimensions of issues related to human resources that lead to positive and productive educational settings. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 582 EDUCATIONAL POLICY AND POLITICS (3)

This course is an examination of federal, state, and local politics and policy and their effects on school districts and schools. Emphasis is placed on the issues of educational reform, accountability, and finance. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 583 SCHOOL LAW (3)

This course is a study of the governance of school and the various sources of regulation impacting education. Case studies and application of various sources of law are explored, including student rights, torts, first amendment issues, special education law, teacher rights, contracts, church and state issues, and discipline. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 587A BEGINNING FIELD EXPERIENCE IN ADMINISTRATION (3)

Intensive field experience in school administration that extends learnings and competencies in program coursework. Prerequisites: admission to the Preliminary Administrative Services Credential program and consent of instructor.

EDEL 587B ADVANCED FIELD EXPERIENCE IN ADMINISTRATION (3)

This course is the completion of the fieldwork requirement for the program. Candidates provide evidence that they have successfully met all six administrative standards in their fieldwork experiences. Each student completes field assignments and projects that apply learning to educational settings. Cr/NC. Prerequisites: admission to the Preliminary Administrative Services Credential Program and EDEL 587A.

EDEL 588 EDUCATIONAL CURRICULUM, INSTRUCTION, AND PROGRAM ASSESSMENT (3)

Candidates study curriculum theory and curriculum ideologies found in public and private schools. Candidates examine the relationship between learning and curriculum design. The candidate learns how to explore and evaluate curriculum and the critical role of the administrator as an instructional leader. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 589 LEADERSHIP FOR DIVERSE POPULATIONS AND COMMUNITIES (3)

This course is designed for candidates to reflect on their own culture and to better understand the point of view of a variety of cultures, ethnic groups, and special groups in a diverse society. The goal of the course is to learn successful strategies and approaches involved in working with very diverse communities and how a leader can move their school or district towards high levels of cultural proficiency. The course examines the guiding principles and essential elements of cultural proficiency. Grade only. Prerequisite: admission to the Preliminary Administrative Services Credential Program.

EDEL 590A INDUCTION PLAN (2)

Students develop, in consultation with their employer and SSU program faculty, an induction plan that meets the Professional Administrative Services Credential requirements. The plan reflects an assessment of the administrator's strengths and needs, future professional goals, and requirements of the position in which the student works. Cr/NC. Prerequisite: admission to the Professional Administrative Services Credential Program.

EDEL 590B ASSESSMENT OF COMPLETION OF THE INDUCTION PLAN (2)

During the final seminar the Professional Administrative Services Credential (PASC II), the candidate, in conjunction with program faculty and the employing school district, evaluates the degree of completion of the induction plan proposed in EDEL 590A. The competency review includes the development of an on-going future professional development plan that reflects student strengths and areas of need identified during the PASC II Program. Cr/NC. Prerequisites: admission to the Professional Administrative Services Credential Program and EDEL 590A.

EDEL 595 SPECIAL STUDIES (1-4)

EDEL 596A INTRODUCTION TO ADVANCED EDUCATIONAL PROBLEMS (2)

Students will be involved in site-based problem solving and analysis, the generation and field implementation of appropriate solutions, and an evaluation of the chosen solutions. Planning, discussion, monitoring, coaching, and evaluation will occur in a seminar setting. Cr/NC only. This course is part of the Professional Administrative Services Credential program. Prerequisites: EDUC 590A, possession of Preliminary Administrative Services Credential, and admission to the Professional Administrative Services Credential program.

EDEL 596B COMPLETION OF ADVANCED EDUCATIONAL PROBLEMS (2)

Same as EDUC 596A. Cr/NC only. Prerequisites: EDUC 590A, a Preliminary Administrative Services Credential, and admission to the Professional Administrative Services Credential program.

EDEL 596C INTRODUCTION TO COLLABORATIVE ACTION RESEARCH (2)

Same as EDUC 596A. Cr/NC only. Prerequisites: EDUC 590A, possession of Preliminary Administrative Services Credential, and admission to the Professional Administrative Services Credential program.

EDEL 596D COMPLETION OF COLLABORATIVE ACTION RESEARCH (2)

Same as EDUC 596A. Cr/NC only. Prerequisites: EDUC 590A, possession of Preliminary Administrative Services Credential, and admission to the Professional Administrative Services Credential program.

Education: Multiple Subject (EDMS)

EDMS 100 EXPLORATIONS IN TEACHING (2)

This seminar is designed as a reflection space for students who are considering the teaching profession. They will observe and interact with children and teachers in elementary schools, as well as read about forces that shape teachers and issues they confront in our educational system. They will analyze what it means to be a teacher today in our elementary schools, facing the challenges of diversity, equity, and quality of education.

EDMS 200 BEING A TEACHER IN TODAY'S SCHOOLS (2)

This seminar continues the process of exploration, building on ED/LIBS 100, where students discussed what it means to be a teacher in our schools today. Here the focus is on the student in elementary education. From an educational perspective, students will consider what it means to be a student; what forces and circumstances shape their identity and their journey as students in elementary education. Students will elaborate their teaching philosophy throughout the semester, interweaving information from their own lives as students, from the readings, and from their field observations.

EDMS 411 TEACHING SECOND LANGUAGE LEARNERS (3)

This course examines first and second language acquisition and major second language teaching methodologies in relation to children's language development in school settings. In line with state standards, the purpose of this three-unit course is to help students learn and apply a variety of theories, methods, materials, media, and strategies to provide instruction that is appropriate to assessed proficiency levels and needs of English learners and to make academic content accessible. Focus is on instructional principles and practices for learner development of comprehensive English language and literacy skills as well as academic language proficiency. The main goal is to learn to help all students become active, engaged, and independent learners.

EDMS 463 TEACHING READING AND LANGUAGE ARTS TO YOUNGER STUDENTS (3)

Philosophy, goals, and pedagogy in reading and language arts in grades K-3. Candidates examine early literacy development and teaching/learning processes in relation to state content standards. They learn to assess and build upon students' oral and written language strengths with attention to print awareness, language cueing systems, functions and conventions of oral and written language and literature study and composing strategies. Grade only.

EDMS 464 TEACHING READING AND LANGUAGE ARTS TO OLDER STUDENTS AND STRUGGLING READERS (3)

Philosophy, goals, and pedagogy in reading and language arts in grades 3-8. Designed for student teachers to refine and extend their knowledge of literacy development and teaching/learning processes in language arts. Candidates design and teach literacy lessons in their classrooms and work with struggling readers using assessment data and state content standards. Emphasis is on reading and writing across the curriculum, and meeting the literacy needs of all learners. The PACT teaching event is scaffolded in this course. Grade only.

EDMS 470 MULTICULTURAL PEDAGOGY (3)

Through multicultural approaches, activities, and materials, candidates examine the ways in which culture, ethnicity, race, class, gender, language disability, and family structure impact teaching and learning. Candidates consider the different beliefs, identifies, cultural knowledge and social relationships that a diverse student population brings to the classroom, and develop multicultural teaching strategies.

EDMS 471 TEACHING SOCIAL SCIENCES IN A MULTICULTURAL SOCIETY (3)

Credential candidates develop their pedagogical content knowledge in social studies, and explore K-8 educational practices that establish social studies as a catalyst for promoting civic responsibility and cultural understanding. Upon course completion students will gain experience with integrating literature, primary documents, secondary resources, technology, hands-on activities, and the arts into their social studies curriculum. Students will also become familiar with state and national standards to inform curricular decisions.

EDMS 474 MATHEMATICS IN THE ELEMENTARY SCHOOL (3)

Methods, principles, goals, and materials for elementary mathematics teaching. This course develops effective strategies and techniques for planning, teaching, assessing, and adapting mathematics instruction; explores current practices, issues, and resources in mathematics education; deepens students' understanding and appreciation of elementary mathematics; and builds knowledge of children's mathematics thinking, learning, development, and diversity. Learner-centered, meaningful mathematics instruction is modeled and analyzed throughout. Course content is aligned with national professional standards and California content and performance standards.

EDMS 475 SCIENCE IN THE ELEMENTARY SCHOOL (3)

Methods, principles, goals, and materials for elementary science teaching. This course develops effective strategies and techniques for planning, teaching, assessing, and adapting science instruction; explores current practices, issues, and resources in science education; deepens students' understanding and appreciation of elementary science; and builds knowledge of children's science thinking, learning, development, and diversity. Learner-centered, meaningful science instruction is modeled and analyzed throughout. Course content is aligned with national professional standards and California content and performance standards.

EDMS 476F PARTICIPANT OBSERVATION (3)

Fifteen week field placement (approximately 14 hours per week). Candidates observe classroom routines, activities, curriculum materials, and instruction for each subject area. Candidates implement curriculum that is sensitive to students' language needs and is open to considerations of diversity. Plan for small and whole group instruction. Prerequisites: Certificate of Clearance, negative TB, CSET, School of Education Legal Seminar, EDUC 417 (or LIBS equivalent), and EDEC 420 (or LIBS equivalent). Cr/NC only.

EDMS 476S PARTICIPANT OBSERVATION SEMINAR (2)

On-campus seminar. Components include lesson planning, peer observation, digital portfolio, physical education, and classroom management. Grade only.

EDMS 481A INTERN SUPERVISION (3)

This multiple-session supervision and seminar topics address professional issues faced by MS interns. Issues in education are examined through the perspectives of theoretical and practice-based research and the educational foundations of history, philosophy, sociology, anthropology, and politics of education. Interns will analyze their current classroom practices and influences on their teaching, conduct teacher research, and develop a professional portfolio consistent with their district professional growth plan and intern individual learning plan. Cr/NC only.

EDMS 481B INTERN SUPERVISION (3)

This multiple-session supervision and seminar topics address professional issues faced by MS interns. Issues in education are examined through the perspectives of theoretical and practice-based research and the educational foundations of history, philosophy, sociology, anthropology, and politics of education. Interns will analyze their current classroom practices and influences on their teaching, conduct teacher research, and develop a professional portfolio consistent with their district professional growth plan and intern individual learning plan. Cr/NC only.

EDMS 481C INTERN SUPERVISION (3)

This multiple-session supervision and seminar topics address professional issues faced by MS interns. Issues in education are examined through the perspectives of theoretical and practice-based research and the educational foundations of history, philosophy, sociology, anthropology, and politics of education. Interns will analyze their current classroom practices and influences on their teaching, conduct teacher research, and develop a professional portfolio consistent with their district professional growth plan and intern individual learning plan. Cr/NC only.

EDMS 481D INTERN SUPERVISION (3)

This multiple-session supervision and seminar topics address professional issues faced by MS interns. Issues in education are examined through the perspectives of theoretical and practice-based research and the educational foundations of history, philosophy, sociology, anthropology, and politics of education. Interns will analyze their current classroom practices and influences on their teaching, conduct teacher research, and develop a professional portfolio consistent with their district professional growth plan and intern individual learning plan. Cr/NC only.

EDMS 482F STUDENT TEACHING AND SEMINAR (10)

Fifteen week student teaching (4.5 days per week). Candidates implement curriculum that is sensitive to students' language needs and issues of diversity. Teaching small and whole group instruction leads to teaching the entire curriculum and managing the school day during a two week take over. Prerequisites: CBEST and Subject Matter or CSET, EDMS 476F, and Phase I courses. Co-requisite: EDMS 464. Cr/NC only.

EDMS 482S STUDENT TEACHING SEMINAR (2)

On-site student teaching seminar that covers all aspects of student teaching including the digital portfolio and becoming a reflective educator. Students meet with their supervisors every week on-site. Taken concurrently with EDMS 482F.

EDMS 495 SPECIAL STUDIES (1-4)

Education: Reading and Language (EDRL)

EDRL 507 RESEARCH IN LANGUAGE AND LITERACY (3)

Critical analysis and evaluation of theory and research in reading and language and the implications for curriculum. A focus of the course is literacy. Students may pursue projects on literacy at any age. Grade only. Prerequisite: admission to the Reading/Language or Early Childhood Education M.A. program.

EDRL 521A LANGUAGE DEVELOPMENT IN FIRST AND SECOND LANGUAGES (3)

Research and theory in oral and written language development in home and subsequent languages, and the relationship between literacy learning and teaching. Special attention is given to factors that promote concept development and confident, effective language use. Attention to the structure of the English language including phonology, orthography, morphology, syntax, and semantics. Contributions from many fields, (e.g., psycholinguistics, sociolinguistics, anthropology, and developmental psychology) provide perspectives for analysis of language acquisition and learning, evaluation of current educational practice, and planning for effective classroom experiences. Transfer strategies from primary language reading skills into English language reading skills are presented based on the tenets of effective language acquisition.

EDRL 521B READING AND LANGUAGE ARTS IN FIRST AND SECOND LANGUAGES (3)

Research, theory, and practice focused on written language development in home and subsequent languages. Students read, discuss, and critique theory and research into processes of reading and writing, with an emphasis on writing and written communication. Includes the theoretical foundation of assessment approaches for documenting reading and language arts progress and the relationship between literacy learning and teaching. Topics include sociolinguistic and psycholinguistic factors in reading and writing development, assessment-based reading and writing instruction for English language learners and struggling readers, emergent literacy at all ages, comprehension and study strategies, instructional planning, and evaluation and intervention approaches. Students develop a comprehensive set of strategies for promoting fluent reading, confident writing, and purposeful conversation for diverse student populations. Grade only. Applicable to the Reading/Language program. Prerequisite: approval of the program.

EDRL 522 ASSESSMENT AND TEACHING IN READING AND LANGUAGE ARTS (3)

Principles and procedures for literacy and content learning in English in classrooms with bilingual/bicultural students, as well as the design and selection of materials, methods, and contexts for literacy and content instruction at all ages. This course also focuses a variety of strategies for Specially Designed Academic Instruction in English (SDAIE) Field Studies. Applies to the concentration in Reading/Language. Grade only. Prerequisite: approval of the program.

EDRL 523 CURRICULUM DEVELOPMENT IN LANGUAGE AND LITERACY (3)

Critical analysis and development of learning-centered language and literacy curriculum. Evaluation and selection of materials for instruction. Grade only. Applicable to the Reading/Language program. Prerequisite: approval of the program.

EDRL 524 LITERATURE AND LITERACY (3)

Study of children's and adolescents' literature, authors, and ways of using literature in the classroom. Grade only. Applicable to the Reading/Language program. Prerequisite: approval of the program.

EDRL 525 LEADERSHIP AND POLICY IN LITERACY PROGRAMS (3)

An investigation of decision-making and policies for teaching reading and writing and program coordination; current influences, such as cross-cultural and multilingual classrooms, testing, technology, and community involvement. Extensive field experience. Grade only. Applicable to the Reading/Language program. Prerequisite: approval of the program.

EDRL 527A CLINICAL FIELD EXPERIENCE IN READING AND LANGUAGE ARTS (3-6)

Supervised practicum for Certificate candidates. In a Reading and Writing Workshop format, candidates work with K-12 students under the supervision of and in collaboration with clinical faculty and Reading and Language Arts Specialist Credential candidates. Certificate candidates are assigned to students based on the candidate's prior program coursework and professional background, in order to assure diversity of experience with readers and writers of varying ages and abilities. Certificate candidates conduct formal and informal assessments and plan instruction and intervention for students in the clinic. Based on assessment findings, candidates collaborate in the delivery of appropriate instruction and interventions that utilize learners' strengths in order to address their needs. Candidates participate in clinical conferences and write reports in which they summarize and critique assessment findings and the success of the instruction. Opportunities will be available for candidates to work with beginning readers, struggling readers at different levels, English language learners, and successful readers and writers.

EDRL 527B ADVANCED CLINICAL FIELD EXPERIENCE IN READING AND LANGUAGE ARTS (3-6)

Supervised practicum for Reading and Language Arts Specialist Credential candidates. In a Reading and Writing Workshop format, Credential candidates supervise Certificate candidates as they work with K-12 students. In turn, Credential candidates are supervised by University and clinical faculty. In collaboration with clinical faculty and other Credential candidates, they assume leadership roles, overseeing all assessment and instructional practices of Certificate candidates and directing all clinic activities. Specialist Credential candidates play a major role in clinical conferences and in the preparation of clinical reports. They also work directly with students in the clinic, providing demonstration of appropriate assessment and intervention strategies and to extend their experience with readers and writers of varying ages and abilities. Opportunities will be available for candidates to work with beginning readers, struggling readers at different levels, English language learners, and successful readers and writers.

EDRL 529 EVALUATION IN READING AND LANGUAGE ARTS PROGRAMS (3)

Philosophy, purposes, and procedures for evaluation of reading, writing, and oral language. Students examine a variety of evaluation tools and procedures (formal and informal, group and individual) with respect to how teachers can use these instruments and procedures to inform literacy instruction and intervention for diverse populations. Selected procedures are used with struggling readers to identify their reading and writing strengths and needs. Topics include the role of the literacy environment in evaluation results, methods of reporting progress to students, parents, and administrators, and the role of standardized testing in schools. Students develop criteria for reading and language arts program evaluation, maintenance, and enhancement.

EDRL 595 SPECIAL STUDIES (1-4)

Education: Special Education (EDSP)

EDSP 400 FOUNDATIONS OF SPECIAL EDUCATION (3)

In this course, students are presented with the history, philosophy, and legal requirements related to the implementation of special education services for students with disabilities and their families. Foundational knowledge on typical and atypical human development; examination of disability risk conditions; understanding the Individualized Education Program (IEP) framework and process; and the importance of the role of family, school, and community in supporting the well being of individuals with disabilities is provided. Additional emphasis is placed on understanding and examining diverse learners and their families within the context of special education. Class readings and course assignments are integrated within this class to establish the connection from special education theory to practice culminating the development of a personal philosophy of special education.

EDSP 421A EFFECTIVE PRACTICES THAT SUPPORT STUDENTS WITH DIVERSE LEARNING NEEDS (3)

EDCU 421A represents a first course in the study of theoretical orientations, instructional strategies, and classroom management to provide inclusive educational support for students with disabilities. The course is designed for Educational Specialist credential candidates in the Mild/Moderate, Moderate/Severe, and Communication Disabilities programs. Course content offers theoretical and conceptual underpinnings of the development of academic skills of students and the development of positive classroom ecologies to support students with special needs. Theoretical and conceptual foundations from a variety of paradigms are developed into applied techniques of instruction and classroom management through a series of readings, exercises, and assignments throughout the course. Prerequisite: Admission to the Education Specialist credential program or permission of the instructor.

EDSP 421B EARLY FIELD PLACEMENT (1)

EDSP 421B is an Early Field Placement during which candidates spend approximately 60 hours observing and participating in three special education classrooms or placements. In conjunction with EDSP 421A and the introduction on specific topics, the candidate will observe the teacher and students in the observation classrooms/settings to understand how these topics are operationalized in special education settings. These observations will be discussed further during class and via online discussion forums. The guided exploration of the work of a special education teacher and the ecology of the classroom will enrich the candidate's understanding of the profession and help to build the foundational knowledge and skills needed to be an effective special education teacher.

EDSP 421C USING EDUCATIONAL AND ASSISTIVE TECHNOLOGY (1)

EDSP 421C surveys the use of technology to enhance teaching and learning in special education classrooms. A variety of topics are considered including the roles of technology in teaching and learning, designing lessons that incorporate the effective use of technology and using technology to support special populations. Both theory and practice in the use of educational and assistive technology will be examined through readings, discussions, and activities in an online environment. Prerequisite: Admission to the Education Specialist credential program or permission of the instructor.

EDSP 421D HEALTHY LEARNERS & SCHOOL ENVIRONMENT (1)

In this course, personal, family, school, and community health are the framework for presenting coordinated health education in K-12 schools to teaching credential candidates. Subject matter includes school health laws, universal precautions, common diseases and prevention, drugs, alcohol and tobacco, sexuality, nutrition, fitness, pregnancy, special populations, child abuse, bullying, gender issues, community, diversity, and human ecology. Based upon California Health Framework, meets state credential requirements. Prerequisite: admission to the Education Specialist Credential Program or permission of the instructor.

EDSP 422 COLLABORATIVE PARTNERSHIPS AND SPECIAL EDUCATION (4)

Candidates are presented with theory, concepts, and practices related to the implementation of special education services for students with disabilities and their families. Foundational knowledge on the identification of disabilities, service delivery models, and the legislative framework that mandates key special education practices are explored. Additional emphasis is placed on the communication, consultation, and collaboration skills useful in forming productive partnerships with families, school personnel, and community service providers. Coursework and field assignments are integrated to support the development of a personal philosophy of special education that links theory to practice. Grade only. Prerequisite: admission to the Education Special Credential Program or permission of the instructor.

EDSP 422A CASE MANAGEMENT AND TRANSITION PLANNING IN SPECIAL EDUCATION (3)

In this course and accompanying seminar, students will explore the communication and collaboration skills necessary for effective case management and transition planning for individuals with exceptional needs. Emphasis is placed on examining the skills, models, and strategies for successful collaboration in the context of special education service delivery requirements and models. Additional emphasis is placed on developing a comprehensive case management system as well as planning, implementing, and evaluating transition services across the lifespan for all learners. Class readings, course assignments, and specific fieldwork activities (422B) are integrated within these classes to establish the connection from theory to practice culminating in the development of a case management notebook. Concurrent enrollment in EDSP 422A and 422B is expected.

EDSP 422B PARTICIPANT OBSERVATION/FIELDWORK (1)

In this course and accompanying seminar, students will explore the communication and collaboration skills necessary for effective case management and transition planning for individuals with exceptional needs. Emphasis is placed on examining the skills, models, and strategies for successful collaboration in the context of special education service delivery requirements and models. Additional emphasis is placed on developing a comprehensive case management system as well as planning, implementing, and evaluating transition services across the lifespan for all learners. Class readings, course assignments, and specific fieldwork activities (422B) are integrated within these classes to establish the connection from theory to practice culminating in the development of a case management notebook. Concurrent enrollment in EDSP 422A and 422B is expected.

EDSP 423 ASSESSMENT OF STUDENTS WITH DISABILITIES (3)

In EDSP 423, candidates explore the basic principles and strategies of assessment and the ways that assessment informs curricular and instructional decisions for individuals with diverse special education needs. Candidates learn to use a variety of formal and informal assessments, linking these with progress monitoring to analyze student performance and develop appropriate goals based on findings. Legal, ethical, and diversity issues related to assessment are explored. Eligibility criteria and characteristics of students with disabilities are also a focus of this course. Grade only. Prerequisite: Admission to Education Specialist Credential program or by permission of the instructor.

EDSP 424 POSITIVE BEHAVIOR SUPPORTS FOR STUDENTS WITH DISABILITIES (3)

Functional assessment and analysis are used to develop positive behavior support plans for children with more significant behavior needs. The goal of this course is to help candidates learn to promote the social competence, self-management, and communication skills of students with special needs through behavior support. Grade only. Prerequisite: Admission to the Education Specialist Credential Program or by permission of the instructor.

EDSP 425 DEVELOPING ACADEMIC PERFORMANCE-MILD/MODERATE (4)

EDSP 425 is designed to provide candidates in the Education Specialist Mild to Moderate Disabilities Credential Program with a research-based perspective on developing academic performance for students with mild to moderate disabilities. The relationship among assessment, curriculum, and instruction is investigated through the examination and application of a variety of informal assessments, instructional strategies, and curricula within the context of access to the core curriculum and content standards. Curricular modifications and instructional strategies that support students with mild/moderate disabilities in inclusive settings are explored. Coursework follows a "theory into practice" format consisting of classroom simulations, visitations, guided activities, and student projects using field-based lessons. Grade only. Prerequisite: admission to the Education Special Credential Program or permission of the instructor.

EDSP 426 COMMUNICATION DEVELOPMENT: ASSESSMENT AND INSTRUCTION (4)

In this course, students are presented with an overview of typical and atypical communication development in special populations. Evaluation measures, evidence based practices, and effective instructional strategies related to the implementation of special education services for students with communication disorders and their families are addressed. Foundational knowledge on intervention techniques, AAC, and second language development is provided. Additional emphasis is placed on the communication and collaboration skills useful in forming productive partnerships with families, school personnel, and community service providers. Class readings and course assignments are integrated within this class to establish the connection from special education theory to practice culminating in the development of a communication report.

EDSP 428 PROFESSIONAL SEMINAR: TOPICS IN THE EDUCATION OF STUDENTS WITH MODERATE/SEVERE DISABILITIES (5)

EDSP 428 is designed to provide candidates in the Education Specialist Moderate to Severe Disabilities Credential Program with a research-based perspective on developing skills that are functionally tied to real world demands and that are referenced as the requirements for successful inclusion in school, community, and workplace. Grade only. Prerequisite: admission to the Education Special Credential program or permission of the instructor.

EDSP 430 SPECIAL EDUCATION FOR TEACHERS (4)

A survey course that presents theory, program concepts, and teaching practices related to students with special educational needs. Legislation, public policy, and advocacy related to the full inclusion of students with special needs into the least restrictive environment are reviewed. Additionally, assessment, curriculum, and instructional modifications designed to accommodate learners with diverse backgrounds (cultural, linguistic, socioeconomic) and abilities are addressed. Thirty hours of required field experience are an integral part of the course. Grade only. This course meets the special education requirements to convert a basic credential to a Professional Clear Credential and is a required beginning course for students in the Education Specialist Credential Program.

EDSP 432 DESIGNING INCLUSIVE ENVIRONMENTS IN EARLY CHILDHOOD EDUCATION (4)

An introduction to theories, research, and practices related to providing appropriate services for young children with special needs (birth through 8). Topics include: early identification of exceptional needs; collaborative partnerships for inclusive education; the role of parents; strategies and resources for supporting the educational, social, behavioral, and/or medical needs of young children; and the requirements of special education laws. Grade only.

EDSP 433 TEACHING ADOLESCENTS WITH SPECIAL EDUCATION NEEDS (3)

EDSP 433 is an introductory course which presents a survey of theory, program concepts, and teaching practices related to students with special needs. Emphasis is placed on understanding and addressing the educational and social needs of secondary aged students with disabilities as well as gifted and talented students. Legislation, policies, and practices pertaining to the education of students with special needs in a secondary setting are presented. Knowledge skills and strategies including disability and gifted and talented identification, major roles and responsibilities in the Individual Education Program (IEP) process, and collaboration between general and special educators aimed at successful inclusive educational practices are also addressed. Thirty hours of field experience are included. Elements of this course will include the use of the Internet and the World Wide Web.

EDSP 460 TEACHING EVENT SEMINAR (2)

This seminar accompanying the student teaching experience (EDSP 465 or 467) is designed to support student teachers as they apply the skills and knowledge they've learned in coursework to the teaching of individuals with special needs. Through the seminar, they will also complete a teaching event demonstrating their competence as special educators as well as receive guidance and support aimed at a successful student teaching experience. Graded. Prerequisites: Admission to the Education Specialist Mild/Moderate Disabilities Credential program, Corequisite: EDSP 465 or 467.

EDSP 464A PARTICIPANT OBSERVATION (2)

Provides an early fieldwork experience for education specialist credential candidates not currently working in special education as interns. Candidates become acquainted with the daily operation of a special education classroom within the context of the school and the community. Ninety hours observation and participation in a special education classroom during which the candidate observes curriculum, instruction, classroom ecology, IEP meetings, and assessment. Cr/NC. Prerequisite: admission to Education Special Credential Program. Requires concurrent enrollment in EDSP 464B.

EDSP 464B PARTICIPANT OBSERVATION: SEMINAR (2)

This seminar, to accompany EDSP 464A, allows candidates to discuss and evaluate their experiences observing in special education classrooms, with a focus on the social context of the classroom, school, and community. The roles of specialists and others working in collaboration with the special educator are investigated and links between theory and practice are explored. Grade only. Prerequisite: Admission to the Education Special Credential Program. Required concurrent enrollment in EDSP 464A.

EDSP 465 PRACTICUM: MILD/MODERATE DISABILITIES (11)

EDSP 465 represents the student teaching component of the Mild/Moderate Disabilities credential program. Credential candidates students teach for 12 or more weeks under the guidance and supervision of a master teacher in the schools as well as a University supervisor from SSU. Cr/NC only. Prerequisites: Admission to the Education Specialist Mild/Moderate Disabilities Credential Program, completion of requirements described in handbook. Co-requisite: EDSP 460.

EDSP 466 SEMINAR: MILD/MODERATE DISABILITIES (2)

EDSP 466 represents the seminar which accompanies the student teaching component of the Education Specialist Mild/Moderate Disabilities Credential Program. The seminar is designed to provide a problem-solving forum for the myriad of educational, social, and psychological issues which tend to arise as part of student teaching. Guidance and support aimed at a successful student teaching experience is offered through EDSP 466. In addition to the instructor of EDSP 466, occasional guest visits by student teaching supervisors, resident teachers, and school administrators will complement the class sessions. Candidates will also be provided time to form cooperative support groups around commonalities of assignment or problem areas. Cr/NC only. Prerequisites: admission to the Education Specialist Mild/Moderate Disabilities Credential Program, EDSP 422, EDSP 423A, EDSP 424A. Co-requisite: EDSP 465.

EDSP 467 PRACTICUM: MODERATE/SEVERE DISABILITY (11)

EDSP 467 represents the student teaching component of the Moderate/Severe Disabilities credential program. Credential candidates student teach for 12 or more weeks under the guidance and supervision of a master teacher in the schools as well as a University supervisor from SSU. Cr/NC only. Prerequisites: Admission to the Education Specialist Mild/Moderate Disabilities Credential Program, completion of requirements described in handbook. Co-requisite: EDSP 460.

EDSP 468 SEMINAR: MODERATE/SEVERE DISABILITIES (2)

EDSP 468 represents the seminar that accompanies the student teaching component of the Education Specialist Moderate/Severe Disabilities Credential Program. The seminar provides a problem-solving forum for the myriad of educational, social, and psychological issues which tend to arise as part of student teaching. Guidance and support aimed at a successful student teaching experience is offered through EDSP 468. In addition to the instructor of EDSP 468, occasional guest visits by student teaching supervisors, resident teachers, and school administrators will complement the class sessions. Candidates will also be provided time to form cooperative support groups around commonalities of assignment or problem areas. Cr/NC only. Prerequisites: admission to the Education Specialist Moderate/Severe Credential Program, EDSP 422, EDSP 423A, EDSP 424A. Co-requisite: EDSP 467.

EDSP 481 INTERNSHIP PRACTICUM/SEMINAR (4)

This course provides on-going support and guidance to Internship teachers serving diverse learners with special needs. The course focuses on examining the California Standards for the Teaching Profession and connecting these standards with University coursework and the Intern's teaching experience. This is a hybrid course in which teachers meet in a seminar format (face to face) and in an online format. The course focuses on problem solving using the standards, University courses, and individual teaching experiences as frames of reference. Learning from and supporting other interns by sharing individual teaching experiences is the major emphasis of this course as well as offering support in developing the program portfolio. In addition to the seminar, the practicum will provide support and guidance to interns in their classrooms. On-site support teachers and University faculty will visit teacher's classrooms, conference with teachers about their needs, observe classroom practices, and provide feedback on observations.

EDSP 490A EDUCATING STUDENTS WITH AUTISM SPECTRUM DISORDERS (3)

This course intends to provide class participants with an overview of characteristics, etiology, and prevalence of autism spectrum disorders. An additional aim of this course is to supply participants with the knowledge and skills necessary to support the learning of children with autism spectrum disorders including instructional strategies, classroom organization, and teaming with families and professionals.

EDSP 490B AUTISM SPECTRUM DISORDERS: SEMINAR AND FIELDWORK (2)

This practicum and attached seminar will provide candidates with the opportunity to implement evidence-based practices with students diagnosed on the autism spectrum. Candidates will also engage in progress monitoring and the selection and administration of appropriate assessment measures. The seminar will extend candidate understanding of the service delivery options available to students with Autism Spectrum Disorders.

EDSP 495 SPECIAL STUDIES (1-4)**EDSP 501 FORMATIVE ASSESSMENT AND INDUCTION INTO TEACHING (3)**

Education 501 is the initial course in the Professional Induction Credential Program for the Educational Specialist Credential Program. This course offers a forum for the development of an individualized plan for the induction of new special education teachers into the profession of Special Education, a format for self reflection and evaluation of teaching practices through the analysis of teaching videos, the development of an applied field project developed in response to the teachers' areas of professional needs and interests, and opportunities to participate in a Professional Learning Community. The Individual Learning Plan or similar Induction Plans developed during Preliminary Level I program forms the basis of the development of the Professional Induction activities. The candidates develop the Induction Activities with support and approval of their University instructor and school district mentor/support provider and within a research-based perspective.

EDSP 502 ADVANCED PEDAGOGY IN SPED (3)

Candidates will deepen their understanding of pedagogies most effectively and equitably used to support the learning and behavioral needs of children with disabilities as well as children with disabilities who are also English language learners. Multiple assessment measures, including progress monitoring tools, will be linked to instructional planning to differentiate lessons according to student needs within the context of grade level standards and curriculum frameworks.

EDSP 503 LEADERSHIP LAW AND ADVOCACY IN SPECIAL EDUCATION (3)**EDSP 504 FORMATIVE ASSESSMENT AND INDUCTION CULMINATION (3)****EDSP 511 PROFESSIONAL INDUCTION PLAN: SUPERVISED DEVELOPMENT (1)**

EDSP 511 is the initial course in the Professional Level II Education Specialist Credential Program. This course offers a forum for the development of an individualized plan for the induction of new special education teachers into the profession of Special Education. The Individual Learning Plan developed during Preliminary Level I forms the basis for development of the induction plan. The Professional Induction Plan is developed in response to the new teachers' areas of professional needs and interests. It is developed by the candidate with University faculty, school district mentors/support providers, and other teachers. Cr/NC only. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 512 ADVANCED ISSUES IN ASSESSMENT, CURRICULUM, AND INSTRUCTION FOR STUDENTS WITH DISABILITIES (3)

EDUC 512 is part of the Professional Level II Education Specialist Credential program. Foundational knowledge in assessment, curriculum, and instruction is extended within EDUC 512. Candidates gain advanced skills in planning, conducting, reporting, and utilizing a variety of assessments, and in integrating assessment results into instructional planning. Issues such as assessment bias and research, law and policies, and procedures pertaining to the assessment process are addressed. Broad curricula areas including vocational development and community living preparation, diverse instructional approaches, and educational technologies are also addressed. Adaptation and modification of assessment, curriculum, and instruction to meet the individual needs of students with disabilities is a course focus. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 513 CURRENT AND EMERGING RESEARCH AND PRACTICE IN SPECIAL EDUCATION (3)

EDSP 513 is part of the Level II Education Specialist Credential Program. The course will critically examine emerging research on varied issues impacting special educational policy and practice. The value of empiricism as a philosophy, and data-based teaching practices will be explored. The issues surrounding quantitative and qualitative measurement along with varied conceptualizations of validity, reliability, and accountable practice will be explored via assigned readings and individual projects. These projects will require students to assess the research-based merits of selected special educational practices. Candidates will be required to triangulate various quantitative and qualitative measures of educational and policy effectiveness in order to render empirically informed conclusions about differential effects of various practices in the field of special education. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 514 ADVANCED COMMUNICATION, COLLABORATION, AND CONSULTATION IN SPECIAL EDUCATION (3)

EDUC 514 is a required course for the Professional Level II Education Specialist Credential Program. EDUC 514 explores advanced issues surrounding communication, collaboration, and consultation in special education. The effective performance of educational leadership, advocacy, and team management, as well as methods for positively representing special education to parents, administrators, and other educators are addressed in the course. Additionally, skills and methods of collaborating and communicating with professionals and paraprofessionals about students' complex emotional and behavioral needs are addressed. The area of cross-agency transitional services and individualized transitional experiences are explored with emphasis on communication and collaboration across human service agencies. The development of collaborative planning, evaluation, and refinement of instructional strategies, curriculum, adaptations, and behavioral support are also required of candidates taking EDUC 514. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 515 ADVANCED LEGAL ISSUES IN SPECIAL EDUCATION (3)

EDUC 515 is part of the Professional Level II Education Specialist Credential Program. Advanced legal issues faced by teachers, administrators, and parents in special education are addressed. Topics include entitlement to services, procedural due process, complaint resolution, least-restrictive environment, provision of related services, parent participation, shared decision-making, and other related legal issues. Candidates review federal legislation, case law, and statutory requirements within the context of understanding the legal framework underlying special education and providing services, which are legally, as well as programmatically, sound. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 516 PROF INDUCTION PLAN: CULMINATING ASSESSMENT (1)

EDUC 516 is the final course in the Professional Level II Education Specialist Credential Program. This course creates a context for the culminating assessment of the individualized Professional Induction Plan. Candidates will collaboratively assess the elements presented in their induction plans developed in EDUC 511. Working with University faculty, school district support staff, and other teachers, the candidates will evaluate the attainment of their professional goals by reviewing the evidence contained in their Professional Portfolio and applied to their school settings. Areas for continued professional growth will also be identified. Cr/NC only. Prerequisite: admission into the Professional Level II Education Specialist Credential Program.

EDSP 578 PROJECT CONTINUATION (1-3)**EDSP 590 CRITICAL ISSUES IN SPECIAL EDUCATION (3)**

Education 590 examines advanced issues surrounding current and critical issues in special education. Students will engage in self-directed inquiry exploring emerging theories and research in the field of special education. Further, the course will focus on the importance of understanding and respecting differing perspectives and positions related to special education theory and research. Prerequisite: admissions to the Professional Level II program, M.A. program, or consent of the instructor.

EDSP 595 SPECIAL STUDIES (1-4)

Course may be repeated for credit.

Education: Single Subject (EDSS)

EDSS 418 LEARNING AND DEVELOPMENT IN ADOLESCENTS (3)

This is a prerequisite course for admission to the Single Subject Credential Program. Students will become familiar with all areas of adolescent development including physical, cognitive, identity, social, sexual, moral, physical, and psychological factors affecting adolescent health currently. Analysis of development in contexts such as family, school, culture, and mass media will be emphasized. Through reading, reflective writing, and practical assignments, students will also become familiar with current adolescent issues, needs, and experiences. The overall goal of the course is to translate this knowledge and familiarity into effective learning environments for secondary students.

EDSS 442 TEACHING IN MULTICULTURAL SETTINGS (4)

Exploration of theory and research on teaching, learning, and the curriculum and their relationship to teaching practice in middle, junior high, and senior high schools. Emphasis on teaching/learning situations applicable to all content areas and to issues of culture and diversity. All aspects of instructional planning, implementation, and evaluation are addressed, including classroom atmosphere, interpersonal skills, classroom leadership, management and discipline, interdisciplinary planning, and teaming and collaborative learning. Students develop a repertoire of teaching strategies that address the needs of diverse learners. Students develop materials that contribute to a program portfolio to be evaluated before continuation to student teaching. Grade only. Prerequisites: admission to the Single Subject CLAD Credential Program, EDUC 417, and EDUC 418.

EDSS 443A OBSERVATION/PARTICIPATION IN MULTICULTURAL SETTINGS (2)

Focused and systematic observation and structured participation in a middle, junior high, or senior high school classroom settings leading to a supervised student teaching experience. Cr/NC only. Prerequisites: admission to the Single Subject CLAD Credential Program, EDUC 417, EDSS 418, and EDSP 433. Must be taken concurrently with EDUC 443B.

EDSS 443B SEMINAR: CLASSROOM MANAGEMENT AND FIELD EXPERIENCE (3)

This seminar accompanies EDSS 443A, Supervised Observation, and Participation in Schools. The seminar serves three functions: (1) to guide students' observations with special emphasis on classroom management; (2) to serve as a liaison between the Single Subject program and the students' observation placements; and (3) to prepare students for successful student teaching with the creation of a classroom management plan and detailed reflections on the three days teaching experience required for EDSS 443A and in preparation for PACT. Prerequisites: EDUC 417, EDSS 418.

EDSS 444 TEACHING IN THE CONTENT AREAS (4)

Principles, methods, and materials for teaching particular academic content in middle, junior high, and senior high schools. Emphasis is on applications of constructivist theory to teaching and learning, and on organization and representation of content in forms accessible to learners. Students prepare for and process their concurrent field experience in secondary classrooms. In addition, as part of the preparation for PACT (Performance Assessment for California Teachers), students learn to evaluate and critique the content and structure of lesson plans, instructional materials, and assessments of student performance tasks. Prerequisites: EDUC 417, EDSS 418, and admission to the Single Subject Credential Program. Grade only. May be repeated for credit.

EDSS 446 LANGUAGE LITERACY ACROSS THE CURRICULUM: MIDDLE AND SECONDARY SCHOOL (4)

Principles, methods, and materials for guiding students' literary development in subject areas at the secondary level. Includes literacy and language theory and current issues in reading/language pedagogy for first and second language learners. Emphasis is on the interrelationships between language systems and constructivist literacy theory and the cognitive, affective, and social aspects of literacy development in subject areas. Issues of cultural and language diversity related to competencies, bilingualism, classroom management, lesson and unit design using competencies, and dialect variation are integral to the course. Students develop materials that contribute to a program portfolio to be evaluated before continuation to student teaching. Grade only. Prerequisites: admission to the Single Subject or Education Specialist Credential Program, EDUC 417, EDSS 418 and EDSP 433, or permission of instructor.

EDSS 458 STUDENT TEACHING IN MULTICULTURAL SETTINGS (12)

A supervised teaching experience in a multicultural middle, junior high, or senior high school setting under the guidance of a resident teacher and a University supervisor. Assignment consists of three teaching periods and two preparation periods daily. Two periods entail full student teaching responsibility as outlined in the Single Subject Handbook. The third period consists of assisting the resident teacher and/or limited teaching responsibilities in a supplemental authorization subject area. Student teachers may team teach in some or all of the classes. Cr/NC only. Prerequisites: successful completion of all Phase I courses and successful presentation of a program portfolio. Must be taken concurrently with EDSS 459.

EDSS 459 SEMINAR FOR SECONDARY STUDENT TEACHERS (4)

This seminar supports student teacher candidates during their student teaching semester. The course provides opportunities for candidates to exhibit and examine their teaching competence in regard to classroom management, curricular planning, instructional strategies for diverse learners, assessment, and professional development. Candidates assemble a teaching portfolio. In addition, the weekly seminar prepares candidates for the PACT Teaching Event, a summative performance assessment of the candidate's demonstrated ability to plan, implement, and assess a significant segment of teaching. Successful completion of the Teaching Event will be required to earn a California Preliminary Single Subject Credential. Prerequisite: successful completion of all Phase I courses. Must be taken concurrently with EDSS 458.

EDSS 495 SPECIAL STUDIES (1-4)

Education: Teaching English to Speakers of Other Languages (EDTE)

EDTE 540 THEORIES AND RESEARCH IN SECOND LANGUAGE ACQUISITION (3)

This course provides an overview and critical examination of the theories and research in second language acquisition (SLA) and explores relationships between this work and second language teaching and learning. Major theories examined will include those from cognitive, psycholinguistic, sociolinguistic, and sociocultural perspectives. Prerequisite: admission to the SOE M.A. Program.

EDTE 541 ADVANCED PEDAGOGICAL GRAMMAR (3)

In this course you will gain an understanding of the grammar of English and how to use this understanding in teaching English as a second or foreign language. We will explore a variety of current perspectives and approaches to describing and teaching grammar. Prerequisites: admission to SOE M.A. Program, EDTE 544.

EDTE 542 TEACHING MULTILINGUAL WRITERS (3)

This course investigates the theory and practice of learning to write in a second language from an applied linguistics perspective. Topics will include the theoretical developments in L1 and L2 composition, current research issues, and pedagogical concerns, among others. Prerequisite: Admission to the SOE M.A. Program, EDTE 544.

EDTE 543 PRACTICUM IN TEACHING ESL (3)

The practicum is designed to provide students with an opportunity to observe an ESL teacher(s) and to have a supervised experience in teaching English learners. A seminar accompanies the field experience. Prerequisites: admission to the SOE M.A. Program, EDTE 544.

EDTE 544 ADVANCED METHODS OF TEACHING ENGLISH AS A SECOND/ FOREIGN LANGUAGE (3)

This course is designed to provide an in-depth study of methods for teaching English to non-native speakers at various levels. Students will link theory to practice through the study of current methods for teaching and developing speaking, listening, reading, and writing processes in English. Prerequisite: admission to the SOE M.A. Program.

EDTE 545 SPECIAL TOPICS IN TEACHING ESL/EFL (3)

Special Topics in the fields of applied and sociolinguistics related to teaching English as a second or foreign language will be offered on a rotating basis. Prerequisite: admission to the SOE M.A. Program.

EDTE 540 THEORIES AND RESEARCH IN SECOND LANGUAGE ACQUISITION (3)

This course provides an overview and critical examination of the theories and research in second language acquisition (SLA) and explores relationships between this work and second language teaching and learning. Major theories examined will include those from cognitive, psycholinguistic, sociolinguistic, and sociocultural perspectives. Prerequisite: admission to the SOE M.A. Program.

EDTE 541 ADVANCED PEDAGOGICAL GRAMMAR (3)

In this course you will gain an understanding of the grammar of English and how to use this understanding in teaching English as a second or foreign language. We will explore a variety of current perspectives and approaches to describing and teaching grammar. Prerequisites: admission to SOE M.A. Program, EDTE 544.

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This course investigates the theory and practice of learning to write in a second language from an applied linguistics perspective. Topics will include the theoretical developments in L1 and L2 composition, current research issues, and pedagogical concerns, among others. Prerequisite: Admission to the SOE M.A. Program, EDTE 544.

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Special Topics in the fields of applied and sociolinguistics related to teaching English as a second or foreign language will be offered on a rotating basis. Prerequisite: admission to the SOE M.A. Program.

Engineering Science (ES)

ES 101A COMMUNICATION IN THE DIGITAL AGE (3)

This course focuses on the concept of digital age technology, and modern communications, and understanding various routinely used technical terms and commonly known computer and communications components and devices; understanding digital voice, video and data communication; mobile communication; communication through internet; ill effects such as radiation, invasion of privacy, unethical usages and protection from them; and assessment of learning. (The companion laboratory course ES 101B is strongly recommended; the course does not apply to ES major). Prerequisite: GE math eligibility. This course meets GE Area B3 requirement.

ES 101B COMMUNICATION IN THE DIGITAL AGE LABORATORY (1)

Laboratory to demonstrate the concepts discussed in the course ES 101A and give hands-on experience to the students. (Does not apply to the ES major). Co-requisite: ES 101A, or permission of the instructor. This course meets the GE science laboratory requirement.

ES 110 INTRODUCTION TO ENGINEERING AND LABORATORY EXPERIENCE (2)

Lecture, 1 hour; Laboratory, 3 hours. This course is designed to introduce principles of engineering to the students and expose them to the electronics and computer lab environment. The students are given opportunity to design and build some simple analog and digital circuits and make measurements using various types of lab equipment.

ES 112 FUNDAMENTALS OF DIGITAL LOGIC DESIGN (1)

Lecture, 1 hour. Review of set theory and binary system, digital logic, Venn diagram, logic gates, minimization techniques, combinatorial logic, and design of simple combinatorial logic circuits such as 1-bit adder; concept of coders, decoders, and integrated circuits. Prerequisites: ES 110, or consent of instructor.

ES 210 DIGITAL CIRCUITS AND LOGIC DESIGN (4)

Lecture, 3 hours; Laboratory, 3 hours. Logic gates, combinatorial logic and analysis, and design of combinatorial circuits and electronic circuits for various logic gates. Flip-flops, registers, and counters, sequential circuits and state machines. Various logic families and comparison of their electrical characteristics such as fan-out, rise and fall times, delay, etc. Concepts of machine, assembly, and high level languages and relationships between them, basic principles of computer design. Laboratory work will include designing, building, and testing of digital circuits, logic, and sequential circuits. Prerequisites: ES 112, Co-requisite: ES 230; or consent of instructor.

ES 220 ELECTRIC CIRCUITS (3)

Lecture, 3 hours. Review of Kirchhoff's laws, circuit design, node and mesh analysis, etc.; Thevenin's theorem, Norton's theorem, steady state and transient analysis; transfer function AC power; and three-phase circuits, Y-Delta equivalents. Multi-port networks, two-port networks with energy storage ideal transformers. Amplifiers and frequency response, filters. Prerequisites: ES 110 and MATH 211; Co-requisite: ES 221 and PHYS 214; or consent of instructor.

ES 221 ELECTRIC CIRCUITS LABORATORY (1)

Laboratory, 3 hours. Laboratory work on material treated in ES 220 emphasizing elementary design principles. Prerequisite: ES 110. Co-requisite: ES 220.

ES 230 ELECTRONICS I (3)

Lecture, 3 hours. Theory, characteristics, and operation of diodes; bipolar junction transistors and MOSFET transistors; analog and digital electronic circuits; design and analysis of analog electronic circuits such as filters, operational amplifiers, and single and multistage amplifiers; and modeling and simulation using spice/multisim software. Prerequisites: ES 220 and 221 or consent of Instructor.

ES 231 ELECTRONICS I LABORATORY (1)

Laboratory, 3 hours. Laboratory work to accompany ES 230. Computer-assisted design of electronic circuits involving devices such as diodes and transistors. Design, building, and testing of electronic circuits such as filters, oscillator, amplifiers, etc. Prerequisites: ES 220 and ES 221.

ES 310 MICROPROCESSORS AND SYSTEM DESIGN (4)

Lecture, 3 hours; laboratory, 3 hours. Hardware architecture of a microprocessor and its programming and instruction design, memory hierarchy and I/O interfaces, comparison of various microprocessor architectures and capabilities, and system design using microprocessors. Laboratory work. Prerequisites: ES 210 and ES 230, or consent of instructor.

ES 314 ADVANCED PROGRAMMING, MODELING, AND SIMULATION (4)

Lecture, 4 hours. Pointers and dynamic allocation of storage linked lists, an introduction to the object oriented programming (OOP) paradigm, classes and objects, encapsulation, member variables, and member functions. Static arrays, dynamic arrays, stacks and queues, linked lists, trees, binary search trees, balanced trees (AVL, red-black, B-trees), heaps, hashing, and graphs. System modeling techniques and applications such as generation of noise (random numbers) and correlated signal with different pdfs, measurement of statistical parameters like moments, queuing systems, and system simulation. Prerequisite: CS 115 Programming I. Co-requisites: MATH 345 Probability Theory and ES 220 Electric Circuits, or consent of instructor.

ES 330 ELECTRONICS II (2)

Lecture, 2 hours. This course focuses on output stage design of the amplifiers, on-linear op-amp circuits, differential amplifiers, common mode and differential mode circuit analysis, half-circuit analysis, study of current mirrors and active load design, analysis of two stage active load CMOS op-amp, high frequency models of BJT and MOSFET, analysis of low and high frequency responses of amplifiers, open circuit time constant (OTC) and short circuit time constant (STC), and study of tuned amplifier. Prerequisite: ES 230 or consent of instructor.

ES 345E ENGINEERING APPLICATIONS OF PROBABILITY THEORY (1)

Lecture, 1 hour. This is a one-unit course introducing how to apply probability theory to model engineering problems, particularly in communications and networking areas. Topics covered include application of probability to measure of information and redundancy, moments to measure power, correlation to determine correlation function, power spectrum and linear prediction, and estimation of statistical parameters. Co-requisite: MATH 345E or consent of instructor.

ES 400 LINEAR SYSTEMS THEORY (3)

Lecture, 3 hours. This course focuses on analysis of linear time-invariant systems, correlation, convolution, impulse response, complex variables, Fourier series and transform, sampling, filtering, modulation, stability and causality, feedback and control systems, Laplace and Z-transform, and fast Fourier transforms. Prerequisite: MATH 241 or consent of instructor. Cross-listed as MATH 430 and CES 400.

ES 430 ELECTROMAGNETIC THEORY AND APPLICATIONS (3)

Lecture, 3 hours. This course focuses on electrostatics, magnetostatics, electric currents, electromagnetic induction, electric and magnetic fields in matter, Maxwell's equations, retarded potentials radiation reaction, light emission, simple scattering and antenna theory, properties of waveguides, relativistic formulation of electrodynamics, and Fourier decomposition of fields. Prerequisites: ES 220, MATH 241, and MATH 261. Cross-listed as PHYS 430.

ES 432 PHYSICAL ELECTRONICS (3)

Lecture, 3 hours. This course focuses on semiconductor materials; crystal structure and growth; energy bands and charge carriers, conductivity, and mobility; metal-semiconductor and p-n junctions; p-n junction diodes; bipolar junction transistors; and field-effect transistors, CCD's, photonic devices, and integrated circuits. Projects in photolithography, conductivity and contact resistance measurements, I-V and C-V characteristics of diodes, and characterization of transistors may be assigned. Prerequisite: ES 230 or consent of Instructor. Cross-listed as PHYS 475 and CES 432.

ES 440 ANALOG AND DIGITAL COMMUNICATIONS I (3)

Lecture, 2 hours; laboratory, 3 hours. This course focuses on mathematical modeling of signals, time and frequency domain concepts; spectral density; components of a communications system; and analog signal transmission. AM, FM, and PM modulation and demodulation techniques; noise and bandwidth; and link analysis. Laboratory work. Prerequisites: ES 230 and ES 400, or consent of instructor.

ES 441 ANALOG AND DIGITAL COMMUNICATIONS II (3)

Lecture, 2 hours; laboratory, 3 hours. This course focuses on digital signals and their transmission; PCM, log-PCM, ADPCM and DM, and other low bit rate coders; digital data transmission, data encoding, clock recovery and BER; data modulation techniques; ASK, FSK, PSK, and QAM; Link budgets for satellite, cellular, and cable systems; the effects of noise; and bandwidth. Laboratory work. Prerequisites: ES 314 and ES 440 or consent of instructor.

ES 442 ANALOG AND DIGITAL COMMUNICATIONS (4)

Lecture, 3 hours; laboratory, 3 hours. This course focuses on mathematical modeling of signals, time and frequency domain concepts, spectral density, components of a communications system, and analog signal transmission. Analog modulation and demodulation techniques; FDM, noise and bandwidth; Digital signals and their transmission; PCM and low bit rate coders; TDM; data encoding for efficient base-band digital transmission and digital data modulation. Laboratory work consistent with the lecture topics covered. Prerequisites: ES 230 and ES 400, or consent of instructor.

ES 443 INTRODUCTION OPTICAL FIBER COMMUNICATIONS (3)

Lecture, 3 hours. This course focuses on principles of light wave propagation, propagation in an optical fiber, fiber characteristics, O/E and E/O conversions, coupling, WDM, modulation techniques for efficient information transmission, and system design. Prerequisite: ES 430; Co-requisite: ES 442 or consent of the instructor.

ES 445 PHOTONICS (3)

Lecture, 3 hours. This course focuses on gaussian beams; guided-wave optics; fiber optics; optical resonators; resonant cavities; laser oscillation and amplification; laser excitation; optical pumping; solid state, gas, dye, chemical, excimer, and free electron lasers; semiconductor lasers; laser spectroscopy; fiber optic communication; photomultiplier and semiconductor radiation detectors including photoconductors and junction photodiodes; p-i-n diodes and avalanche photodiodes; and detector noise. Prerequisite: PHYS 314 or consent of Instructor. Cross-listed as PHYS 445 and CES 430.

ES 465 INTRODUCTION TO NETWORKING AND NETWORK MANAGEMENT (3)

Lecture, 2 hours; laboratory, 3 hours. The ISO reference model, theoretical basis for data communications, data transmission theory and practice, telephone systems, protocols, networks, internetworks, with examples. Prerequisites: ES 314 and ES 440 or consent of Instructor. Cross-listed as CES 440.

ES 480 ARTIFICIAL INTELLIGENCE (3)

A survey of techniques that simulate human intelligence. Topics may include: pattern recognition, general problem solving, adversarial game-tree search, decision-making, expert systems, neural networks, fuzzy logic, and genetic algorithms. Prerequisite: ES 314 or consent of Instructor.

ES 485 SELECTED TOPICS IN ENGINEERING SCIENCE (1-3)

A course on a single topic or set of related topics not ordinarily covered in the Engineering Science curriculum. The course may be repeated for credit as topics vary. Prerequisite: consent of instructor.

ES 492 SENIOR DESIGN PROJECT PLANNING (2)

Lecture, 1 hour; laboratory, 3 hours. This course is the first phase of the capstone course. In the lecture part, the students will learn design techniques, how to plan a project, evaluate and perform tradeoffs, make project presentations, and write project reports. In the laboratory parts, the students will choose a project, do planning, acquire parts, components, and other resources needed, and start the project work.

ES 493 SENIOR DESIGN PROJECT (3)

This is a capstone course. A major project designed to bring the knowledge gained from various courses together to analyze, design, and implement an electronic and/or communications system in an efficient and economic manner. Prerequisite: Consent of the instructor.

ES 497 ENGINEERING SCIENCE COLLOQUIUM (1)

Lecture, 1 hour. Series of lectures on topics of interest in the relevant fields of engineering. A maximum of 1 unit can be applied to the ES major. The students may not miss more than two presentations. A brief summary of each presentation must be submitted after the presentation. The course grade is decided on evaluation of these reports. Cr/NC only.

English (ENGL)

ENGL 099T BASIC COMPOSITION-TUTORING (1)

Individual and group tutoring in English composition. Tutoring units are assigned on basis of English Placement Test scores and are taken in conjunction with other writing courses. May be repeated. Cr/NC only. Not applicable toward graduation. Prerequisite: completion of the English Placement Test (EPT).

ENGL 100A FIRST-YEAR COMPOSITION (3)

Study and practice in the expression of facts and ideas and principles of investigation, of organization, and of effective writing style, with emphasis upon expository writing and upon developing analytical reading ability. Students must successfully complete both English 100A and English 100B; English 100B may not be taken alone. Satisfies GE Area A2 (Fundamentals of Communication). Grade only. Three units each semester. Prerequisite: completion of the English Placement Test (EPT). English 100A is a prerequisite for English 100B.

ENGL 100B FIRST-YEAR COMPOSITION (3)

Study and practice in the expression of facts and ideas and principles of investigation, of organization, and of effective writing style, with emphasis upon expository writing and upon developing analytical reading ability. Students must successfully complete both English 100A and English 100B; English 100B may not be taken alone. Satisfies GE Area A2 (Fundamentals of Communication). Grade only. Three units each semester. Prerequisite: completion of the English Placement Test (EPT). English 100A is a prerequisite for English 100B.

ENGL 101 EXPOSITORY WRITING AND ANALYTICAL READING (4)

Study and practice in the expression of facts and ideas and principles of investigation, of organization, and of effective writing style, with emphasis upon expository writing and upon developing analytical reading ability. Practice in the oral analysis and expression of ideas. Individual sections may be designated as Freshman Interest Group (FIG) courses and course material linked with companion FIG courses in other departments. Satisfies GE Area A2 (Fundamentals of Communication). Prerequisite: completion of the English Placement Test (EPT).

ENGL 160A HUMANITIES LEARNING COMMUNITY (4)

ENGL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

ENGL 160B HUMANITIES LEARNING COMMUNITY (4)

ENGL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

ENGL 199 STUDENT-INSTRUCTED COURSE (1-3)

A course taught by graduate students under the supervision of a department faculty member. The course content will not be one covered by the regular course offerings.

ENGL 200 CALIFORNIA CULTURAL ANALYSIS (3)

Within the context of readings related to California history and culture and their role in shaping contemporary California life, students practice the techniques of expository writing, oral expression, and reading and thinking critically. Satisfies GE Area A1. Prerequisites: completion of GE Areas A2 and A3.

ENGL 201 WRITTEN AND ORAL DISCOURSE STUDIES (3)

A course in analysis and production of written and oral discourse appropriate to a variety of disciplines and rhetorical situations, with emphasis on methods of critiquing, argumentation, and cross-disciplinary discourse problems and challenges. Prerequisites: completion of GE Areas A2 and A3. Satisfies GE Area A1.

ENGL 203 INTRODUCTION TO LINGUISTIC STUDIES (4)

This course focuses on the nature and structure of natural language; language variation; child first and second language acquisition; the role and function of language in the context of personal and group interactions and identities; language and other communication systems in culture and society; how language changes; and introduction to techniques used in the scientific study of language. Satisfies GE Area D1 (Individual and Society).

ENGL 207 INTRODUCTION TO CREATIVE WRITING (4)

An introduction to a variety of forms of creative writing, poetry and prose poems; the personal essay; vignettes; short stories; drama; and experimental fiction. Students will explore each form with in-class exercises and discussion.

ENGL 214 LITERATURE OF THE WORLD (4)

An introduction to the study of literature. Literature drawn from a worldwide range of cultures and historical periods will provide the basis for oral discussion and written analysis. The course promotes global awareness or cross-cultural perspectives while developing basic analytical skills necessary for appreciating literary texts in diverse contexts and traditions. Emphasis will be placed on written analysis of literary form and meaning. Satisfies GE Area C2 (World Literature).

ENGL 215 INTRODUCTION TO CALIFORNIA LITERATURE (3)

A survey of California literature. Works will be drawn from a range of California ethnic and cultural traditions. Emphasis will be placed on written analysis of literary form and meaning. Satisfies GE Area C2 (World Literature). Prerequisite: ENGL 101.

ENGL 237 SURVEY: EARLY AMERICAN LITERATURE (4)

Survey of American Literature from the 17th century through the middle decades of the 19th century, concluding with a study of Whitman and Dickinson. In addition to major authors, major themes of the periods will be explored, including a story of Puritanism, transcendentalism, and American romanticism.

ENGL 238 SURVEY: LATER AMERICAN LITERATURE (4)

Begins with Whitman and covers most major writers of the late 19th century and of the 20th century. Dickinson, Twain, H. James, Faulkner, Eliot, Kate Chopin, Baldwin. Realism, naturalism, and modernism.

ENGL 239 SURVEY: EARLY BRITISH LITERATURE (4)

Survey of British Literature from the Anglo-Saxon period to the end of the 18th century. Focus is on major authors in their cultural context.

ENGL 240 SURVEY: LATER BRITISH LITERATURE (4)

Survey of British literature from the late 18th century to the present. Focus is on major authors in their cultural context.

ENGL 275 COMPOSITION WORKSHOP (1-4)

Intensive study and preparation in-class and timed writing situations such as the WEPT and/or practical writing situations (i.e. Community Service Writing). Topics of special study may include rhetorical strategies for argumentation and expository writing in various situations; grammatical review; and techniques for revising, editing, and proofreading. May be offered as a stand-alone class, or in conjunction with other courses. Enrollment in linked sections will be limited to students in linked courses.

ENGL 280 INTRODUCTION TO CALIFORNIA CULTURAL STUDIES (3)

Introduction to California culture studies and its multiethnic, interdisciplinary and multi-disciplinary perspectives, tasks, and methods. Includes the study of California regionalisms and a range of topics from geology, philosophy, and art. Fieldwork and field trips to sites of historical and cultural interest required. Fulfills GE Area C4.

ENGL 292 LIBRARY AND INFORMATION RESEARCH: HUMANITIES (4)

An introduction to the use of Humanities resources in the Salazar Library. Students learn how to satisfy information needs, how to construct search strategies, how to find and retrieve information, and how to critically evaluate information sources. Includes lectures, demonstrations, and online research practice. Electronic and print sources are covered.

ENGL 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring and reading for the blind. Students receive 1 to 4 units, depending on the specific tasks performed. A total of 6 units of CIP credit may be applied toward a degree.

ENGL 301 LITERARY ANALYSIS: SEMINAR (4)

The art of critical writing on each genre, and the application of traditional and modern criticism to the study of literature. All English majors must take this course in their junior year.

ENGL 302 SPECIAL TOPICS AND THEMES IN CALIFORNIA CULTURAL STUDIES (4)

Courses include: California and the Environmental Imagination; Representing LA; Mural Art and California Politics; California Lives, San Francisco Culture; California in the Fifties; The Jack London Circle; California Immigration Experience; California and the West; and Race, Ethnicity, and Culture in California.

ENGL 303 SPECIAL STUDIES IN COMPOSITION (2-4)

This course focuses on expository writing, with a specific emphasis that varies from semester to semester, reports, grants, proposals, technical writing, and general business writing. Please see Schedule of Classes for current title.

ENGL 304 WAR AND PEACE LECTURE SERIES (4)

Students attend the public War and Peace Lecture Series and meet in discussion groups weekly to address a broad range of issues relating to the problem of war and prospects for peace. Lecturers represent diverse disciplines - e.g., economics, physics, peace studies, political science, sociology - and institutions. Discussion sessions synthesize material presented in lectures and outside readings and elicit students' personal responses to the issues raised. Reading and writing assignments required. Satisfies GE Area C2 (Literatures, Philosophies and Values). Prerequisite: Upper-Division standing.

ENGL 307 INTRODUCTION TO FICTION WRITING (4)

A writing workshop which focuses on crafting the short story. Prerequisite: consent of instructor.

ENGL 313 CLASSICAL LITERATURE AND MYTH (4)

Study of major works of the ancient world in cultural context. Consult Schedule of Classes for current listing.

ENGL 314 MODERN WORLD LITERATURE IN ENGLISH (4)

Explorations and analysis of modern world literature in translation as well as works written originally in English. The course may offer a survey of world literature or provide a more in-depth study of one or more non-Western traditions in a global context (check course schedule for particular topics). Satisfies GE Area C2 (World Literature).

ENGL 315 CALIFORNIA ETHNIC LITERATURE (4)

An introduction to representative California writers from 1900 to the present. Includes an examination of the theoretical, regional, multicultural, and multiethnic foundations of California literature. This course focuses upon both inter-ethnic and intra-ethnic literary relationships. Satisfies GE Area C2 (World Literature). Satisfies the Ethnic Studies requirement. Prerequisite: completion of ENGL 101.

ENGL 315L CURRICULUM LABORATORY (1)

Workshop in curriculum development for Teachers Preparation Candidates only. Concurrent enrollment in ENGL 315 is required.

ENGL 318 INTRODUCTION TO POETRY WRITING (4)

This course is designed for the beginning student in poetry writing. Through creative exercises and the reading of contemporary poetry, we'll focus on the basic elements of writing poetry: individual voice, image line, language form, sound, and process. While there will be reading and much discussion of the reading, the central focus will remain on student work. May be repeated for credit.

ENGL 339 INTRODUCTION TO SHAKESPEARE (3-4)

An introductory course in Shakespeare that centers around explication, discussion, and criticism of the major plays in the canon. Available to majors and non-majors. Fulfills Shakespeare requirement for English majors.

ENGL 341 EXPLORATIONS IN LANGUAGE (4)

This course introduces a series of linguistic topics that meet the content requirements of the English waiver program for future teachers. Topics include history of the English language semantics, language and/or literacy acquisition, or classroom discourse analysis. See Schedule of Classes for current offering.

ENGL 342 CHILDREN'S LITERATURE (4)

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

ENGL 343 YOUTH AND LITERATURE (4)

A survey course focusing on the genre of young adult fiction and non-fiction, with emphasis on its use in the teaching of secondary school English.

ENGL 345 WOMEN WRITERS (4)

A survey that, with a varying focus from semester to semester, considers women writers in a number of different periods, countries, and genres. This course emphasizes the comparative analysis of gender and literary practice, including, for example, intersections with ethnicity, sexuality, and social class. Suitable for non-majors. May be repeated for credit. Satisfies GE Area C2 (World Literature).

ENGL 349 EXPLORATIONS IN LITERATURE (3-4)

A course in literary explorations that will include subjects not normally offered in the regular curriculum. Please see Schedule of Classes for current titles. May be repeated for credit.

ENGL 352 PERSONAL ESSAY (4)

Intended for the general student who wishes to practice expository writing. Provides students with an opportunity to explore personal experience through writing and to examine elements of prose style in an informal, workshop atmosphere. May be repeated for credit. Prerequisites: upper-division standing and completion of the WEPT requirement, or consent of instructor.

ENGL 367 INTRODUCTION TO SHORT STORY (4)

An introductory course on the study of the short story as a genre. This course will survey the development of the short story over time. Specific offerings of this course may focus on particular traditions within the history of the short story.

ENGL 368 SMALL PRESS EDITING: ZAUM (4)

This course offers experience in editing and publishing a student literary journal as well as working on a national literary journal. Activities include editing, layout and graphics, marketing, and distribution. May be repeated for credit.

ENGL 369 INTRODUCTION TO POETRY (4)

An introductory course on the study of poetry as a genre. This course will survey the development of poetry over time. Specific offerings of this course may focus on particular traditions within the history of poetry.

ENGL 371 INTRODUCTION TO THE NOVEL (4)

An introductory course on the study of the novel as a genre. This course will survey the development of the novel over time. Specific offerings of this course may focus on particular traditions within the history of the novel.

ENGL 373 INTRODUCTION TO DRAMA (4)

An introductory course on the study of drama as a genre. This course will survey the development of drama over time. Specific offerings of this course may focus on particular traditions within the history of drama.

ENGL 375 ADVANCED COMPOSITION (4)

An advanced writing course, emphasizing organization of essays, style, usage rhetorical techniques, and rewriting and editing. Course includes discussion of effective prose, review of students' work, and individual consultations. Prerequisite: ENGL 101. Completion of ENGL 375 with a grade of C or better satisfies the University WEPT requirement. ENGL 375 does not count towards Creative Writing concentration units.

ENGL 377 TOPICS IN FILM STUDIES (1-4)

This course investigates major topics in film studies. Subjects vary and may include: the intersection of text and visuality, studies of authors/directors, script analysis, genres, historical movements and themes, and critical and theoretical approaches. The course may be repeated for credit up to a maximum of 6 units. This class may be offered as a stand-alone or in conjunction with other courses. Enrollment in linked sections will be limited to students in linked courses.

ENGL 379 STRUCTURE OF ENGLISH: PEDAGOGICAL GRAMMAR (4)

This course is designed to develop an understanding of basic principles of linguistic analysis as well as the forms and functions of English grammar and sentence structure. Applications to classroom practices are also explored.

ENGL 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring and reading for the blind. Students receive 1 to 4 units, depending on the specific tasks performed. May be repeated for a total of 6 units toward a degree.

ENGL 399 STUDENT-INSTRUCTED COURSE (1-4)

A course taught by graduate students under the supervision of a department faculty member. The course content will not be one covered by the regular course offerings.

ENGL 400 ENGLISH LECTURE SERIES (1-4)

A public lecture series on topics of general interest. Two units require regular attendance and a final paper. Students who take three units additionally meet once a week in discussion groups and do further reading on selected topics.

ENGL 401 INTRODUCTION TO MODERN CRITICAL THEORY (4)

An introduction to a range of critical theories and practices related to modern literary criticism. The course aims to introduce students to the contemporary forms of critical theory and their antecedents, and to show their effects upon reading practices. This course may be repeated for credit.

ENGL 407 ADVANCED FICTION WRITING (1-4)

An advanced-level fiction writing workshop. May be repeated once for credit.

ENGL 409 MASTER CLASS-FICTION WRITING (4)

Fiction writing workshop with a published writer. Enrollment limited to 15. Prerequisite: previous enrollment or consent of instructor.

ENGL 418 ADVANCED POETRY WRITING (4)

This course is designed for the more advanced student in poetry writing. It is recommended that the student have prior instruction or approval by the instructor. While the focus is on student writing, students can also expect to obtain a strong sense of American poetics over the last 50 years.

ENGL 430 CREATIVE WRITING: SELECT GENRES (1-4)

A workshop in the writing of a selected genre such as: memoir, autobiography, screenplay, stage play, novel, etc. May be repeated for credit.

ENGL 435 DIRECTED WRITING (2-8)

Individualized instruction in poetry, fiction, or creative non-fiction writing, one-on-one with a published writer. Prerequisite: consent of the instructor. No more than eight units of ENGL 435 may be counted toward the English major. May be repeated for credit.

ENGL 436 STUDIES IN POSTCOLONIAL LITERATURE (4)

Study of contemporary Anglophone and translated literary works with emphasis on transnational contexts and encounters between the First and Third Worlds. May be repeated once for credit.

ENGL 439 STUDIES IN SHAKESPEARE (4)

An advanced course in Shakespeare that focuses on the plays in the sub-genres through the context of history, sources, criticism, and theatrical reception. Fulfills Shakespeare requirement for English majors.

ENGL 447 STUDIES IN COMPARATIVE LITERATURE (3-4)

The study of literary themes and movements. Includes the various literatures that relate to a particular topic, such as decadence and symbolism, and modern European literature. Please see Schedule of Classes for current offering. May be repeated for credit. Normally offered through Special Sessions in Extended Education.

ENGL 448 PERIODS IN BRITISH LITERATURE (4)

Study of British authors in their historical periods, including Middle English, Renaissance, 17th century, Restoration and 18th century, Romantic, Victorian, and 20th century. Please see Schedule of Classes for current offering. May be repeated for credit under different subtitles.

ENGL 450 PERIODS IN AMERICAN LITERATURE (4)

Selections from the 17th through the 20th century, inclusive of contemporary American literature, will comprise the Period offerings. Please see Schedule of Classes for current offering. May be repeated for credit.

ENGL 451 FEMINIST PERSPECTIVES IN LITERATURE (4)

Feminist Perspectives is an advanced course in reading, writing, and research that will engage feminist perspectives in literature. This course is interdisciplinary in approach and is conducted in a seminar format. May be repeated once for credit. Course is cross-listed as WGS 451

ENGL 460 TEACHING ASSISTANT IN ENGLISH (1-4)

Provides students experience in assisting an instructor in an English course by doing course-related research and tutoring. Prerequisite: consent of the instructor. May be repeated for credit. No more than eight units of ENGL 460 may be counted toward the English major.

ENGL 462 RESEARCH ASSISTANT IN ENGLISH (1-4)

Provides selected students the opportunity to participate in the construction and execution of a faculty research project. Prerequisite: faculty invitation.

ENGL 470 STUDIES IN POETRY (4)

Themes, modes, and techniques of poetry: modern British, 20th century American, etc. Please see Schedule of Classes for current offering. May be repeated for credit.

ENGL 472 STUDIES IN THE NOVEL (4)

In-depth studies of a particular kind of novel: English, 20th century American, political (offered jointly with the department of political science), war novel, etc. Please see Schedule of Classes for current offering. May be repeated for credit with a different topic.

ENGL 474 STUDIES IN DRAMA (4)

Study of representative plays of a particular period: Medieval, Renaissance, Neoclassic, 19th century, or Modern. Please see Schedule of Classes for current offering. May be repeated for credit with a different topic.

ENGL 475 MASTER CLASS IN NONFICTION (4)

An advanced workshop in creative nonfiction, focused on the writing of publishable essays and the art of the book proposal. Prerequisite: ENGL 375, 352, 430 (Creative Nonfiction), or consent of instructor. May be repeated once for credit.

ENGL 480 STUDIES IN CALIFORNIA LITERATURE (4)

Study of a topic unique to California literature (e.g. Beats, LA/SF detective fiction, California immigrant and autobiographical literature). Emphasis on the historical, cultural, and regional character of the selected writings. Please see Schedule of Classes for the topic studied. Fulfills the core requirement of the California Cultural Studies special major. May be repeated once for credit.

ENGL 481 STUDIES IN BRITISH LITERATURE (4)

Studies of topics in British as well as related literatures including colonial, postcolonial, and Anglophone literatures. Please see Schedule of Classes for current offering. May be repeated for credit under different subtitles.

ENGL 482 STUDIES IN AMERICAN LITERATURE (4)

Close study of topics unique to American literature (e.g., transcendentalism, Western American literature). Please see Schedule of Classes for current offering. May be repeated for credit under different topic.

ENGL 483 INDIVIDUAL AUTHORS: AMERICAN (4)

One or more authors will be selected for study in depth. Please see Schedule of Classes for the author(s) to be studied. May be repeated for credit under different topics.

ENGL 484 INDIVIDUAL AUTHORS: ENGLISH (4)

Each semester one or more authors will be selected for study in depth. Please see Schedule of Classes for the authors to be studied. May be repeated for credit under different topics.

ENGL 485 CALIFORNIA AUTHORS (4)

One or more California authors will be selected for in depth study. Please see Schedule of Classes for the authors studied. May be repeated once for credit.

ENGL 487 STUDIES IN RHETORIC (4)

Specialized study of topics in rhetoric (including the history of rhetoric from classical to modern and post-modern rhetoricians), specific problems in rhetoric, and nontraditional rhetorical strategies. Content varies from semester to semester.

ENGL 489 TOPICS IN LINGUISTICS (4)

Individual and small-group study in specialized topics in the field of linguistics or literacy studies. Can be used to meet the Single Subject elective requirement. Offered every two years.

ENGL 491 SEMINAR IN TEACHING COMPOSITION (4)

This course will focus on composition theory, course design, instructional methods, and assessment in the teaching of writing in multicultural settings. Students will also write extensively to improve their own writing. A school-based practicum is a required component of this course.

ENGL 492 READING AND RESPONDING TO LITERATURE (4)

This course will focus on the links between literacy studies and the teaching of literature, with an emphasis on understanding current approaches to supporting adolescent reading in multicultural classrooms. The course explores books, both modern and traditional, that are of particular interest to adolescent and young adult readers. Through extensive reading and writing, students will build an understanding of how to develop effective English Language Arts curriculum at the secondary level.

ENGL 494 ADVANCED SURVEY (4)

This course offers academic support for the review of English and American literature that Master's candidates undertake in preparation for the graduate qualifying exam. Offered Cr/NC only.

ENGL 495 SPECIAL STUDIES (1-4)

To register for ENGL 495, not only must the student have the consent of the instructor, but the material and course of study should satisfy student needs not covered by regularly offered courses. In addition, the amount and level of work proposed should be at the appropriate academic level. Prerequisites: consent of instructor and department chair. May be repeated for credit.

ENGL 496 ENGLISH EDUCATION CAPSTONE SEMINAR (4)

This course engages senior-level English education majors in discussion and activities which review, synthesize, and assess the breadth and depth of their subject matter competence.

ENGL 499 INTERNSHIP (1-4)

For upper-division majors who wish to work off-campus in job-learning situations that relate to their major emphasis. Excludes student teaching. Written contract and faculty sponsorship required.

ENGL 500 RESEARCH AND CRITICAL WRITING (4)

Required for M.A. candidates in English. Advanced use of reference materials and library resources, and the techniques of critical and scholarly writing. The course should be taken during the first semester of classified status. May be repeated for up to eight units. Prerequisite: graduate status or consent of instructor.

ENGL 501 LITERARY THEORY AND CRITICISM (4)

Advanced study of the major texts in critical theory from Plato and Aristotle to the theoretical pluralism of the present. This course should be taken in the second semester of classified status. Prerequisite: graduate status or consent of instructor.

ENGL 530 GRADUATE WORKSHOP IN CREATIVE WRITING (4)

An advanced workshop in creative writing with in-depth discussions of individual work. Please see Schedule of Classes for current offering. May be repeated up to 8 units. Prerequisite: graduate status or consent of instructor.

ENGL 535 DIRECTED WRITING (2-6)

Individualized instruction in the development of an extended creative writing project. Prerequisite: consent of instructor. The M.A. completion option in creative writing is fulfilled through taking a total of 6 units of 535 to successfully produce the final creative project. This project must be approved by the creative project chair and second reader. Prerequisites: ENGL 500, classified status, and an authorized Advancement to Candidacy (GS01) form. Students in other M.A. emphases may count no more than 4 units of 535 toward the degree; creative writing students may count no more than 4 units in addition to the 6 creative project units of 535 toward the degree. Prerequisite: consent of instructor.

ENGL 536 WORLD/POSTCOLONIAL LITERATURE (4)

Studies related to different aspects of world and/or postcolonial literature. Emphasis on historical and social contexts and contemporary theoretical models. Course content varies from semester to semester. Course may be taken more than once for credit under different subtitles. Prerequisite: graduate status or consent of instructor.

ENGL 539 SEMINAR: SHAKESPEARE (4)

Critical reading and in-depth analysis of representative modes such as tragedy and comedy in Shakespeare. Prerequisite: graduate status or consent of instructor.

ENGL 578 PROJECT CONTINUATION (1-4)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. Once students have begun final project units, they must remain continuously enrolled; these units allow them to do this and provide services such as access to the library during this time. These units may also be taken through Extension. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. May be repeated for credit. Cr/NC only.

ENGL 581 SEMINAR: BRITISH LITERATURE (4)

A topic of English literature will be selected for study in depth. In addition to the literature of Britain, the topic may cover related colonial and postcolonial literatures. Please see Schedule of Classes for current offering. Course may be repeated for credit under different subtitles. Prerequisite: consent of instructor.

ENGL 582 SEMINAR: AMERICAN LITERATURE (4)

A topic of American Literature will be selected for study in depth. In addition to the literature of America, the topic may cover colonial, postcolonial, and/or Antlphone literatures of the Americas. Please see Schedule of Classes for current offering. Course may be repeated for credit under different subtitles. Prerequisite: consent of instructor.

ENGL 583 INDIVIDUAL AUTHORS: AMERICAN (4)

In-depth study of an individual author and related criticism. Please see Schedule of Classes for current offering. May be repeated for credit under different subtitles. Prerequisite: graduate status or consent of instructor.

ENGL 584 INDIVIDUAL AUTHORS: BRITISH (4)

In-depth study of an individual author and related criticism. Please see Schedule of Classes for current offering. May be repeated for credit under different subtitles. Prerequisite: graduate status or consent of instructor.

ENGL 587 SEMINAR: RHETORICAL THEORY (4)

Study of topics in recent rhetorical theory specifically as it applies to the teaching of writing at the college level. Course content varies from semester to semester. Course may be repeated for credit under different subtitles. Prerequisite: consent of instructor.

ENGL 588 SEMINAR: STUDY OF LANGUAGE (4)

Study of current theories in linguistics and literacy studies and their applications to English, with emphasis on original research and analysis in the study of oral and/or written language. Course may be repeated for credit under different subtitles. Prerequisite: consent of instructor.

ENGL 595 SPECIAL STUDIES (1-4)

Individualized study on a student-designed topic. The material and course of study should only cover topics not available in currently offered courses. Students must complete the standard SSU form and secure the required written approvals. May be repeated once for credit toward the M.A. Prerequisites: consent of instructor and department chair.

ENGL 597 DIRECTED READING (3)

Focused reading on a relatively narrow topic validated by a written and an oral examination. To be taken by students choosing the directed reading option to complete the M.A. Topic to be approved by the directed reading chair and second reader. Prerequisites: ENGL 500, classified status, and an authorized Advancement to Candidacy (GS01) form.

ENGL 599 THESIS AND ACCOMPANYING DIRECTED READING (3-6)

To be taken by students writing a traditional thesis, an extended research topic approved and guided by the thesis chair and second reader. Prerequisites: ENGL 500, classified status, and an authorized Advancement to Candidacy (GS01) form.

Environmental Studies and Planning (ENSP)

ENSP 200 GLOBAL ENVIRONMENTAL ISSUES (3)

Lecture/discussion, 3 hours. An introduction to environmental studies and planning, including: humans in relation to the global ecosystem; an overview of problems of energy use, pollution, resource depletion, population growth, food supply, urbanization, climate change and biodiversity; and the search for solutions and future prospects. Satisfies GE Area D5 (Contemporary International Perspectives).

ENSP 201 ENVIRONMENTAL FORUM (1)

Regular weekly departmental lecture series. Outside professional speakers and ENSP alumni and faculty report on environmental topics and opportunities for environmental careers. Cr/NC only.

ENSP 202 QUANTITATIVE METHODS: ENVIRONMENTAL STUDIES (3)

This course involves lectures and workshops designed to enhance students' confidence in analytical problem solving. Essential techniques emphasizing environmental applications: translating knowledge into abstract and mathematical models, numerical estimates, basic geometry and trigonometry, dimensional analysis, unit conversions, interpreting statistical data, and graphic display of information. Conceptual introduction to calculus, differential equations, and complex numbers. Prerequisites: ENSP majors or minors; completion or concurrent enrollment in GE Area B4 (Math Concepts). Cr/NC only.

ENSP 301 THE HUMAN ENVIRONMENT (3-4)

This course is designed to explore environmental issues and their impact on/by humankind. The class will demand that each student contribute ideas from his/her own experience each class session, as well as doing an in-depth group research project on an issue that involves human interaction with the environment. Issues could include: effects of human technology and social institutions upon the natural environment as well as beliefs, values, and attitudes in relation to human and non-human environment. Prerequisites: ENSP 200 or equivalent, junior- or senior-level standing.

ENSP 302 APPLIED ECOLOGY (3-4)

This course explores major concepts of ecology and examines current environmental issues in light of these concepts. Topics include: relationship between organisms and the physical environment, community-level ecological processes, the structure and function of ecosystems and their distribution on the planet, evolutionary processes, and population ecology. Environmental issues include loss of biodiversity, global climate change invasive species, and others. Development of speaking and writing skills is a significant element of the course. Field trip required. Prerequisite: completion of GE Area B2 or consent of instructor.

ENSP 303 APPLIED PHYSICAL SCIENCE (3-4)

A review of the physical field sciences for environmentalists. Develops an understanding of the problems and challenges in environmental control of air, water, soil, natural hazards, and nonrenewable resources by applying scientific principles to practical environmental problems. Prerequisite: completion of lower-division GE Area B1 (Physical Sciences).

ENSP 305L COMPUTER-AIDED COMMUNICATIONS (3)

Designed to introduce ENSP students to theory and techniques of computer-aided environmental communication. The fundamentals of visual communication will be addressed, demonstrated, and applied through a variety of instructional technologies including Web tools, presentation graphics, digital photography, and desktop publishing. Prerequisites: ENSP majors or minors and junior- or senior-level standing.

ENSP 306 ENVIRONMENTAL ETHICS (3)

An examination of philosophical issues, concepts of extending rights to nonhuman entities of nature and the question of humans' place in nature, and logical and conceptual foundations for an environmental ethic. Prerequisite: completion of GE Area A (Communication and Critical Thinking).

ENSP 307 ENVIRONMENTAL HISTORY (4)

Environmental history offers an earth's-eye view of the past, by addressing the many ways in which humans have interacted with the natural environment over time. How has the environment shaped the course of human history, and how have human actions and attitudes shaped the environment? And how does studying past environments help us understand our present-day challenges? All too often, historians study the human past without considering nature; similarly, all too often, scientists study nature without considering human history. We will explore the value of integrating these different perspectives, and argue that a historical perspective is absolutely crucial if one hopes to understand contemporary environmental issues. Prerequisite: Completion of GE Area A (Communication and Critical Thinking).

ENSP 308 ENVIRONMENTAL LITERATURE (3)

A survey of great American environmental books, including H. D. Thoreau's *Walden*, John Muir's *Mountains of California*, and works by other environmental authors. The course considers the natural, political, cultural, and historical environment of the writers. Prerequisites: ENSP majors or minors, junior- or senior-level standing.

ENSP 309 SOIL SCIENCE (3-4)

An introduction to soil science emphasizing applications to agronomy, archaeology, botany, ecology, engineering, geography, geology, land use planning, hazardous materials management, and water quality. Technical exercises emphasize low-cost scientific analytical equipment. Prerequisite: completion of GE Area B (Natural Science and Mathematics).

ENSP 310 INTRODUCTION TO PLANNING (3)

An overview of land use planning and associated concerns, such as environmental protection, transportation, open space preservation, housing, economic development, urban design, and public finance. Consideration of the evolving forms and functions of cities, towns, and rural areas and society's attitudes toward development, environmental concerns, and the appropriate role of government in regulating land use. Course addresses general plans, zoning, growth management, environmental impact assessment, and the local political process relating to planning. Current trends in planning and sustainable community development.

ENSP 311 PLANNING THEORY AND METHODOLOGY (4)

Exploration of evolving planning thought and processes as a basis for understanding planning practice. Comprehensive planning, incremental, and communicative action models. Planning and local politics. The values and ethics of the professional planner. Mediating environmental and land use disputes. Basic analytical, methodological, and communication skills utilized in urban, environmental, and business planning. Prerequisites: ENSP 310 is required or can be taken concurrently, junior- or senior-level standing, ENSP majors or minors.

ENSP 314 URBAN DESIGN I: THE URBAN FORM (3)

An exploration of the physical and visual form of urban communities. The appearance and aesthetic qualities of public open spaces, streets, buildings, neighborhoods, city gateways, signs, and other elements of the urban scene. Meaning of "sense of place." The effects of public policy and regulations on urban form. The scale, pattern, and image of urban form elements. Planning for new communities, historic preservation, urban plazas, and public art. Prerequisite: ENSP 310 is recommended.

ENSP 315 ENVIRONMENTAL IMPACT REPORTING (3)

The practice and theory of environmental impact assessment and analysis. The process of preparing environmental impact reports (EIRs) and statements (EISs) as mandated by state and federal statutes and regulations. Reviewing and commenting on environmental documents. Relationship between EIRs and comprehensive planning activities. Litigation of EIRs and environmental mediation. Prerequisites: ENSP majors or minors, junior- or senior-level standing, ENSP 310 is recommended.

ENSP 322 CONSERVATION BIOLOGY (3-4)

Interdisciplinary investigation into biological, management, economic, and ethical issues associated with the current extinction of species. Course will cover principles and applications of ecology, population biology and genetics, biogeography, and social sciences for protection and management of biodiversity in the face of current widespread alteration of the environment. At least one field trip required. Prerequisites: ENSP 302 or BIOL 122 or BIOL 130A, junior- or senior-level standing only.

ENSP 324A AGROECOLOGY (2)

The Agroecology course focuses on the study and practice of sustainable agriculture. Fall topics include soil testing, composting, seed beds for winter crops, planting green manure crops, and pest control. Environmental concerns concentrate on genetic diversity, seed saving, and decreased dependence on chemical pesticides and herbicides. Class time is divided between classroom lectures/discussions and field research/experimentation.

ENSP 324B AGROECOLOGY (1-2)

The Agroecology course focuses on the study and practice of sustainable agriculture. Spring topics include composting green manure, preparation of greenhouse seed beds, pest and weed control, and spring planting in open beds. Environmental concerns concentrate on large-scale irrigation; greenhouse management; fruit, nut, and forest production; and health effects of pesticides and herbicides. Class time is divided between classroom lectures/discussions and field research/experimentation.

ENSP 326A NATIVE PLANT PROPAGATION (2)

Field course in applied aspects of propagation of plants native to the local area. Topics include native plants and plant communities; techniques for collecting, growing, and planting native plants; and ecologically sound guidelines for collection and reintroduction of native plants. Experimental approaches to improve propagation success are emphasized. Course provides native stock for restoration of local riparian habitats.

ENSP 326B NATIVE PLANT PROPAGATION (1-2)

Field course in applied aspects of propagation of plants native to the local area. Topics include native plants and plant communities; techniques for collecting, growing, and planting native plants; and ecologically sound guidelines for collection and reintroduction of native plants. Experimental approaches to improve propagation success are emphasized. Course provides native stock for restoration of local riparian habitats.

ENSP 330 ENERGY, TECHNOLOGY, AND SOCIETY (4)

A lecture/discussion course designed to assist students in understanding energy as a fundamental measure of organization, structure, and transformation in society. Principal topics include: energy history; thermodynamics; energy resources and conversion technologies; global issues and trends; environmental impacts; and energy economics, institutions, and politics. Elementary quantitative analysis. Prerequisites: ENSP majors or minors, junior- or senior-level standing, and completion of GE Area B4 (Mathematical Concepts) or prior or concurrent enrollment in ENSP 202.

ENSP 337 THERMAL ENERGY MANAGEMENT (3-4)

An introduction to energy management in residential and commercial buildings, focusing on space heating and cooling, and hot water. Fundamentals of heat transfer, thermal properties of building materials, building load calculations, and energy economics. Prerequisites: ENSP majors, MATH 160, MATH 161, or ENSP 202; and PHYS 114 or PHYS 210A or equivalent.

ENSP 338 ELECTRICAL ENERGY MANAGEMENT (3-4)

An overview of energy management approaches in residential and commercial settings that involve electrical devices, including lighting, motors, and HVAC. Fundamentals of electricity, electric power delivery, and the workings of common appliances; energy economics. Strong algebra background and PHYS 210 recommended. Prerequisites: ENSP majors, MATH 160, MATH 161, or ENSP 202; and PHYS 114 or PHYS 210A required.

ENSP 345 PORTFOLIO DEVELOPMENT AND REVIEW (3)

Course designed to introduce students to critical issues in elementary education as well as to conduct an assessment of students entering ENSP in the education study plan. Students develop portfolios and present to classmates. Field trips. Cr/NC only. Course fee. Prerequisite: ENSP majors or minors.

ENSP 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Involvement in human, social, biological, or physical problems of the off-campus community. A total of 6 units may be applied toward the degree.

ENSP 399 STUDENT-INSTRUCTED COURSE (1-3)

Topic will differ each semester.

ENSP 400 SELECTED TOPICS (1-4)

Intensive study of selected topics related to environmental studies and planning. Topics vary from semester to semester. May be repeated for credit with consent of instructor.

ENSP 401 U.S. ENVIRONMENTAL POLICY (4)

This class starts with the idea that institutions of government are not a fixed inheritance but choices that are constantly being revised. The goal of the course is to sort out that assertion while providing a basic introduction to both American political institutions and major environmental issues. We will look at choices shaping the structure of governance and tools of environmental policy. Where are we heading in terms of democratic decision-making, responsibility, and accountability? How does the realm of international policy dovetail with national-level governance? Prerequisite: Completion of GE Area D4.

ENSP 404 ENVIRONMENTAL LAW (3)

Review of environmental law and regulation in the United States generally and California in particular. Overview of federal and California legal systems with emphasis on their role in environmental protection. Evolution of environmental law in the United States, including property rights and environmental justice. Prerequisite: junior- or senior-level standing.

ENSP 405 ENVIRONMENTAL RESEARCH AND WRITING (2-3)

Whether you are conducting research for a class assignment, writing a paper in graduate school, or solving real environmental problems as a working practitioner, you will need some strong basics in research methods. This class covers a variety of methods in the social sciences applicable to work in a wide range of environmental fields, including library searches, interviews, historical research, finding and interpreting planning documents, and effective writing. Prerequisite: juniors, seniors, or graduate students.

ENSP 411A PLANNING WORKSHOP (4)

The first semester of an intensive, year-long project that provides practical experience in preparation of a general (comprehensive) plan for an actual community or geographic area. The fall semester focuses on background studies and field surveys of land use, public opinion, transportation, economic base, and environmental conditions. Class fee required at time of registration. Prerequisites: ENSP 310 and 311, ENSP seniors in Planning Concentration required. Course fee.

ENSP 411B PLANNING WORKSHOP (4)

Continuation of ENSP 411A. Spring semester focuses on preparation of the plan, including implementation programs, following state guidelines. Public presentations of class project. Class fee required at time of registration. Prerequisite: completion of ENSP 411A.

ENSP 412 HEALTHY COMMUNITIES PLANNING (3-4)

Topics in planning: This course is designed to provide students with knowledge and service learning-based experience in the field of planning for healthy communities. Students will be exposed to and will evaluate the rapidly evolving thinking on this topic and will apply and test that thinking by working with community partners engaged in healthy community planning projects. Prerequisites: Introduction to Planning (ENSP 310) recommended. This course is repeatable once for credit.

ENSP 414 URBAN DESIGN II: PLACEMAKING (3)

Course focus is on the process of designing urban places where public life and a sense of community can thrive. Many critics of American cities have lamented the fact that these urban areas have lost their uniqueness; the urban landscape has come to be visually characterized by a dispiriting "sameness". Considered most offensive are standardized development of chain and "big box" stores with their corporate "logo" signs, and "cookie cutter" residential subdivisions. The course explores efforts of communities to retain their uniqueness and enhance civic pride, including the creation of vibrant public spaces, lively pedestrian environments, and comfortable and safe streets and neighborhoods. The meaning, purposes, and techniques of "contextual design" are explored, especially those designed to protect local historical heritage and regional distinctiveness. Prerequisites: sophomores, juniors, seniors, or graduate students; ENSP 310 recommended.

ENSP 415 LAND USE LAW (3)

Overview of the law governing land use in California. Fundamentals of the legal system and legal analysis. Substantive law regarding planning and zoning, subdivision, development conditions, growth management, land use initiatives, vested rights, and design review. Constitutional protection of property rights. Prerequisites: ENSP majors or minors, junior- or senior-level standing, ENSP 310 recommended.

ENSP 416 ENVIRONMENTAL PLANNING (3-4)

This course focuses on the relationship between land use planning and environmental and natural resources concerns, using property and landscape as our primary lenses. We will consider how ideas regarding resource management, open space, biodiversity, "sustainability", etc., are reflected in land use planning processes and practices. The course will examine broad planning and regulatory tools, such as EISs, regional planning, and resource management planning, and more specific applications such as Habitat Conservation Plans and open space planning. Prerequisite: ENSP 401 recommended.

ENSP 418 PLANNING FOR SUSTAINABLE COMMUNITIES (3)

Sustainability as a concept in environmental and land use planning. Definitions and models of sustainability. Evaluation of sustainable development on global, national, regional, and local levels. Practical experience with city and county planning for sustainability. Prerequisites: ENSP majors or minors, juniors or seniors. ENSP 310 recommended.

ENSP 419 TRANSPORTATION PLANNING (3)

Theory, methods, and tools related to the systematic analysis of city, regional, and rural transportation problems. The focus is on fundamental land use and transportation interrelationships. Transportation as an integrated system composed of automobiles, public transit, bicycles, and pedestrian travel modes. "Level of service" and traffic impact assessment. Congestion management, energy conservation, sustainability, and environmental impact considerations. Prerequisite: ENSP 310 recommended.

ENSP 421 LANDSCAPE HISTORY OF THE AMERICAN WEST (3)

Use of and interactions with natural resources have transformed the American West over time, and greatly affected the western environment as we know it today. This seminar takes a historical look at the settlement, development, and management of the western landscape, both in terms of natural resources (timber, water, grazing, parks etc.) but also in terms of cultural settlement and use - and considers landscape as a tool for understanding the cultural/social/political history of a place. Students can expect to do some serious reading, writing, and thinking about how and why the West has become such a distinctive natural and cultural landscape. Open to juniors, seniors, and graduate students only or consent of instructor. Prerequisite: juniors, seniors, or graduate students. Cross-listed as HIST 467.

ENSP 422 SPECIAL TOPICS IN CONSERVATION AND RESTORATION (2-3)

Interdisciplinary seminar addressing ecological, historical, cultural, social, and/or policy aspects of different natural resource topics each year. Examples of topics could include forestry, wetlands ecology, fisheries, management, endangered species protection, etc. Students will read and discuss material from diverse sources to achieve a thorough understanding of a particular issue in conservation and restoration, allowing them to participate constructively in on-going policy and management debates. Prerequisite: juniors, seniors, or graduate students.

ENSP 423 RESTORATION ECOLOGY (5)

Field course introducing major concepts and practical aspects of restoration ecology and land management. Topics include: the conservation context of restoration, restoration goals, measuring success, experimental approaches, dynamic systems and change over time, disturbance, restoring animal populations and the role of animals in ecosystem restoration, and educational elements of restoration. Practical techniques covered include: seed collection, ex-situ seed and plant management and propagation, invasive species removal, planting native species, and others. Topics are addressed in a variety of diverse local systems. Prerequisite: ENSP 322 required. Course fee.

ENSP 424 FIRE ECOLOGY, MANAGEMENT, AND POLICY (3)

A seminar course exploring fire ecology, management, and policy issues. Specific topics covered will include the use of fire or fire surrogates for restoring grassland, shrub land and forest systems; management of non-native species with prescribed fire; wildfire management; historical fire policy and its ecological implications for the western United States; and climate change and fire. Prerequisite: ENSP 200. Course fee.

ENSP 425 RESTORATION AND SOCIETY (4)

This capstone course focuses on the ideas and theories behind environmental restoration work and asks some critical questions about the field: where did the idea of restoration come from? What are the goals of environmental restorations, and how do you know if a project is meeting those goals? What do we mean by the terms "wilderness", "native", "diversity", and so forth? Do environmental mitigation projects really work? We will also look at several specific case studies through the semester. Prerequisite: ENSP 322 or consent of instructor.

ENSP 427 CONSERVATION DESIGN (3)

This course applies concepts from landscape ecology and conservation biology to conservation planning and design in a rapidly urbanizing area. Focusing on an area of Sonoma County with both high conservation value and development pressure, the class will develop blueprints for biodiversity conservation and evaluate those strategies as alternative scenarios in a GIS environment. Prerequisites: ENSP 322, ENSP graduating seniors or consent of instructor.

ENSP 428 CONSERVATION RESEARCH METHODS (3)

This research seminar emphasizes a current topic of applied and theoretical interest in the field of conservation biology. Students investigate the topic through a field research project, readings, and discussions. Students contribute to all phases of the research, from generating hypotheses and collecting data in the field, to analyzing the data and writing a scientific paper based on the results. Each class focuses on a different topic and related set of field methods. Prerequisite: GEOG 205 is required or can be taken concurrently.

ENSP 430 ENERGY FORUM (1-2)

Speakers, including community professionals, program alumni and University faculty, cover a wide variety of energy issues with formal presentations followed by discussion period. May be repeated for credit. Prerequisites: ENSP majors or minors, junior- or senior-level standing.

ENSP 437 PASSIVE SOLAR DESIGN (3-4)

Fundamentals and advanced applications of passive solar design, including: site analysis and design; passive applications (sunspace, trombe wall, convective loop, direct, and indirect gain systems); passive performance predictions; and economic payback analysis. Computer applications and student design projects. Prerequisites: ENSP 337, ENSP majors, junior- or senior-level standing or consent of instructor.

ENSP 438 SMALL SCALE ENERGY SOURCES (3-4)

Course will focus on functional design of small-scale wind, photovoltaic, biomass, and hydroelectric energy sources. Siting, evaluating potentially available power, design of fully operable installation, and by-products and waste streams will be discussed. Energy storage mechanisms, interconnections to existing energy networks, and energy cost comparisons will be examined. Prerequisite: ENSP 338, ENSP majors, junior- or senior-level standing, or consent of instructor.

ENSP 439L COMPUTER APPLICATIONS IN ENERGY MANAGEMENT LABORATORY (2-3)

Applications laboratory addressing state-of-the-art computer programs in this field. Focus on simulation-and-design programs utilized in residential and commercial building compliance. Student projects and presentations. Prerequisites: ENSP 337, ENSP majors or minors, junior- or senior-level standing.

ENSP 440 EDUCATION AND THE ENVIRONMENT (4)

This course is designed to provide an introduction to the history and current scope of environmental education; contemporary frameworks for learning and teaching; self, site, and audience assessment; and program options for schools and education centers. One overnight field trip, course fee required at time of registration.

ENSP 442 METHODS AND MODELS IN EDUCATION AND THE ENVIRONMENT (3)

An advanced course in environment-based education to build upon the fundamental theory and techniques presented in ENSP 440. The focus is on exemplary programs, place-based delivery techniques, curriculum, and technologies. Several field trips to local schools and community education centers. Cr/NC only. Prerequisite: ENSP 440 or consent of instructor.

ENSP 444 OUTDOOR LEADERSHIP (4)

A survey course addressing the theory and practice of outdoor leadership. Central topics include safety and first aid; trip planning, leading, and debriefing; business models and employment options; and outdoor skills such as orienteering, rock climbing, whitewater rafting, and sea kayaking. Course fee and overnight field trips. Classes meet the first half of the semester.

ENSP 448 CLASSROOM GARDEN (1-2)

Development of curriculum materials and teaching techniques to utilize school and community gardens as outdoor classrooms. Curriculum materials will relate to such topics as plant identification, growth cycles, photosynthesis, soils and nutrients, nutrition, insects, predator/prey relationships, pesticides, and soil and water pollution. Lesson plans suitable for elementary school level will be developed.

ENSP 450 WATER TECHNOLOGY (3-4)

The science and engineering of purifying polluted water for drinking. Applications of mathematics, microbial ecology, and chemistry to the practical problems of working toward California certification in water supply and water treatment. Course has extensive homework and field trips. Prerequisites: GE Area B4 (Mathematical Concepts) and one semester of chemistry, ENSP majors or minors; or consent of instructor.

ENSP 451 WATER REGULATION (3)

The regulation of water supply and quality from all points of view including regulators, industries, scientific agencies, nonprofit organizations, and action agencies. The law, management, economics, and technology of water. Prerequisite: GE Area B4 (Mathematical Concepts).

ENSP 460 TEACHING ASSISTANT IN ENSP (1-4)

Open only to advanced students. Intended to give students experience in assisting the instructor in an environmental studies course by doing research and tutoring students in the class. Prerequisite: ENSP majors or consent of instructor. This may be repeated for credit.

ENSP 470 PLANNING INDEPENDENT STUDY (1-4)

Contracts for group and individual interdisciplinary study for those qualified to work independently. Internships may be a part of the study. Prerequisites: consent of instructor required prior to registration; written contract and faculty approval. May be repeated for credit.

ENSP 490 SENIOR PROJECT (1-4)

Group and some individual studies. This major senior activity may be coordinated with independent studies and/or special problems to total 12 units. May be repeated for credit. Prerequisites: written contract and faculty approval.

ENSP 495 SPECIAL STUDIES (1-4)

Independent study designed in consultation with an instructor. Requires prior approval of ENSP faculty member and department chair. Prerequisites: successful completion of at least two ENSP courses and submission of a completed SSU special studies form; ENSP majors or minors or consent of instructor. Course may be repeated for credit.

ENSP 497 SENIOR SEMINAR: ISSUES IN PROFESSIONAL PREPARATION (1-2)

This seminar covers topics essential for professional preparation in the fields of conservation and restoration. Topics include discussions with guest speakers on career options in governmental, private, and non-profit settings; writing highly effective resumes, CVs, and cover letters; and techniques for successful interviewing. The course will also cover preparation for future training in professional and academic fields. Required for seniors in the Conservation and Restoration study plan. Cr/NC only. Prerequisites: ENSP majors, senior-level standing.

ENSP 498 SENIOR SEMINAR: ISSUES IN PROFESSIONAL PRACTICE (1-2)

Discussion of situations and challenges new planners are likely to encounter early in their professional careers. Seminars include discussions with professional planners on such topics as working with the public, elected officials, and other professionals; maintaining relations with the press; ethical dilemmas; and other matters of current concern. Discussion of students' internship experiences. Required for senior students in the Planning concentration. Must be taken within two semesters of graduation. Cr/NC only. Prerequisites: ENSP majors, senior-level standing.

ENSP 499 INTERNSHIPS (1-8)

For senior students (in most cases) working off-campus in experiential learning positions with written contract and faculty guidance. Cr/NC or a grade, depending on study plan. Prerequisites: ENSP majors only, junior- or senior-level standing or consent of instructor. Course may be repeated for credit.

French (FR)

FR 101 FIRST-SEMESTER FRENCH (4)

Assumes no prior experience in French. Moves from simple, everyday greetings to basic vocabulary and phrases describing people, places, clothing, food, travel, studies, sports, and professions. Competency-based testing of listening, speaking, reading, writing, and cultural skills. Requires concurrent enrollment in FR 101L. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 101L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions involving online exercises and/or interactive exercises. Cr/NC only. Prerequisite: concurrent enrollment in FR 101.

FR 102 SECOND-SEMESTER FRENCH (4)

Students progress through increasingly complex sentence structures. Competency-based testing of listening, speaking, reading, writing, and cultural skills. Grammatical content includes past tenses, future, conditional, subjunctive, object pronouns, etc. Requires concurrent enrollment in FR 102L. Prerequisite: FR 101 or by examination. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 102L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions involving online exercises and/or interactive exercises. Cr/NC only. Prerequisite: concurrent enrollment in FR 102.

FR 201 THIRD-SEMESTER FRENCH (4)

A thorough and detailed review of all French grammar, augmented by more sophisticated elements of syntax, presented within the context of French and francophone cultural materials. Requires concurrent enrollment in lab, FR 201L. Prerequisite: FR 102 or by examination. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 201L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly in practice sessions involving online exercises and/or interactive exercises. Cr/NC only. Prerequisite: concurrent enrollment in FR 201.

FR 202 ORAL FRENCH (4)

Required of majors. Extensive use of oral group activities, use of periodicals, and listening comprehension through video and tapes. Practical work in phonetics and intonation. Speaking and listening competence at intermediate level. Prerequisite: FR 201 or by examination. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 300 INTRODUCTION TO LITERARY ANALYSIS AND CRITICAL WRITING (4)

Study of advanced aspects of French grammar and stylistics with a focus on introducing students to literary analysis, including poetry, theater, and narrative prose. Oral and written presentations. May be repeated for credit when course content is different. Prerequisites: FR 201 or equivalent, and FR 202. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). May be repeated for credit.

FR 314 FRENCH LITERATURE IN ENGLISH TRANSLATION (4)

Studies in French-speaking Caribbean, African, Near Eastern, Asian, and/or North American literatures in English translation. Topics may include non-Western cultural and religious values, colonialism versus emerging nationalisms, and the quest for identity, personal, cultural, and national. Satisfies GE Area C2 (Literature, Philosophies and Values). Prerequisite: completion of GE Area A. May be repeated for credit.

FR 320 FRANCE YESTERDAY (4)

French civilization — history, social and political institutions, and the arts — as revealed in written documents and visual media (architecture, painting, graphics, etc.), from the medieval period to the Revolution. This course includes readings, discussion, and oral and written reports in French. Prerequisite: FR 300 or equivalent (may be taken concurrently). Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 321 FRANCE TODAY (4)

French civilization — history, social and political institutions, and the arts — as revealed in written documents and visual media (architecture, painting, graphics, etc.), from the Revolution to the present. Readings, discussion, and oral and written reports in French. Prerequisite: FR 300 (may be taken concurrently). Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 410 FRENCH LITERATURE (4)

Readings in theatre, prose, and poetry representing major writers and movements from the Middle Ages, the Renaissance, Classical, and the pre-Romantic periods. May be organized around themes or genres or by aesthetic movements. Readings, discussion, and oral and written reports in French. Prerequisite: FR 320. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 411 FRENCH LITERATURE (4)

Readings in theatre, prose, and poetry representing major writers and movements from the 19th and 20th centuries. May be organized around themes or genres or by aesthetic movements. Readings, discussion, and oral and written reports in French. Prerequisite: FR 321. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 415 SPECIAL TOPICS IN FRENCH CULTURE (4)

Topics vary according to current interests and issues, e.g. the Francophone world, Paris, the French film, French feminism, French impressionism, Theatre and society, etc. Readings, discussions, and oral and written reports. May be repeated for credit when topics change. Prerequisite: FR 320 or 321 (may be taken concurrently). Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 475 SENIOR SEMINAR (4)

An advanced writing course, culminating in a research paper on a literary topic, or a substantial piece of creative writing. This course may only be taken at SSU. It may not be taken abroad or at another U.S. university. Prerequisite: FR 321 or 411 (may be taken concurrently). Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

FR 495 SPECIAL STUDIES (1-4)

Directed individual study. Prerequisite: consent of instructor. May be repeated once for credit.

FR 499 INTERNSHIP (1-4)

Students in the internship program apply skills and methods mastered in their course work in French in a variety of situations in public and private agencies. Credit is awarded for completion of 3 hours of work (weekly average) per unit, participation in a seminar or conferences, and a final report. Placement must be arranged in advance with department coordinator. May be repeated once for credit

Geography (GEOG)**GEOG 201 GLOBAL ENVIRONMENTAL SYSTEMS (4)**

This course presents a broad survey of how the earth works. It focuses on the processes within, and the relationships between, the four global sub-systems: the atmosphere, biosphere, hydrosphere, and lithosphere. The course examines how physical, chemical, and biological functions create local, regional, and global climate and landscape patterns. It also explores the links between human activities and changes in climate, vegetation patterns, and landform processes. The course includes weekly two-hour lab sessions in which students participate in field-based data collection exercises and conduct scientific analyses. Satisfies GE Area B1 (Physical Science).

GEOG 202 WORLD REGIONAL GEOGRAPHY (3)

This course explores 4-5 world regions from a holistic perspective, examining their economic, political, demographic, cultural, and environmental landscapes with considerable historic depth. The course also considers how each region fits within a larger global, political and economic system, and how their roles have changed, particularly with globalization. Satisfies GE Area D5 (Contemporary International Perspectives).

GEOG 203 HUMAN GEOGRAPHY (3)

The course introduces students to a spatial perspective of cultural, economic, political, demographic, and environmental processes. We review the deep historical origins of many social processes and examine how they continue to influence our contemporary experience. We also study how these processes change as they move across geographic space and encounter other cultures and places. Satisfies GE Area D2 (World History and Civilization).

GEOG 302 WORLD REGIONS IN GLOBAL CONTEXT (4)

Selected regions of the world form the basis of study. Economic development, political problems, man-land relationships, and global issues are covered. The course uses geographical methodologies and concepts and is interdisciplinary in its observations of world regions. Satisfies GE Area D5 (Contemporary International Perspectives).

GEOG 312 GEOGRAPHIC CONFERENCES (1-2)

Students attend a professional meeting in the Western Region, including but not limited to CGS, APCG, and AAG meetings. Students participate in at least one day of professionally-led field trips organized through the conference and one day of scholarly presentations. A fee will be charged for this course. Course may be repeated for credit. Up to 2 units of GEOG 312 in total may be counted towards the major.

GEOG 313 FIELD EXPERIENCE ABROAD (2-3)

Field Experience outside the United States (2-3). Cultural and physical studies of people and places through travel, observation and interaction, and oral and written analysis. Destinations include Central and south American countries. Course contents and locations will vary; may be repeated for credit. Check with instructor regarding destination and cost. Offered during Intersession or Summer Session. Prerequisite: consent of the instructor.

GEOG 314 FIELD EXPERIENCE (1-2)

Field experience is provided in a variety of topical areas. The course titles and contents will vary and may be repeated for credit. Please see the current Schedule of Classes for the particular topic offered. A fee will be charged for this course. Up to 2 units of GEOG 314 in total may be counted toward the major

GEOG 315 FIELD METHODS IN GEOGRAPHY (2)

This course provides hands-on experience with field sampling techniques commonly used in biophysical data collection and spatial inquiry. Course topics include sample design, field measurements, statistical data analysis, report writing, and the use of field equipment. Field work will be conducted mainly in the Fairfield Osborn Preserve and surrounding area. Data collected from vegetation sampling, soil descriptions, microclimate measurements, and geomorphologic observations will be used to interpret the natural and anthropogenic landscape. Throughout the course, students will work with Global Positioning System (GPS) units to accurately locate their field samples on the Earth, allowing for subsequent spatial analysis. Laboratory fee may be charged; see current Schedule of Classes.

GEOG 316 GEOGRAPHIC INQUIRY (1)

This field based course is meant to help seniors prepare for original research associated with the Senior Seminar the following semester. Through field practice students learn how to formulate research hypotheses and/or questions. The course meets six times. Four meetings are four hours in duration and involve off-campus exercises.

GEOG 317 LAB METHODS IN PHYSICAL GEOGRAPHY (2-3)

This course provides hands-on experience with laboratory analysis techniques commonly used in physical geography. Topics include stratigraphic and laboratory analyses, report writing, and data presentation. Data collected from soil and sediment profiles and tree rings will be used to interpret environmental conditions. Students will follow laboratory methods, protocols, and use analytical equipment. Laboratory fee may be charged; see current Schedule of Classes. Prerequisites: GEOG 201 or consent of instructor.

GEOG 320 GEOPOLITICS (4)

In this course we dig deep into the field of geopolitics, the struggle for control over territory, transportation corridors, and natural resources. We analyze the origin of the discipline, its historical development, and key contemporary issues, including the Iraq War, the U.S. missile defense shield and the expansion of NATO, the promotion of democracy as a security strategy, Iranian nuclear ambitions, and Chinese military expansion. We will also examine the upsurge of nationalism since the end of the Cold War, and examine ethno-national rebellion from multiple perspectives, including the failure of nation-building, the failure of economic development, and competition over scarce natural resources.

GEOG 322 LIBERATION ECOLOGIES: GLOBALIZATION, ENVIRONMENTAL, AND SOCIAL MOVEMENTS (4)

This course examines some of the ways specific places and people have promoted, encountered, and negotiated the projects of development and globalization. We begin with a critical examination of development and globalization and a public narrative that has obscured their origins, intentions, and operations. We will use case studies of specific places where development and globalization have motivated resistance, often leading to new identity-based social movements. We will examine cases related to environmental degradation, land dispossession, gender and justice, and personal and community security. The course has a global perspective which includes, but is not limited to, cases from the Third World. The class often enlists political ecology and political economy perspectives in our analysis.

GEOG 330 HISTORICAL GEOGRAPHY OF NORTH AMERICA (4)

A study of the settlement history of North America and of the changing concepts of man-environment relationships in the chronology of the Europeanization of the American landscape. Investigations into where and why people settled as they did, and the origins of the economic and spatial relationships that constitute the present American scene will be the focus of the course.

GEOG 335 GLOBAL FOOD SYSTEMS: SCARCITY AND SUSTAINABILITY (4)

This course explores the development of agriculture from its origins to its modern forms. It discusses the historical development and current structure of five agricultural systems: small and large corporate farms in the development of the world, as well as traditional peasant production systems, plantations, and green revolution forms in the developing world. It then considers issues such as world hunger, food aid, global commodity trade, and the affect of biotechnology in both the developed and developing world.

GEOG 338 SOCIAL GEOGRAPHY (3)

Studies aspects of demography, migration, and the spatial dimension of social organization. Included in the course are the spatial perspectives of social well-being, poverty, crime, and ethnicity. The spatial structure of human settlement, as well as political, religious, and social values will be discussed. Satisfies upper-division GE Area E (Integrated Person).

GEOG 340 CONSERVATION OF NATURAL RESOURCES (4)

This class explores the use and management of natural resources. Each year, it focuses on a different set of renewable and non-renewable resources, such as water, oil, diamonds, rangeland, and others. It addresses topics such as distribution, scarcity, substitution, access and use-rights, resource cartels, regulation, and sustainability. It also looks at how these issues are changing under globalization and the rise of transnational corporations.

GEOG 350 URBAN GEOGRAPHY (4)

A consideration of urban origins, the diffusion of the city, and modern-day inter- and intracity phenomena. Topics to be discussed include urbanization, comparative urban forms, urban functional organization, land use, distribution of cities and their territories, and urban problems - pollution, housing, and open space.

GEOG 352 CLIMATE CHANGE AND SOCIETY (4)

This course briefly reviews climate change mechanisms and models. It then turns to its main topics: attempts and failures to mitigate greenhouse gas production, specific predicted challenges, and current and future attempts to adapt to the environmental and social impacts related to changing climates. The course compliments GEOG 372.

GEOG 360 GEOMORPHOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Explores the relationships between surface processes such as weathering, mass movements, running water, wind, waves, and glacial ice, and the landforms these processes create. The course looks at geomorphic systems and the role of tectonics and climate in changing the balance of these systems. Actual research projects are presented to demonstrate geomorphic approaches to environmental questions. Students are exposed to research methods in the field and lab. Field trips and field reports, use of maps, and hands-on labs are included. A fee will be charged for this course. Prerequisites: GEOG 201, GEOL 102, or consent of instructor.

GEOG 365 BIOGEOGRAPHY (4)

Biogeography is the study of plant and animals distributions at local to global spatial scales, and seeks to understand the physical, biological and human processes that determine these patterns through time. This is a highly integrative field of inquiry pulling on concepts, theories and data from general ecology, evolutionary biology, geology, physical and human geography, and geospatial science. With its perspective on broad spatial and temporal scales, Biogeography is particularly relevant for designing viable long-term strategies for nature conservation in the face of modern human-induced changes, such as global warming and habitat conversion. This course uses lectures, reading assignments and an individual student project to explore past and present biota at regional to global scales, and a field trip to understand our local northern California ecosystems.

GEOG 370 WEATHER AND CLIMATE (4)

An exploration of the atmosphere, how it differs from place to place and time to time. The role of radiation, temperature, humidity, evaporation, cloudiness, precipitation, and surface factors (topography, exposure and altitude) in differentiating world climates. Climate's influence on man physically and culturally, in history and prehistory. Climate change drought and flood, and solar radiation are among the topics investigated in detail. Prerequisite: GEOG 201 or consent of instructor.

GEOG 372 GLOBAL CLIMATE CHANGE: PAST, PRESENT, AND FUTURE (4)

An advanced course focusing on evidence of climate change in the past and potential climate change in the future. Present research methods used to investigate past climate and project possible climatic trends will be studied. The range of theories regarding past, present, and future climate, and the response of the environment to such changes will be explored in detail. Prerequisites: GEOG 201 or ENSP 303 and juniors, seniors, or graduate students only.

GEOG 375 NATURAL HAZARDS (3-4)

This course examines natural hazards in relation to human populations and activities around the world. It focuses on disasters generated by weather, climate, and geomorphic processes (such as hurricanes, landslides, tsunamis, and earthquakes) as well as global climate change. It considers risk assessment, hazard perception, population change, and impact on the built environment. Prerequisite: GEOG 201 or ENSP 303 or consent of instructor.

GEOG 380 ENVIRONMENTAL REMOTE SENSING (4)

Environmental remote sensing uses imagery from satellite and airborne sensors to map properties of the Earth over broad spatial scales. This course develops an understanding of physical principles behind remote sensing; explores a range of sensors, spatial scales, and locations; and uses image processing techniques for extracting useful environmental information.

GEOG 385 CARTOGRAPHIC VISUALIZATION (3-4)

Lecture, 2 hours; laboratory, 3 hours. Map and graphic methods in geography: history, design, theory, and construction. Topics include selection of map projections, use of scales, generalization, data input and processing, color, visualization of spatial data, and map production. Emphasis is placed on effective communication through graphic design. Covers the increasing role of geographic information systems (GIS) in cartography. Also examines the collection of geographic data, such as with global positioning systems (GPS). Exercises guide students through increasingly complex methods of data collection and cartographic construction. Laboratory fee may be charged; see current Schedule of Classes.

GEOG 387 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (4)

Geographic information system (GIS) technologies provide researchers and policy-makers with a powerful analytical framework for making decisions and predictions. As with any technology, the appropriate use of GIS depends greatly on the knowledge and skills of the user. This course addresses the scientific and technical aspects of working with geographical data, so that GIS users understand the general principles, opportunities, and pitfalls of recording, collecting, storing, retrieving, analyzing, and presenting spatial information. Both fundamental concepts and "hands on" experience with state-of-the-art software are incorporated through readings, lecture discussion, and laboratory assignments. The first half of the course focuses on the "nuts and bolts" of how a GIS works, while the second half concentrates on methods for spatial analysis and modeling. Prerequisite: Course requires a basic competency with Microsoft operating system and Office applications.

GEOG 390 GEOGRAPHY OF CALIFORNIA (3)

California as a state and as a region is in many ways unique. This course examines both the singular physical and human aspects of the State, from its unusual geologic history, climate, and vegetation, through its earliest inhabitants, to its present day diverse population, and trend-setting economic, political, and cultural atmosphere. Issues discussed include changing populations and regional differences, evolving urban areas, water resources, agriculture, and forestry.

GEOG 392 LATIN AMERICA AND THE CARIBBEAN (4)

From an environmental history perspective, the class begins with an investigation of pre-Columbian and post-contact social ecologies. This leads to analysis of more contemporary processes such as rural modernization, the rapid growth of cities and migration, the role of identity and women, and the dynamics of free-trade globalization and international relations.

GEOG 394 AFRICA SOUTH OF THE SAHARA (4)

Students explore various historical and contemporary processes that have created Africa's diverse and complex geography. The course begins with a historical survey of the continent, starting with its great civilizations and continuing through its experiences through colonialism, independence, the cold war, and globalization. This section of the class examines how these major events have played out throughout the different regions of Africa, south of the Sahara. The class then turns directly to thematic issues that are central to a human-geographic perspective of the continent: population, rural/urban dynamics, education and health issues, and human-environment interactions including agricultural systems and conservation issues. Finally, with a deeper understanding of the region, the course addresses present-day political hot spots of post-cold war Africa, and the critical development problems plaguing the continent.

GEOG 396 SPECIAL TOPICS IN AREA STUDIES (4)

This course will cover regions not regularly taught in the department. Regions may include areas such as The Middle East, East Asia, Southeast Asia, Arid lands, The Pacific Rim/World or underdeveloped lands. Offerings will vary depending on visiting faculty, experimental courses, and educational needs.

GEOG 460 LAB ASSISTANT IN GEOGRAPHY (2)

Open only to advanced students who have been invited by the faculty member to serve as a Lab Assistant for GEOG 201 Global Environmental Systems. Intended to give students experience in assisting the instructor in the laboratory. Three units may be counted towards the Geography major. Prerequisite: consent of instructor. May be repeated once for credit.

GEOG 483 ENVIRONMENTAL GIS (3-4)

Environmental issues typically involve a range of physical, ecological and socio-economic factors with complex interactions that span multiple spatial and temporal scales. Computer-based Geographic Information Systems (GIS) are particularly well-suited for describing, analyzing, and modeling environmental problems and datasets, and the technology is widely used for local- to global-scale research, impact assessment, conservation planning, and natural resource management. This course investigates a range of environmental problems through the unique perspective afforded by geospatial data analysis within a GIS. Lectures introduce the ecological, scientific and societal issues associated with major environmental issues of our time, such as land-use change biodiversity loss, and global carbon emissions. These issues are then quantitatively analyzed with real-world spatial datasets using GIS-based methods and tools in coordinated laboratory exercises. In the process, students extend and strengthen GIS skills and concepts acquired through Geog 387. Prerequisites: Geography 387, basic college-level math, statistics helpful.

GEOG 487 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (3)

This course provides greater depth in the foundations of geographic information systems (GIS). Readings, group discussions, and lectures delve into database development issues, advanced spatial analysis, and GIS research applications. Students also complete a semester-long research project using GIS technologies. Students learn to identify problems that can benefit from a spatial-analytical approach and determine the appropriate data for pursuing such a project. Students build their own GIS database, mastering skills such as digitizing and attributing spatial data, importing data from the internet, collecting field data for GIS integration, and converting GIS layers into a single coordinate system and map projection. Finally, students learn to choose and implement the most appropriate spatial analysis method for their research, and then interpret the results. Prerequisite: GEOG 387 with a grade of B or better or consent of instructor.

GEOG 490 SENIOR SEMINAR (3-4)

The focus of the seminar may vary, but the class will expose students to the nature of the discipline of geography through readings of scholarly literature. The class will emphasize a student research project and will include classroom discussions during the course of the semester.

GEOG 495 SPECIAL STUDIES (1-4)

Special studies may be arranged to cover an area of interest not covered in the courses otherwise offered by the department. Prerequisites: completed special studies form and consent of the instructor.

GEOG 496 SELECTED TOPICS IN GEOGRAPHY (2-5)

A single subject or set of related subjects not ordinarily covered by the geography department. Offerings will vary depending on visiting faculty, experimental courses, and educational needs.

GEOG 499A GEOGRAPHY INTERNSHIP PROGRAM (2-5)

Students in the internship program will be given the opportunity to gain practical experience using geographical skills by working in a variety of county and city agencies in the Sonoma State University service area. Credit is given for three hours per unit work per week as arranged with the internship coordinator. Must have junior- or senior-level standing and a minimum GPA of 2.75, or permission from the Department Chair. GEOG 499A is offered in Fall; GEOG 499B is offered in Spring. May be repeated once for credit.

GEOG 499B GEOGRAPHY INTERNSHIP PROGRAM (2-5)

Students in the internship program will be given the opportunity to gain practical experience using geographical skills by working in a variety of county and city agencies in the Sonoma State University service area. Credit is given for three hours per unit work per week as arranged with the internship coordinator. Must have junior- or senior-level standing and a minimum GPA of 2.75, or permission from the Department Chair. GEOG 499A is offered in Fall; GEOG 499B is offered in Spring. May be repeated once for credit.

GEOG 595 GRADUATE SPECIAL STUDIES (1-6)

Advanced research and writing. Students work under close supervision of faculty members. Subject matter variable. May be repeated for credit. Prerequisites: consent of instructor and completed special studies form.

Geology (GEOL)

GEOL 102 OUR DYNAMIC EARTH: INTRODUCTION TO GEOLOGY (3)

Lecture, 2 hours; laboratory, 3 hours. A study of the minerals, rocks, and landforms that make up our earth in the context of the dynamic forces that form them. Emphasis on local geology, including earthquakes and other environmental aspects. Laboratory study of minerals, rocks, and maps. Required one-day weekend field trip. Fee required. Satisfies GE Area B1 (Physical Sciences) and GE laboratory requirements.

GEOL 105 THE AGE OF DINOSAURS (3)

Lecture, 3 hours. The life and death of dinosaurs as evidenced by the fossil record will be studied to show how geology and biology combine in the discipline of paleontology. The evolution of dinosaurs over a 150-million- year time span sets the stage to investigate several interesting and ongoing controversies surrounding dinosaurs, including: why dinosaurs became extinct, the metabolism of dinosaurs, and the relationship between birds and dinosaurs. Satisfies GE Area B1 (Physical Sciences).

GEOL 107 INTRODUCTION TO EARTH SCIENCE (3)

This course studies the operation of the Earth system and its solar system home. It introduces the fundamental aspects of 4 major areas: astronomy; geology, including plate tectonics, and the planetary history of the Earth and its moon; physical oceanography; and weather and climate. There is no lab. The course is designed to prepare students for the earth science and astronomy parts of the SET examination. The prerequisite is that the student must be enrolled in the AMCS, LIBS, CALS, or ENSP credential program.

GEOL 110 NATURAL DISASTERS (3)

A course to examine the interaction between natural processes and human activities and the often costly and fatal results. Course emphasis will be on the principles underlying natural disasters such as earthquakes, volcanic eruptions, landslides, floods, severe weather, coastal processes, asteroid impacts, fires, great dyings, and population growth. Many examples will be drawn from the northern California area. Course content may vary with instructor. Satisfies GE Area B3 (Physical Sciences, Specific Emphasis).

GEOL 120 REGIONAL FIELD GEOLOGY (3)

Lecture, 1 hour. The heart of geology is in the field. The course is an examination of rocks, minerals, and landforms, and the processes that form them. This course includes a 10-day field trip taken during spring vacation, or multiple weekend field trips in the fall semester, where the natural world becomes our classroom. Prerequisite or co-requisite: any 100-level Geology course or instructor consent; students must be in good physical condition.

GEOL 205 MINERALOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Principles of crystal chemistry, crystallography, and properties and origins of common rock-forming minerals. Laboratory sessions emphasize hand specimen and petrographic mineral identification characterization. Prerequisites: completion of or concurrent enrollment in GEOL 303 and CHEM 115A.

GEOL 205A MINERALOGY, OPTICS (2)

Supplementary course to be held concurrently with GEOL 205. For students who already have taken a mineralogy course but have not gained sufficient experience in optical mineralogy. Consists of the lecture and laboratory portion of GEOL 205 relevant to optical mineralogy. Prerequisite or co-requisites: GEOL 303 and CHEM 115A.

GEOL 301 NATURAL HISTORY OF THE HAWAIIAN ISLANDS (3)

Lecture, 3 hours. The origin and evolution of the flora and fauna of the most isolated archipelago in the world, geologic history and context of volcanic oceanic islands, and conservation biology efforts to save the rare and endangered species of Hawaii. Satisfies GE Area B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 115 or 130A and 130B.

GEOL 302 GEOLOGY OF CLIMATE CHANGE (3)

Lecture, 3 hours. Climate changes on time scales of days to millions of years. We will review methods by which the amplitude and pacing of climate changes are measured, use data analysis to assess the significance of past climate variability, and consider interpretations and theories proposed to explain Earth's climate. Prerequisites: GEOL 102 and CHEM 115A.

GEOL 303 ADVANCED PRINCIPLES OF GEOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. Advanced treatment of the principles, methods, and tools within the geological sciences. We will discuss topics such as: plate tectonics, Earth materials and resources, Earth surface processes, geological hazards, how to read geological and topographic maps, how we decipher geological history, and much more. Prerequisite: one of the following: GEOL 102, 105, 107, 110, or 120; ANTH 201, ENSP 303, ENSP 309, BIOL 310, or GEOG 204.

GEOL 304 GEOLOGIC MAPPING AND REPORT WRITING (1)

Field studies and report preparation done in conjunction with GEOL 303. Required weekend field trips. Prerequisite: concurrent enrollment in GEOL 303. Students must be in good physical condition.

GEOL 306 ENVIRONMENTAL GEOLOGY (3)

Lecture, 3 hours. Study of geological principles and processes as they relate to our natural environment emphasizing interaction between human activities and the geological environment. Major topics include the nature and behavior of rocks and soils; earthquakes and their associated hazards; landslides, slope stability, and building construction; groundwater and pollution; stream processes and flooding; shoreline processes and coastal development; engineering geology and construction of highways and dams; and development of natural resources and conservation and ecology. Specific content varies year to year, depending on instructor. Prerequisite: GEOL 102 or consent of instructor.

GEOL 307 IGNEOUS AND METAMORPHIC PETROLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. A study of the origin, properties, classification, and occurrence of igneous and metamorphic rocks. Laboratory exercises in the classification and description of minerals, textures, and structures of the more common rock types. Laboratory work will emphasize both hand specimen analysis and microscopic petrography. Prerequisites: GEOL 205, and GEOL 102 or GEOL 303.

GEOL 308 IGNEOUS AND METAMORPHIC PETROLOGY FIELD COURSE (1)

Field studies done in conjunction with GEOL 307. Required weekend field trips. Fee required. Prerequisite: concurrent enrollment in GEOL 307. Students must be in good physical condition.

GEOL 309 COMPUTER APPLICATIONS IN GEOLOGY (4)

Lecture, 3 hours; Laboratory, 3 hours. This course aims to provide our majors with some fundamental skills for manipulating and representing geological data using computer applications. Applications include using digitizing field maps and data into GIS format, creating figures in computer aided drawing programs, using basic functions computational software and generating histograms, and rose diagrams. Prerequisite or co-requisite: GEOL 303 and GEOL 304.

GEOL 310 GEOPHYSICS (4)

Lecture, 3 hours; laboratory, 3 hours. This course will cover the basic principles underlying various geophysical methods, field procedures, data collection, and how to interpret geophysical data. Topics include seismic reflection and refraction, paleomagnetism, gravity and magnetic surveying, and how geophysical methods have augmented our overall understanding of the Earth's structure and Earth processes. Prerequisite: GEOL 303.

GEOL 311 SEDIMENTARY GEOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. The description, classification, and origin of sedimentary rocks. Discussion of weathering and origin of sediment, sediment transportation, and sedimentary structures; clastic and nonclastic classification; and petrology. Prerequisites: GEOL 303 and 304.

GEOL 312 SEDIMENTARY GEOLOGY FIELD COURSE (1)

Lecture, 1 hour. Field studies done in conjunction with GEOL 311. Required weekend field trips. Prerequisites: GEOL 303 and concurrent enrollment in GEOL 311. Students must be in good physical condition.

GEOL 313 PALEONTOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. The study of fossils in their geological context. Topics include taxonomy, morphology, evolution, biogeography, extinction, and biostratigraphy of the main groups of invertebrate fossils. Laboratory work will include becoming familiar with stratigraphically important fossil groups and the use of fossils in solving both geological and biological problems. Prerequisites: GEOL 303 for majors, GEOL 102 for non-majors, or instructor consent.

GEOL 314 PALEONTOLOGY FIELD COURSE (1)

Lecture, 1 hour. Field studies done in conjunction with GEOL 313. Required weekend field trips. Prerequisites: GEOL 303 for majors, GEOL 102 for non-majors, and concurrent enrollment in GEOL 313. Students must be in good physical condition.

GEOL 317 STRUCTURAL GEOLOGY (4)

Lecture, 3 hours; laboratory, 3 hours. An introduction to deformation processes within the Earth's crust and the geological structures that result from these processes. We will examine deformation running the gamut of scales (from atomic scale to tectonic scale). Prerequisites: GEOL 303, GEOL 304, and MATH 160.

GEOL 318 STRUCTURAL GEOLOGY FIELD (1)

Lecture, 1 hour. Field studies done in conjunction with GEOL 317. Required weekend field trips. Prerequisite or co-requisite: GEOL 317. Students must be in good physical condition.

GEOL 320 BASIN ANALYSIS (4)

Lecture, 3 hours; laboratory, 3 hours. Origin and evolution of sedimentary basins; tectonic settings and significance; subsidence and thermal histories; basin-scale depositional systems; paleocurrent, provenance, and paleogeographic analysis; basin types; paleoclimatic influences; and resources. Prerequisite: GEOL 311, 312, 317, and 318.

GEOL 321 BURGESS SHALE PALEONTOLOGY (3)

Lecture, 2 hours; laboratory, 3 hours. Advanced examination of the Cambrian Burgess Shale fossil deposits in British Columbia, Canada. Field work supplements lecture sessions on campus. Prerequisites: GEOL 313, GEOL 314, and consent of instructor. Students must be in good physical condition.

GEOL 323 HYDROLOGY (3)

Lecture, 3 hours. This course focuses on water as a natural resource, the hydrologic cycle, and the distribution of water on the Earth; atmospheric water, soil water, runoff, and groundwater as related to water supply and use; and applications to problems of flood control, water management, and water pollution, with special emphasis on California and Sonoma County. Prerequisites: GEOL 102 or consent of instructor; MATH 106 or 107.

GEOL 326 STRATIGRAPHY AND EARTH HISTORY (4)

Lecture, 3 hours; laboratory, 3 hours. The principles of stratigraphy and historical geology will be discussed, with special emphasis given to the application of these principles to the geologic development of North America. The geologic history of California will be treated in detail. The use of sedimentary rocks, fossils, and structural and tectonic principles will be discussed, especially as they relate to our understanding of historical geology. Laboratory work will include a study of sedimentary rocks and their properties, fossils and their occurrence and distribution, the construction and interpretation of various types of stratigraphic maps, and detailed studies of selected maps representative of the various geologic provinces of North America. Required field trip. Prerequisite: GEOL 303 or consent of instructor.

GEOL 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in community problems such as tutoring, aiding in school science classes, and advisement of county agencies. A total of 6 units of CIP credit may be applied toward a degree. May be taken by petition only. Not applicable to the Geology major.

GEOL 396 INTERNSHIP IN GEOLOGY (1-4)

Professional geologic work for a geologic firm or agency. Forty-five hours of work per unit. Not applicable to the Geology major. Prerequisites: GEOL 303 and consent of instructor.

GEOL 406 X-RAY MINERALOGY (2)

Lecture, 1 hour; laboratory, 3 hours. Introduction to the use of x-ray diffraction techniques. Prerequisites: CHEM 115A and GEOL 205 or concurrent enrollment, and consent of instructor.

GEOL 420 INTEGRATIVE FIELD EXPERIENCE (4)

Lecture, 2 hours. This course is a synthesis of the Geology major core courses. This course aims to hone our students' abilities to make valid geologic field interpretations through detailed field mapping and report writing. Twelve days of fieldwork are required. Prerequisites: GEOL 308, GEOL 309, GEOL 312, and GEOL 318. Students must be in good physical condition.

GEOL 422 GEOCHEMISTRY (3)

Lecture, 3 hours. Introductory cosmochemistry and origin of the elements; meteorites; the Earth as a chemical system, chemistry of processes at the surface of the Earth; mineral crystal chemistry; introduction to geochronology and stable isotope variations in nature; thermodynamics and its geological application; geochemical prospecting. Prerequisites: GEOL 303, CHEM 115AB/116AB, MATH 161, or consent of instructor.

GEOL 425 ECONOMIC GEOLOGY (3)

Lecture, 3 hours. Classification, origin, and alteration of metallic ore deposits. Laboratory sessions on hand sample identification of ore and alteration minerals and petrographic analysis of selected ore suites. Prerequisites: previous or concurrent enrollment in GEOL 307 and CHEM 115B/116B.

GEOL 426A SENIOR THESIS I (3)

426A is the first semester of a senior thesis project. A senior thesis is an opportunity for students to engage in primary research. Students must write a proposal, defining the scope of their project. Thesis projects must be a two-semester project. Students will be required to present their projects at the Geology Colloquium. Prerequisite: thesis advisor consent.

GEOL 426B SENIOR THESIS II (3)

426B is the second semester of a senior thesis project. A senior thesis is an opportunity for students to engage in primary research. Students must write a proposal, defining the scope of their project. Thesis projects must be a two-semester project. Students will be required to present their projects at the Geology Colloquium. Prerequisites: thesis-advisor consent and GEOL 426A.

GEOL 427 ADVANCED FIELD GEOLOGY (4)

A minimum of five weeks of detailed mapping in igneous, metamorphic and sedimentary rocks, and the preparation of field reports and geological maps. Students may also complete this course at another university, but should do so only in consultation with the Geology Department. Students must demonstrate equivalence in terms of field hours and course content to GEOL 427. Prerequisite: senior-level standing in Geology. GEOL 420 strongly recommended.

GEOL 495 SPECIAL STUDIES (1-4)

Individual study, under guidance of an advisor, of an advanced field, laboratory, or literature problem. The student must have demonstrated ability to work independently and do quality work. 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. May be repeated for credit.

GEOL 496 SELECTED TOPICS IN GEOLOGY (1-3)

An intensive study of an advanced topic in geology. May be repeated for additional credit with new subject matter. Prerequisite: adequate preparation for topic under consideration. Additional fee may be required.

GEOL 498 GEOLOGY PRACTICUM (1-4)

Application of previously studied theory through supervised instructional work experience in geology, generally as a teaching assistant in geology laboratory classes. Intended for professional growth. May be repeated for up to a total of 4 units. Not applicable for the Geology major or minor. Prerequisites: upper-division standing in Geology and consent of instructor. Student needs to have passed the course that he/she will be a teaching assistant in with a grade of B or better. To be a teaching assistant in GEOL 102 laboratory student needs to have received a grade of B or better in GEOL 303.

German (GER)

GER 101 FIRST SEMESTER - THE PERSONAL WORLD (4)

German for beginners. Through communicative activities covering the four language skills (listening, speaking, reading, and writing), students learn to ask and answer questions and share information about themselves, their families, and their daily activities. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). Prerequisites: None. Requires concurrent enrollment in GER 101L.

GER 101L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the language laboratories and/or online. Cr/NC only. Concurrent enrollment in GER 101 required.

GER 102 SECOND SEMESTER - CONTEMPORARY GERMANY (4)

Expansion of the skills acquired in GER 101. Students build on their knowledge of German culture. They improve their communicative competence, and develop skills needed to negotiate a variety of everyday situations in Germany. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). Prerequisite: GER 101 or consent of instructor. Requires concurrent enrollment in GER 102L.

GER 102L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the language laboratories and/or online. Cr/NC only. Concurrent enrollment in GER 102 required.

GER 195 ELEMENTARY SPECIAL STUDIES (1-4)

Directed individual study.

GER 200 INTERMEDIATE GERMAN: THE GERMAN-SPEAKING WORLD TODAY (4)

This course introduces various cities and regions that provide the context to review first-year German. Students develop ability to communicate in German and their understanding of Germany, Austria, and Switzerland by engaging with increasingly complex topics (i.e. education, environmental issues, politics, history). Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). Prerequisite: GER 102 or consent of instructor. Requires concurrent enrollment in GER 200L.

GER 200L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the language laboratories and/or online. Cr/NC only. Concurrent enrollment in GER 200 required.

GER 210 INTERMEDIATE GERMAN THROUGH FILM (4)

This course uses films to expand students' knowledge of the history and culture of the German-speaking world. Films promote vocabulary enhancement, grammar review as well as improvement of speaking and writing skills. Cross-cultural comparisons encourage critical thinking skills. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). Prerequisite: GER 102. Requires concurrent enrollment in GER 210L. This course may be taken before GER 200.

GER 210L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) weekly of practice sessions in the language laboratories and/or online. Cr/NC only. Must be taken concurrently with GER 210.

GER 300 ADVANCED GERMAN STUDIES (4)

Prepares students for the Goethe-Certificate B1 proficiency examination (Zertifikat Deutsch). Students acquire differentiated vocabulary, greater grammatical accuracy, and improve their speaking and writing skills by focusing on varied language use in different contexts. Content may include: issues of gender or multiculturalism, the continued influence of the Nazi past, and German reunification. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). Prerequisites: GER 200 and GER 210, or consent of instructor. Course may be taken before GER 314. May be repeated for credit under different subtitles. Must be taken in residence at SSU.

GER 314 LITERATURE AND CULTURE OF THE GERMAN-SPEAKING WORLD (4)

Studies of literature, film, art, and the cultural history of German-speaking countries. Taught in English. Satisfies GE Area C2. Prerequisites: ENGL 101 and GER 102 (the latter for German minors only), or consent of instructor. Requires concurrent enrollment for German minors in GER 399L (not for GE students). May be repeated for credit under different title.

GER 315 GERMAN LANGUAGE AND LITERATURE (1)

Readings and discussion of selected literary works in German. Review of vocabulary and grammar. Includes practice of pronunciation. Students pursuing the minor or special major in German must take this course concurrently with GER 314. Also open to other German students.

Prerequisite: GER 102 or consent of instructor.

GER 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring, coaching, and assisting others in the process of learning. Students receive 1 to 4 units, depending on the specific tasks performed. Prerequisite: consent of instructor.

GER 490 SENIOR SEMINAR IN AREA STUDIES (4)

GER 495 SPECIAL STUDIES (1-4)

Directed individual study. Prerequisite: consent of instructor. May be repeated for credit.

GER 499 INTERNSHIP (1-4)

Gerontology (GERN)

GERN 300 THE JOURNEY OF ADULTHOOD (3)

Introduces the study of aging from biological, psychological, sociological, and environmental perspectives. Aging is presented as a normal state of development with both positive and negative aspects. Specific issues discussed include: health care, housing, income maintenance, and advocacy. Satisfies GE Area E (The Integrated Person).

GERN 304 SIBLING RELATIONSHIPS (4)

An exploration of the role of siblings to personal and family development, with a focus on sibling relationships in adulthood and later life. An emphasis will be placed on the psycho-social context of the sibling relationship in addition to theories of the psychology of the individual. Cross-listed as PSY 304.

GERN 305 ISSUES IN LATER LIFE DEVELOPMENT (2-4)

Focuses on contemporary issues and topics in gerontology. Selected issues incorporating historical, cultural, social, psychological, and policy perspectives may be offered. Consult Schedule of Classes for the specific topic and current unit offering.

GERN 312 ADULT DEVELOPMENT LECTURE SERIES (2)

Lectures and presentations on thematic issues in the field of adult development and aging. Speakers are drawn from local community programs, Bay Area research organizations, and academic disciplines.

GERN 317 EMOTIONS AND ADULT LIFE (4)

Emphasizes the social context and social development of emotional responses throughout adulthood. Analyzes the reciprocal relations between social definitions and subjective feelings in connection with life events throughout adulthood. Addresses both basic emotions, such as fear, anger, pleasure, and excitement, and more complex emotions, such as love, jealousy, grief, sympathy, pride, shame, and despair. Cross-listed as SOCI 317. Satisfies GE Area E (The Integrated Person).

GERN 319 AGING AND SOCIETY (4)

Examination of aging throughout adulthood. Analysis of theories of aging, their foundations in social science theory, and their policy implications. Exploration of the meanings and consequences of increasing longevity for society and the individual, with emphasis on the social psychological implications for women, minorities, and those who are poor. Satisfies GE Area D1 (Individual and Society). Cross-listed as SOCI 319.

GERN 332 DEATH AND AMERICAN CULTURE (4)

The relation of cultural values to practices, attitudes, and views about death. Application of sociological and psychological theories to topics on death and dying, such as death conceptions, terminal care, suicide, war, and grief. Emphasis on the social psychology of dying, caregiving, grieving, and being suicidal. Cross-listed as SOCI 332.

GERN 399 STUDENT-INITIATED COURSE (1-4)

A course designed by an advanced student, approved by the gerontology program, and taught by the student under the supervision of his/her faculty sponsor. Consult the Schedule of Classes for topic to be studied.

GERN 408 TRANSITIONS IN ADULT DEVELOPMENT (4)

This course explores how women and men experience and shape the transitions that occur as they mature socially and psychologically. Inquiry includes normative life cycle transitions as well as unexpected, unusual, or "off-time" transitions and develops understandings of how these transitions shape the development of an individual through adulthood and later life. Cross-listed as PSY 408. Prerequisite: junior-level standing.

GERN 421 PSYCHOLOGY OF AGING (4)

Analysis of psychological development as a lifelong process. Examination of theories of psychological growth in later life. Exploration of the role of memory for learning and psychological functioning. Study of issues in mental health in adulthood. Cross-listed as PSY 421. Prerequisite: Junior-level standing or instructor permission.

GERN 422 LIVING AND DYING (4)

Explores personal values and attitudes about life and death and seeks to understand them in relation to our own psychology and to the larger social context. Topics of separation and loss, loss as a transformative process, aging, the dying process, bereavement, suicide, homicide, near-death experiences, mythology, and immortality will be addressed. Cross-listed as PSY 422. Prerequisite: Junior-level standing.

GERN 438 PSYCHOLOGICAL ASPECTS OF DISABILITY (3-4)

This course is designed to give participants a better understanding of people with disabilities and an awareness of how society regards them. The disabilities addressed range from traumatic physical injuries through progressive diseases and conditions to mental retardation, alcoholism, and emotional disabilities. The class is appropriate for anyone interested in disability, whether for personal or professional reasons. Cross-listed as PSY 438.

GERN 452 HEALTH CARE AND ILLNESS (4)

A dual focus on the social organization of health care and the social psychology of illness. Analyses of the structure of care, patient-practitioner relationships, and treatment ideologies. Emphasis on the patient's experience of illness, intimate relationships, and self-images.

GERN 482 TEACHING INTERNSHIP (1-4)

Students learn the skills of organization and communication of psychological theory and research under the supervision of a faculty mentor. Prerequisites: GERN 300 and consent of instructor.

GERN 490 INTERNSHIP SEMINAR (1)

In this optional seminar, students report on the progress of their internships and discuss institutional procedures and interactional processes particular to their intern sites. Case and data management techniques will be discussed. The seminar allows opportunity for group problem-solving, objective analysis of internship issues, and enhancement of professional networks. Prerequisites: concurrent enrollment in GERN 499 and consent of instructor.

GERN 493 NARRATIVE: THEORIES AND METHODS (4)

The course examines the role of narrative, or life storying, in human development research. Students will develop a protocol, conduct research in the community using interview methodologies appropriate to the narrative perspective, analyze transcriptions for theoretical and life themes, and develop a final project based on the analysis of the data. Cross-listed as PSY 493.

GERN 495 SPECIAL STUDIES (1-4)

Students may propose to participate in independent projects or continuing research with the approval and guidance of the faculty member. The special study may extend for more than one semester. May be repeated for credit.

GERN 499 GERONTOLOGY PRACTICUM (1-4)

Field experience in an agency or organizational setting in which the student combines work with academic preparation in programs concerned with aging and/or health. A-F or Cr/NC. May be repeated for credit.

GERN 500 SOCIAL AND PSYCHOLOGICAL ISSUES IN AGING (2-4)

Analysis of the aging process and its social implications. Selected issues provide exploration of relationships between psychological and social development in later life. Developmental, historical, cultural, psychological, and policy perspectives may be offered. Consult Schedule of Classes for specific topic. Cross-listed as PSY 500. Prerequisite: graduate standing or permission of instructor. May be repeated for credit.

GERN 515 GRADUATE RESEARCH SEMINAR (1-4)

Intensive review of literature in specific areas of concentration. Emphasis is on individual student's research interests. Includes research design and implementation. Prerequisite: graduate standing or permission of instructor.

GERN 561 POLITICS OF HEALTH AND AGING (4)

An examination of U.S. state and local health care and aging policy and administration. Cross-listed as POLS 509.

GERN 582 TEACHING COLLEGE GERONTOLOGY (1-4)

Practical experience of supervised teaching in a college gerontology classroom.
Prerequisite: consent of instructor.

GERN 583 GRADUATE RESEARCH ASSISTANT (1-4)

Students learn advanced research methods and practical research skills under the supervision of a faculty member. Prerequisite: consent of instructor.

GERN 595 SPECIAL STUDIES FOR GRADUATE STUDENTS (1-4)

Students should formulate plans for a project and present them to a faculty member for sponsorship. Special forms for this purpose are available in the department office. Prerequisites: graduate standing and consent of instructor.

Global Studies (GLBL)

GLBL 199 FRESHMAN INTRODUCTION TO GLOBAL ISSUES (1)

A flexibly structured discussion seminar designed to enhance entry-level students' knowledge and analysis of prominent global issues. Students will be required to read and report on globally relevant items from the Christian Science Monitor or other approved daily newspapers with extensive international coverage.

GLBL 300 LOCAL RESPONSES TO GLOBAL ISSUES: CASE STUDIES FROM AROUND THE WORLD (3)

This class examines various ways in which individuals take action to solve global social problems in their own local cultural, political, and economic contexts. Students explore the social structures that create social problems, such as human trafficking and political oppression, and how local people adapt to, and seek to change those structures. Satisfies GE Area D1 (Individual and Society). Prerequisite: a GE Area D5 course.

GLBL 350A SERVING THE GLOBAL COMMUNITY (1)

Students will read a text, such as Arthur Kleinman's "What Really Matters," and discuss what it means to live in a world that cries out for human involvement and service. All people, both in developed and developing countries, live on the edge of survival, at constant risk of going under (due to disease, economic collapse, societal chaos, or simply the aging process itself). In the class, we will discuss the importance of being of service in the global effort to live a quality existence. And we will read about individuals who have taken it upon themselves to serve humanity in one way or another. A few examples include: Muhammed Yunus, founder of the Grameen Bank; Paul Farmer's work with patients with infectious diseases; Al Gore's commitment to the environment; and Millard Fuller, founder of Habitat for Humanity. Cr/NC only.

GLBL 495 SPECIAL STUDIES (1-4)

Directed individual study. Prerequisite: consent of instructor.

GLBL 497 CROSS-CULTURAL COMMUNITY SERVICE INTERNSHIP (3)

A three-unit community service internship is required of all students. This is a supervised program of cross-cultural community service work and study for a governmental or non-governmental agency, completed either at home or abroad. A minimum of 135 hours of supervised work is required. Students will keep a daily journal of their experiences, and upon completion will submit 1) a formal letter from their internship supervisor, verifying hours worked and duties performed; and 2) a four-page essay summarizing their experience in rich personal detail. Information about a broad spectrum of internship options is available from the Global Studies coordinator, whose approval is required for all service internship proposals. Cr/NC only.

GLBL 498 CAPSTONE SEMINAR (4)

In spring of the senior year, Global Studies majors will enroll in a seminar devoted to research on globally relevant issues of the student's choosing, in consultation with the instructor. Each student will produce an original research paper on such an issue, examined from various disciplinary perspectives. This project is the capstone requirement for completion of the Global Studies degree. The paper must be approved in its final draft by at least one other qualified faculty member besides the seminar instructor.

Hebrew (HEBR)

HEBR 101 ELEMENTARY MODERN HEBREW - FIRST SEMESTER (4)

This course offered as the first semester course in Hebrew Program. As such it addresses appropriate material for the beginning level. The course requires no prior Hebrew background. Students are exposed to spoken Hebrew during each class; they are expected to communicate in Hebrew with one another as well as with the instructor.

HEBR 102 ELEMENTARY MODERN HEBREW - SECOND SEMESTER (4)

Hebrew for beginners, second level. Elementary oral expression and fundamentals of grammar, cultural readings, and beginning practice in composition. Prerequisite: JWST 101 or equivalent, or instructor permission.

History (HIST)

HIST 150 HISTORY: CREDIT BY EXAMINATION (3)

Challenge Examination - The state code requirement in world or U.S. history may be satisfied by passing the department's challenge examination. (Dates and times are published at the beginning of each semester.) Instructor consent required.

HIST 201 FOUNDATIONS OF WORLD CIVILIZATION (3)

An introduction to the early, classical, and medieval civilizations that have most influenced the modern world. Developments (from prehistory to 1500 C.E.) include the Eastern traditions of India, China, and Japan; the world of Judaism, Christianity, and Islam; the classical Mediterranean civilizations; tropical Africa; and the medieval and Renaissance cultures of the emerging West. Required of all history majors. Satisfies GE Area D2 (World History and Civilization).

HIST 202 DEVELOPMENT OF THE MODERN WORLD (3)

An introduction to modern and contemporary history from 1500 C.E. to the present. Course material includes the impact of world expansion on the Americas, Africa and Asia; the growth of nationalism and the national state; industrial, political, and social revolutions worldwide; the wars of the 20th century; and decolonization and the conclusion of the Cold War. Required of all history majors. Satisfies GE Area D2 (World History and Civilization).

HIST 241 HISTORY OF THE AMERICAS TO INDEPENDENCE (3)

A comparison of the English, Spanish, and Portuguese colonies in America, from the conquest to independence. Topics include: Native Americans, European background, colonial government, religion, economic policies, social relations, slavery, art and literature, independence movements, and nation building. Satisfies GE Area D3.

HIST 242 HISTORY OF THE AMERICAS SINCE INDEPENDENCE (3)

A comparison of the development of the United States after independence with that of Latin America. Topics include: colonial legacies, political leadership, expansion and conflict, regionalism, economic development, reform and revolution, church and state, race relations, education, and inter-American relations. Satisfies GE Area D3.

HIST 251 HISTORY OF THE UNITED STATES TO 1877 (3)

A general survey of the major developments in U.S. history from the European discovery and colonization of the Western Hemisphere through Reconstruction. Required of all history majors. Satisfies GE Area D3 (U.S. History), and the state code requirement in history.

HIST 252 HISTORY OF THE UNITED STATES SINCE 1865 (3)

A general survey of the major developments in U.S. history from the end of Reconstruction to the present day. Satisfies GE Area D3 (U.S. History) and the state code requirement in history.

HIST 304 HISTORY OF THE ARABS TO 1453 (4)

A study of the Arabic speaking people from the early trading centers of Qataban, Sheba, Petra and Palmyra through the development and spread of Islam to the period of Turkish domination of the Middle East. Particular attention will be devoted to religion, language and literature, and mathematics and science.

HIST 325 INTRODUCTION TO CALIFORNIA HISTORY (3)

This is an overview of California history from the Pre-Columbian Period through the present. The first covers conflict and cultural exchange between American Indians, Spanish explorers and missionaries, Mexican nationals, and other newcomers from the eastern United States and the globe. The second half focuses on the economic, social, cultural, and political developments in the 20th century California.

HIST 335 EARLY CHINA TO 1500 (4)

This course is designed to introduce students to the intellectual, political, social, and economic traditions that helped make the 16th century Chinese state the greatest bureaucratic empire in the world. From the great intellectual efflorescence of the "100 School" period to the far-ranging ocean voyages of the eunuch admiral Zheng He, the course will examine a broad spectrum of topics, including folk religion, gender roles, imperial politics, medicine, art, and literature, among others. The relationship between social, economic, and political developments will be emphasized.

HIST 338 EARLY JAPAN TO 1650 (4)

This course is designed to introduce students to the intellectual, political, social, and economic traditions that underlay the creation of the Japanese emperor system and the rise of warrior government. From the unique aristocratic culture of Heian Japan to the legendary conquests of Hideyoshi, the course will look at a broad range of topics, including religion, gender, politics, art, and philosophy. The course also examines the influence on Japan of Tang China and early modern Europe. The emphasis will be on the relationship between social, economic, political, and cultural forces.

HIST 339 ANCIENT AND COLONIAL LATIN AMERICA (4)

An inquiry into the indigenous cultures of Central and South America and an examination of Spanish, Portuguese, and other European empires in America. Areas of study may include land, labor, religion, culture, slavery, race, gender, trade and economic development, art and literature, and resistance and revolt.

HIST 342 MODERN LATIN AMERICA (4)

A study of the major political, economic, social, and cultural developments in Latin America since independence, with an emphasis on political movements in the 20th century, including revolutions in Mexico, Guatemala, Cuba, and Nicaragua; socialism in Chile; peronismo in Argentina; and modernization in Brazil. The role of the United States in Latin America and modern Latin American art and literature will also be emphasized.

HIST 345 WOMEN'S HISTORY AND WOMEN'S ACTIVISM (3-4)

This course (originates in WGS) will take an activist-historical perspective on the history of American women. We will study historical figures, events, and movements central to the history of feminist activism for equality and social justice. The class will address the politics of writing women into history and documenting the diversity of women's activism. Cross-listed as WGS 365.

HIST 348 RACE AND ETHNICITY IN LATIN AMERICA (4)

The course introduces students to the complexities of race and ethnicity in Latin America. By tracing Latin American historical developments from colonialism through the 21st century, students explore the debates of what the nation is and who its citizens are. Students examine how Arabs, Jews, Japanese, Chinese, Blacks, and the indigenous peoples have positioned themselves in Brazil, Argentina, Peru, Bolivia, Cuba, Mexico, Honduras, Colombia, and Haiti. As these Latin American countries struggle with political instability, as well as economic and social inequality, racial and ethnic questions have become increasingly important in these pluralistic and multiethnic societies.

HIST 349 HISTORICAL THEMES (2-4)

Studies of particular themes, issues, and topics of special interest to general students as well as to majors. May be repeated for credit with different topic.

HIST 351 AMERICAN THOUGHT AND SOCIETY TO 1865 (4)

An introduction to the major ideas, values, and beliefs operative in American history up to the Civil War. Topics include Puritan religion and culture, the revolutionary and constitutional debates, Transcendentalism, and slavery controversies.

HIST 352 AMERICAN THOUGHT AND SOCIETY, 1865 TO THE PRESENT (4)

An introduction to the major ideas, values, and beliefs operative in American history from the Civil War to the turn of the 21st century. Topics include the Social Gospel, pragmatism, socialism, the New Left, feminism, and conservative thought.

HIST 370 HISTORY FORUM (1-4)

A semester lecture series on a specific theme or topic presented by members of the department, other SSU faculty, and guest speakers. May be audited. Open to the public. May be repeated for credit with different topic.

HIST 371 SPECIAL TOPICS AND THEMES IN EUROPEAN HISTORY (2-4)

Studies of particular themes, issues, and topics of special interest pertaining to European History. May be repeated for credit with different topic.

HIST 372 SPECIAL TOPICS AND THEMES IN LATIN AMERICAN HISTORY (4)

Studies of particular themes, issues, and topics of special interest pertaining to Latin American history. May be repeated for credit with different topic.

HIST 375 SPECIAL TOPICS AND THEMES IN AMERICAN HISTORY (1-4)

Studies of particular themes, issues, and topics of special interest pertaining to American History. May be repeated for credit with different topic.

HIST 376 SPECIAL TOPICS AND THEMES IN WORLD HISTORY (2-4)

Studies of particular themes, issues, and topics of special interest pertaining to World History. May be repeated for credit with different topic.

HIST 377 SPECIAL TOPICS AND THEMES IN ASIAN AND PACIFIC HISTORY (4)

Studies of particular themes, issues, and topics of special interest pertaining to Asian and Pacific History. May be repeated for credit with different topic.

HIST 380 TWENTIETH CENTURY WORLD (3)

An exploration of the origins and development of 20th century ideas, institutions, and systems in global perspective. Forces that have united and divided the contemporary world community are examined: imperialism, science, democracy, communism, nationalism, militarism, racism, cultural traditionalism, and technological disparities. Satisfies upper-division GE Area D2 (World History and Civilization). Prerequisite: juniors and seniors only.

HIST 382 THE MEDITERRANEAN WORLD, 1400-1700 (4)

A study of the Mediterranean region in the early modern era. The course considers economic, political, social, and cultural interaction in the region. Topics covered include the Ottoman Empire, Iberian expansion into North Africa, the Spanish reconquista, and naval warfare and piracy. History majors may consider this an upper-division European history elective.

HIST 383 THE ATLANTIC WORLD, 1450-1800 (4)

Focusing on the development of institutions and spread of movements that connected Western Africa, Northern Europe, North America, the Caribbean, and South America in a transatlantic context from 1500-1800, this course considers the topics of state formation, revolutions, empire, migration, religion, economy, race, class, and gender in an Atlantic framework. Although the course emphasizes the early modern period, additional consideration is given to the issues facing the Atlantic community in the modern era.

HIST 391 THE STUDY OF HISTORY (4)

An examination of various philosophies and methodologies that have shaped historiography. Consideration is given to the relationship between the historian and the climate of opinion, to varying interpretations of historical events, to the place of history as a literary art, and to the techniques of historical research and writing.

HIST 400 THE ROMAN REPUBLIC (4)

A history of the Roman people from prehistory through Julius Caesar. The course covers political, economic, social, and cultural change in Rome's transition from a village of mud huts to Mediterranean empire.

HIST 401 THE ROMAN EMPIRE (4)

A history of the Roman Empire from Octavian to 476 C.E., covering political, economic, social, and cultural change in Rome's transition from Mediterranean and European empire to the collapse of the empire in the West.

HIST 405 ANGLO-SAXON ENGLAND (4)

This course covers development and change in the political, economic, social, and cultural institutions of Anglo-Saxon England from the settlement and conquest period (ca. 400 C.E.) to the Norman Conquest in 1066.

HIST 406 THE CRUSADES (4)

A study of the Crusades provides a microcosm of trends and assumptions in the Europe of the High Middle Ages. The course will focus on interrelationships of church, political structures, economy, and military structures, with special attention on the First, Fourth, and Sixth Crusades (1095-1270).

HIST 408 THE EARLY MIDDLE AGES (4)

The Early Middle Ages in Europe from 300-1000. The fusion of classical, Christian, and Germanic tribal elements to develop medieval civilization. The course covers political, economic, social, and cultural change from the time of Constantine to 1000.

HIST 409 THE HIGH MIDDLE AGES (4)

Medieval civilization from 1000-1400. The course includes the conflict of church and state, growth of national monarchies, the agricultural revolution and growth of commerce, the flowering of medieval culture, and the devastations of the 14th century.

HIST 410 EARLY MODERN EUROPE, 1350-1789 (4)

This course offers a comparative study of states and society in Western Europe from the Renaissance to the French Revolution. Topics include the persistence of the humanist tradition, European exploration and conquest, religious reform and ideology, the rise of science, and the crisis of culture and social relations. The emphasis in these centuries that shaped the modern world is social and cultural, but political and intellectual issues are also considered in depth.

HIST 411 THE ENLIGHTENMENT TO WORLD WAR I (4)

A political, social, and cultural history that explores the origins of modern Europe. Topics include the Scientific Revolution, the Enlightenment, the French Revolution, the Industrial Revolution, the impact of Europe on the world, the growth of liberalism and socialism, and the causes of World War I.

HIST 412 EUROPE SINCE 1914 (4)

An overview of 20th century European history and culture. Topics include: the impact of World War I; the appeal of totalitarian systems: communism, fascism, Nazism; Europe's "suicide" during World War II; the reconstruction of Europe; the Cold War; economic integration; and Europe's cultural impact since 1914.

HIST 414 GENDER AND SOCIETY IN EARLY MODERN EUROPE (4)

This course examines the role of gender in early modern Europe from the late Middle Ages to the end of the 18th century. Topics include religion, law, labor, social, and family relations. The course also considers the impact of major historical developments such as the Renaissance, Reformation, Scientific Revolution, industrialization, and the rise of the modern state on gender relations.

HIST 415 EASTERN EUROPE, 1815-1918 (4)

A survey of Eastern European history from the end of the Napoleonic Wars to World War I. Major topics include the collapse of the Austro-Hungarian, Russian, and Ottoman Empires; nationalism; industrialization; fin-de-siecle cultural ferment; and the origins and impact of the Great War.

HIST 416 EASTERN EUROPE, 1918-1989 (4)

A survey of Eastern Europe from the end of World War I to the collapse of communism. Major topics include the creation of the new states; nationalism; socialism; the Holocaust; Stalinism; the anti-Soviet uprisings in Warsaw, Budapest, and Prague; and the revolutions of 1989.

HIST 417 RUSSIAN EMPIRE (4)

A survey of Russian history from the origins of Kievan Rus in the 9th century to the Russian Revolution of 1917. Major topics include the Mongols; the development of the Russian autocracy; Orthodoxy; serfdom; the exploration and colonization of Siberia, Central Asia, and Alaska; and Russia's alleged peculiarity vis-à-vis the West.

HIST 418 FALL OF EUROPEAN COMMUNISM (4)

A survey of Eastern European and Russian history from Prague Spring in 1968 to the election of Vladimir Putin in 2000. Major topics include the dissident movement, the economic failures of communism, the East German Stasi and the Soviet KGB, the political upheaval of 1989 and 1991, and the ethnic conflict in the Balkans.

HIST 419 SOVIET UNION (4)

A survey of Soviet history from the Russian Revolution of 1917 to the collapse of communism in 1991. Major topics include the revolutionary upheaval of 1917, Soviet policies toward national minorities and religious groups, Stalinism, socialist realism, World War II, the "developed socialism" of the Khrushchev and Brezhnev years, the Cold War, and Gorbachev's glasnost and perestroika reforms.

HIST 420 THE FRENCH REVOLUTION (4)

A consideration of the causes, events, and results of a key event in French history. The course also examines conditions in 18th century France and the historiography of the French Revolution.

HIST 422 IMPERIAL SPAIN (4)

Examines Spain and the Spanish world from 1400 to 1700. Includes Spanish expansion and empire building worldwide, as well as the economic, political, and social history of Spain itself.

HIST 423 SPANISH CIVIL WAR (4)

This course provides an overview of the political, economic, and social circumstances of Spain's late 19th and early 20th century, as well as a detailed examination of the war years and their immediate aftermath. It also examines the significance of the war within the larger context of European history.

HIST 424 TOLERANCE AND INTOLERANCE IN EUROPE, 500-1500 (4)

What are the roots of tolerance, and intolerance, in Western Europe? This course is a survey of the philosophical, ecclesiastical, legal, cultural, and social attitudes toward and treatment of minorities in Western Europe from the end of the Roman Empire forward.

HIST 425 BRITAIN, 55 B.C.E. TO 1399 C.E. (4)

A survey of the sources and development of political, economic, social, and cultural institutions from the Roman invasion of Celtic Britain to the ouster of Richard II. Some topics include the merging of Celtic, Roman, and Anglo-Saxon cultures; the development of local self-government and law, the effect of Christianization; Viking invasions and royal government; the rise of towns and commerce; the effects of the Norman invasion; transition from personal rule to centralized government, the growth of Parliament, the Hundred Years' War; the Black Death; and the economic disruptions of the 14th century.

HIST 426 BRITAIN AND IRELAND, 1399-1714 (4)

This course considers the social, political, religious, and cultural development of Britain and Ireland from the late Middle Ages to the beginning of empire and industrialization. Topics include the Tudor revolutions in government and religion, relations between kings and parliaments, the evolution of toleration, and ideas about rights and liberty. Special consideration is given to the interaction of the three kingdoms (England, Ireland and Scotland) in the formation of Great Britain and the role of that interaction in the emergence of the British Empire.

HIST 428 MODERN BRITAIN, 1714-PRESENT (4)

The study of the evolution of British society from the beginning of the 18th century to the present. Major political, economic, social, and cultural developments are covered including industrialization and the rise of the working class; the emergence of imperial Britain; the Irish Question; the rise of welfare state; and the role of decolonization, diversity, and devolution in the emergence of contemporary Britain as well as its place in a united Europe.

HIST 430 HISTORY OF THE MAYA (4)

This course will study the development of complex society in the parts of Mesoamerica dominated by speakers of Maya languages. These peoples first appear in the archaeological record in the middle of the first millennium BCE and persist to the present. The course will include consideration of the experience of the Maya through the period of Spanish contact to the present but will focus on aspects of Maya culture in the Classic period, from about 100 BCE to 800 CE.

HIST 432 SEMINAR IN U.S. ECONOMIC HISTORY (4)

Economic development of the United States since the Revolution. Topics to be covered include capital formation and the growth of business concentration, distribution of national income, problems of agriculture, growth of the labor movement, patterns of inflation and depression, and the impact of international relationships on U.S. economic development. Prerequisite: ECON 201A or 201B or consent of the instructor. This course fulfills the History Major Core Senior Seminar requirement. Course open to juniors, seniors and graduate students only.

HIST 433 HISTORY OF MEXICO (4)

A study of the Mexican people from the early native cultures to the present, with particular emphasis on the Mexican Revolution of 1910 and the major political, social, economic, and cultural developments of modern Mexico. Includes major Indian cultures, the Conquest, religion and the Catholic church, literary and artistic expressions, machismo and women, and relations between Mexico and the United States.

HIST 435 HISTORY OF MODERN CHINA (4)

Explores the profound changes that have taken place in China from around 1600 to the present, including the apogee and decline of the imperial system, the encroachments of the West, the failure of Republicanism, the rise and eventual victory of the Chinese communists, and the consequences of China's adoption of a market-based economy in the 1980s.

HIST 438 MODERN JAPAN (4)

Traces the development of Japanese society from earliest times to the present. While some attention will be given to early aristocratic culture and the emergence of the warrior elite, emphasis will be on the period after 1600, particularly the emergence of Japan as an international power after 1868 and economic success since World War II.

HIST 445 TOPICS IN AMERICAN WOMEN'S HISTORY (4)

Course will address the history of women in America from one of several topical or regional perspectives. Topics may include law, women, and family in American history; women and work in American history; or women in the American West. When the class is offered, prospective students should consult the departmental descriptions for the periods and topics to be covered. May be repeated for credit with different topic.

HIST 446 WOMEN IN AMERICAN HISTORY (4)

A study of the status and role of women in America from the pre-colonial period to the present. Special attention will be given to the educational, labor, and political reforms of the 19th century, women's associations, and the various "waves" of women's rights and feminist activism.

HIST 447 QUEER THEORY, QUEER LIVES (4)

This interdisciplinary course (originates in WGS) offers advanced work in queer studies by looking at the production of theories about same-sex sexualities in history, culture, and politics. The course presents queer theory in conjunction with critical race theory, feminist theory, and post-colonial studies. Cross-listed as WGS 455.

HIST 449 GENDER AND SEXUALITY IN LATIN AMERICA (4)

This course examines the changing definitions, institutions, and behaviors related to gender, sexuality, and the formation of families in Latin America from indigenous civilizations to contemporary societies. The course explores how women handled the transition from European colonies to nation-states and how various Latin American men and women in the 20th century were able to position themselves in "traditional" nation-states. The course concludes by evaluating the social, economic, and political changes in Latin America and contemporary social movements. This course is cross-listed as WGS 449.

HIST 450 COLONIAL AMERICA (4)

A study of the European derived societies and cultures in those parts of North America that later became the United States from the beginnings of European expansion until 1763. Topics may include European backgrounds; relations with native peoples; cultural mixing; labor systems; gender relations; and political, social, and economic characteristics and changes.

HIST 451 THE AMERICAN REVOLUTION AND THE EARLY REPUBLIC (4)

A study of the political, economic, and social institutions and conditions during the long period that included the War of American Independence, the contest between federalism and anti-federalism in the newly-independent United States before 1789, and the emergence of a paradoxical American nation notable for a devotion to chattel slavery and to liberty as well as for technological achievements represented by the Erie Canal.

HIST 452 ANTEBELLUM AMERICA (4)

A study of 19th century American society and politics before the Civil War. Topics may include the market revolution, the commercialization of agriculture, territorial expansion and its implications for chattel slavery and Indian policies, the religious movements, reform movements, the emergence of the women's rights movement, and the lure of the West.

HIST 454 CIVIL WAR AND RECONSTRUCTION (4)

A study of the causes and consequences of the Civil War, the struggles of the Reconstruction era, and the transformation of American society and politics in the period between 1850 and the end of Reconstruction.

HIST 456 THE EMERGENCE OF MODERN AMERICA (4)

A study of the major intellectual, cultural, religious, and social developments in the late 19th and early 20th century United States. Explores how what materialized in this era — particularly the consumer revolution, professionalization, and secularization — created a modern American culture and a particular set of problems we still deal with today. This is a reading-intensive course that requires students to have a basic working knowledge of the period.

HIST 457 AMERICA THROUGH DEPRESSION AND WAR (4)

A study of the causes and consequences of the Great Depression, U.S. involvement in World War II, and the advent of the Cold War. Explores the extent to which the challenges of the first half of the 20th century reshaped the United States socially, politically, economically, and culturally, particularly in regard to education, race, ethnicity, gender, and international political participation.

HIST 458 MODERN AMERICA SINCE WORLD WAR II (3-4)

A study of political, social, economic, diplomatic, and cultural change at home and in international affairs as the United States took on a greater role as a global super-power after 1960. Topics may include the Vietnam War, civil rights, student protest, environmental issues, international regional military interventions, feminism, the end of the Cold War, the new conservatism of the 1980s, and the concerns of terrorism.

HIST 467 LANDSCAPES OF THE AMERICAN WEST (3)

Use of and interactions with natural resources have transformed the American West over time, and greatly affected the western environment as we know it today. This seminar takes a historical look at the settlement, development, and management of the western landscape, both in terms of natural resources (timber, water, grazing, parks etc.) and in terms of cultural settlement and use - and considers landscape as a tool for understanding the cultural/social/political history of a place. Students can expect to do some serious reading, writing, and thinking about how and why the West has become such a distinctive natural and cultural landscape. (Course originates in ENSP.) Prerequisite: juniors, seniors, and graduate students only or consent of instructor. Cross-listed as ENSP 421.

HIST 468 BLACKS IN AMERICAN HISTORY (4)

A study of African culture, social philosophy, and political influences in the United States from the pre-Colonial period through the present day. Major emphasis will be placed on black political philosophies and strategies during the periods of Reconstruction, WWI and WWII, the civil revolts of the 1960s, and the contemporary period of political activism.

HIST 469 RELIGION IN AMERICA (4)

An overview of religious beliefs, institutions, and practices from 1630 to the present. Covers major trends in American religion as well as fringe movements, examining the central questions of church and state, religious freedom, and the impact of democracy, science, consumer culture, and professionalization on religious life in America.

HIST 470 THE AMERICAN SOUTH (4)

A regional history of the southeastern United States. The course examines the South from its Native American origins to its antebellum opulence, from the devastation of the Civil War to the development of the modern Sun Belt. An important sub-theme of the class is the journey of African Americans.

HIST 471 THE AMERICAN WEST (4)

A regional history of the trans-Mississippi west. Major political, social, and economic events relating to the Western United States are explored.

HIST 472 CALIFORNIA HISTORY I (4)

Study of California history from the period of European contact through the early years of the 20th century. Special attention is given to the origins, means, and consequences of Spanish expansion into Alta California, to the emergence of Mexican California, and to its accelerated Americanization after the Treaty of Guadalupe-Hidalgo. The closing weeks of the course will include attention to themes that, though rooted in the earlier period, continue to shape present-day California. Among those themes are water policies, immigrations, and the consequences of California's great size and of its location on the Pacific.

HIST 473 CALIFORNIA HISTORY II (4)

Develops a historical perspective on major political, economic and social issues from the early 20th century "invention of California" through depression, war, and prosperity to the challenges of continuing growth and declining resources today.

HIST 474 THE DARWIN WARS: SCIENCE AND RELIGION IN AMERICAN HISTORY (4)

Covers the relationship between science and religion in American thought and culture from the early 19th century through the 20th century. Natural theology, the impact of Darwin, the higher criticism, and culture wars are some of the topics covered in this course.

HIST 477 AMERICAN SOCIAL HISTORY (3-4)

Selected review of the social history of the American peoples. Topics may include social mobility, class structure, social movements, gender roles, race, ethnicity, generational differences, the "American Dream," and individualism.

HIST 482 JUDAISM AND CHRISTIANITY IN THE FORMATIVE PERIOD (4)

The course focuses on the history of Palestine, Judaism, and Christianity in the period from the Babylonian Exile in 589 B.C.E. to the Council of Nicea in 325 C.E. This is the critical formative period for the development of Judaism and Christianity. The course devotes particular attention to the historiography of Jewish and Christian documents written during this period especially two sets of documents that have been discovered in the 20th century and which have led to a reevaluation of many aspects of Judaism and Christianity: the Dead Sea Scrolls found at Qumran and the Gnostic materials found at Nag Hammadi in Egypt. This course fulfills the History major core senior seminar requirement. Class open to juniors and seniors only.

HIST 487 INTRODUCTION TO EGYPTIAN LANGUAGE AND CULTURE (4)

This course is an introduction to the Egyptian language and its hieroglyphic and hieratic writing system. Students learn to read a story written in Middle Egyptian, the classical language of ancient Egypt. This is the version of the language that was the literary and administrative language from about 2250 to about 1350 B.C.E. The study of the language and writing systems is used to introduce students to related aspects of Egyptian culture and history.

HIST 495 SPECIAL STUDIES (1-4)

Individualized studies in historical topics, themes, periods and/or areas beyond the scope of the established curriculum. Open from 1 to 4 units as determined by the department faculty sponsor. Not to be used as a substitute for HIST 498 Senior Seminar. For additional information, please consult the comments on special studies, page 315. May be repeated for credit.

HIST 496 HISTORY JOURNAL (2)

This class will cover all aspects of scholarly journal publication, including management, editing, setting up and implementing an anonymous review system, selection of manuscripts, layout, budgeting, production, sales, and distribution. Students will publish the department student history journal as the final result. May be repeated for credit. Cr/NC only.

HIST 497 INTERNSHIP IN HISTORY (1-6)

Field experience in city, county, state, and federal agencies and with private business and community organizations. May be repeated for credit. Prerequisite: prior arrangement with instructor.

HIST 498 SENIOR SEMINAR (4)

Directed studies in a seminar setting on a particular topic or theme (please see Schedule of Classes for the specific topic selected by the instructor). Combines secondary reading and original research leading to the completion of a research project. Course open to juniors and seniors and graduate students only. May be repeated for credit.

HIST 499 HISTORY HONORS SEMINAR (4)

Individualized studies for advanced undergraduates with at least a 3.50 GPA who want graduate-level academic experience and the honors designation at graduation. Students develop a critical research project in cooperation with a faculty advisor, present their findings, and write a critique of another research paper. Prerequisites: 3.50 GPA, completion of specific major courses, proficiency in a second language, and permission of instructor and advisor. This course is not part of major requirements. Consent of department required.

HIST 500 HISTORICAL METHODS (4)

Workshop course providing practice in archival research, oral history, descriptive statistics, cultural material analysis, and other historical techniques. Recommended for new graduate students, including ITDS.

HIST 510 GRADUATE PRO-SEMINAR (4)

Readings and projects on topics within a common frame of reference, as arranged by instructor and participating students.

HIST 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

HIST 593 GRADUATE INTERNSHIP (2-4)

Experience in professional history, typically in museums, historical societies, and other public history settings, as well as junior college internship programs. Students will produce a professional product, such as a curated exhibit; a research report; a course syllabus; or finding aid. Cr/NC

HIST 595 SPECIAL STUDIES (1-4)

Individualized studies in historical topics, themes, periods and/or areas beyond the scope of the established curriculum. Prerequisites: graduate status and prior arrangement with faculty sponsor and graduate advisor.

HIST 596 RESEARCH AND TEACHING ASSISTANT (1-2)

Directed participation and experience in developing teaching methods, course organization, and research techniques. Prerequisites: advanced graduate status and consent of instructor and graduate coordinator.

HIST 597 GRADUATE SEMINAR: HISTORICAL THEMES AND ISSUES (3-4)

Advanced studies and/or research projects relating to students' theses or field exam topics. Emphasis upon professional historical writing. Prerequisites: completion of 15 graduate course units and admission to candidacy. Non-majors only with permission of instructor.

HIST 598 COMPREHENSIVE EXAMINATION READING AND RESEARCH (3-6)

Directed reading and research activities. Open only to graduate students with classified standing in history who have selected the comprehensive examination option for the M.A. degree. Preferably taken for credit during the semester in which the comprehensive examinations are scheduled. Prerequisite: classified graduate standing in the history comprehensive option for the M.A. Should be taken for each of the two comprehensive examination fields for a total of 6 units.

HIST 599 MASTERS DEGREE THESIS RESEARCH (6)

Extensive individual research and writing project under the direction of the student's thesis committee chair. Preferably taken for credit during the semester in which the M.A. thesis is scheduled for submission in final form. Prerequisites: classified graduate standing in the history thesis option for the M.A. and an authorized Advancement to Candidacy form.

Human Development (HD)**HD 318 HUMAN DEVELOPMENT: SEX AND THE LIFE CYCLE (3)**

An examination of developmental and evolutionary aspects of human reproductive biology and behavior from fetal through adult stages. Sexual selection and life history perspectives on fetal sex differentiation, gender identity, sex role development, puberty and secondary sexual characteristics, and mate choice. Satisfies GE Area E (The Integrated Person). Prerequisite for Anthropology majors: ANTH 201. Prerequisite for non-majors: ANTH 201, BIOL 110, BIOL 115, or consent of instructor.

HD 391 SEMINAR IN HUMAN DEVELOPMENT (2)

This seminar introduces majors to the interdisciplinary study of human development. It covers major figures in life-span developmental; comparative cross-species, cross-cultural, and multicultural; and class and gender perspectives. Open to human development majors. Prerequisite: junior-level standing. Grade only.

HD 490 SENIOR PROJECT (1)

A senior capstone course devoted to senior projects required of Human Development students. Prerequisites: admission to the Human Development major, graduating senior, and completion of HD 391.

HD 495 SPECIAL STUDIES (1-4)

The Human Development major encourages independent study as preparation and practice for life-long self-directed learning. Students should formulate plans in consultation with a faculty member. Special forms for this purpose are available in the department office. These should be completed and filed during the add/drop period. Prerequisite: upper-division Human Development major or consent of instructor. Cr/NC only.

HD 496 AGENCY INTERNSHIPS (1-4)

Agency Internship to allow students in Human Development to do supervised internships in a variety of educational and social service settings. Prerequisites: admission to the Human Development major and consent of instructor.

Humanities (HUM)

HUM 200 WRITTEN AND ORAL ANALYSIS (3)

Students practice the techniques of critical reading and thinking, of expository writing, and of oral expression. They examine the principles of thinking, speaking, and writing, with a view to the multitude of purposes for which these activities are crucial. Satisfies GE Area A1 (Written and Oral Analysis). Prerequisites: completion of GE Areas A2 and A3.

HUM 395 LITERATURE, ARTS, AND EDUCATION (1-4)

Students will work individually or in teams to present enrichment activities and curriculum to local schools in the Rancho-Cotati School District. Students may do this in conjunction with a current class they are taking or as an independent project.

HUM 460 TEACHING ASSISTANT IN HUMANITIES (1-3)

Provides students experience in assisting an instructor in an Humanities course by doing course-related research and tutoring.

HUM 495 SPECIAL STUDIES (1-3)

Independent study designed in consultation with an instructor. Students must complete the standard SSU form. Prerequisite: consent of instructor.

Hutchins School of Liberal Studies (LIBS)

LIBS 100 THE CRAFT OF WRITING (2)

A course designed to help students who are experiencing difficulties with writing. While the craft of writing will be emphasized (punctuation, sentence construction, word choice, paragraph and essay organization, etc.), the course will also address how the craft of writing can become the art of persuasion and self-expression.

LIBS 101 THE HUMAN ENIGMA (12)

Drawing on materials about small-scale societies, ancient cultures, and contemporary civilizations; this course concentrates within a comparative framework on the development of cultural values, the concept of human nature, the growth of self-awareness, and the emergence of ethical and political thought. Prerequisite: a passing score on the EPT. This course fulfills GE Area C1 (Fine Arts, Theatre, Dance, Music, Film)

LIBS 102 IN SEARCH OF SELF (12)

This course focuses on the individual, exploring how personal history, unconscious processes, and political and historical environments shape the concept of the self. This course develops a fuller understanding of these influences through scientific investigation, historical exploration and creative expression, employing materials drawn from biology, psychology, sociology, literature, history, politics, and the arts. This course fulfills GE Area E (The Integrated Person).

LIBS 160A HUMANITIES LEARNING COMMUNITY (4)

LIBS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

LIBS 160B HUMANITIES LEARNING COMMUNITY (4)

LIBS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

LIBS 201 EXPLORING THE UNKNOWN (12)

An investigation of the meaning and limits of knowledge with respect to the nature of the mind and physical reality. These issues are pursued through several different but interrelated fields of study including the following: literature, art, philosophy, comparative religion, and science. The course considers Newtonian and quantum mechanical theories of physical reality, the religions of various cultures, and the functions of myth. The term includes a section focusing on the nature of human creativity.

LIBS 202 CHALLENGE AND RESPONSE IN THE MODERN WORLD (12)

An examination of modern accomplishments and problems that have derived from several sources: the 18th century mechanical models, the Scientific and Industrial Revolutions, and the rise of modern economic theories. This course asks how it is possible in the 21st century to live a moral life and examines the rise of individualism, the tension between personal and social values, the problems of poverty and the distribution of wealth, and the multiple consequences of modern technology upon the human and natural environments.

LIBS 204 MINORITIES IN AMERICAN CINEMA (4)

This course is designed to examine the fundamental beliefs, assumptions, and “self-evident” truths that serve as the foundation for American culture, and then to consider those truths in light of challenges provided by multicultural perspectives. Our primary focus will be the representations of racial minorities in American cinema from the beginning of the 20th century up to the present day. Applying an interdisciplinary and multicultural approach, we will investigate the depictions of race, racial identity, and interracial relationships in both mainstream (Hollywood) and alternative cinemas. We will supplement our inquiry through related works of literature and drama, in addition to readings in film theory, film history, and critical cultural studies. Thus, even as we consider the historical truths of American culture, these “truths” will be consistently interrogated and reformulated by examining the representations of minority figures and groups in American cinema.

LIBS 302 INTRODUCTION TO LIBERAL STUDIES (3)

An interdisciplinary ‘gateway course’ examining the meaning of a liberal education, emphasizing seminar skills, oral and written communication, and introducing the portfolio. It is taken with LIBS 304 or 308 in the first semester of upper-division study. (These are the prerequisites for all upper-division Hutchins courses.) Successful completion of LIBS 302 is required to continue in the Hutchins program. Students must earn a grade of C or higher to continue in Hutchins.

LIBS 304 WE HOLD THESE TRUTHS (3)

The first course in a two-semester sequence, designed to examine fundamental beliefs, assumptions, and “self-evident” truths that serve as the foundation for American culture and politics, and then to consider those truths in light of challenges provided by multicultural perspectives.

LIBS 305 HUTCHINS FORUM (1)

There are two main objectives of the Hutchins Forum. One is to serve as a learning community among Track I students (majoring in Liberal Studies, not pre-credential). Every other week the Forum functions as a sort of “headquarters” for advising or “laboratory of ideas” to assist students on elaborating the meaning of a Liberal Studies education. And, if they are so inclined, to facilitate their focus on a project or to define their own career interests or academic concentrations. Secondly, in the intervening weeks, the Hutchins Forum also serves as a learning community for the entire Hutchins School. This is accomplished by inviting faculty, alumni, and students to share their insights or research with the Hutchins community.

LIBS 307 LECTURE SERIES (2)

Lecture series. Topics vary.

LIBS 308 THE PRACTICE OF CULTURE (3)

The second course in a two-semester sequence, designed to raise critical questions regarding cultural practices in a variety of settings. Topics may include non-Western cultures, cross-cultural issues, popular culture, and global politics.

LIBS 312 SCHOOLS IN AMERICAN SOCIETY (3)

Students will explore basic issues inside the American educational system while fulfilling the state-mandated classroom experience requirement for admission to the credential program.

LIBS 320A ELECTIVE SEMINAR CORE A (3)

Courses under this core area focus on the relationship between the individual human societies. The moral and ethical underpinnings of our patterns of social interaction are investigated with special attention paid to how these affect race, gender, and class relations. Of particular importance to social scientists are questions concerning whether the goals of human dignity, political justice, economic opportunity, and cultural expression are being enhanced or destroyed by specific historical developments, cultural practices, economic arrangements, and political institutions. Examples of seminars in Core A: Postmodernism, Quest for Democracy, and Conspiracy Theories. Prerequisite: LIBS 302 prior or concurrently, or LIBS 202 prior. May be repeated for credit.

LIBS 320B ELECTIVE SEMINAR CORE B (3)

Included in this core area are courses that deal with science and technology and their relationship to the individual and society. Students build upon their understanding of the sciences and come to grips with some of the crucial issues posed by our culture’s applications of science and technology. Students write on topics which address scientific aspects of social issues, the contribution science makes to understanding issues of personal concern, and science as a social endeavor. Examples of seminars in Core B: Health and Healing, Machine as Metaphor, Global Food Web, and The Future of Energy. Prerequisite: LIBS 302 prior or concurrently, or LIBS 202 prior. May be repeated for credit.

LIBS 320C ELECTIVE SEMINAR CORE C (3)

Through the arts and humanities we explore what and why humans create. Courses focus on the broad range of experiences in novels, poetry, drama and other literary forms; the visual arts; languages; architecture; music; dance; the writings of philosophers; and the thought and literature of the world’s religions. Study in the arts and humanities explores the inner world of creativity and individual values as well as the questions about how we arrive at a sense of meaning and purpose, ethical behavior, and a sense of beauty and order in the world. Examples of seminars in Core C: Earth Art, African Art, Memoir, Countercultures, and Minorities in American Cinema. Prerequisite: LIBS 302 prior or concurrently, or LIBS 202 prior. May be repeated for credit.

LIBS 320D ELECTIVE SEMINAR CORE D (3)

Courses in this core area deal with such issues as the study of biology as it relates to psychology, consciousness, and perceptions of reality; meaning-making as a necessary human achievement; and identity formation as it is understood in the light of developmental psychology. Examples of seminars in Core D: Madness and Civilization, Death and Dying, Personal Geographies, and Empathy. Prerequisite: LIBS 302 prior or concurrently, or LIBS 202 prior. May be repeated for credit.

LIBS 321A ELECTIVE COURSE IN CORE A (3)

Courses in this area satisfy seminar requirement.

LIBS 321B ELECTIVE COURSE IN CORE B (3)

Courses in this area satisfy seminar requirement.

LIBS 321C ELECTIVE COURSE IN CORE C (3)

Courses in this area satisfy seminar requirement.

LIBS 321D ELECTIVE COURSE IN CORE D (3)

Courses in this area satisfy seminar requirement.

LIBS 327 LITERACY, LANGUAGE AND PEDAGOGY (3)

This course for pre-credential multiple subject students looks at the importance of literacy and language arts in the contemporary world, including the value of writing and literature in the classroom, as well as the significance of literacy as a broader educational and social issue. Students will develop a pedagogy of grammar, examine the use of literature and the written word in the classroom, and create and teach a classroom grammar lesson.

LIBS 330 THE CHILD IN QUESTION (3)

A close inspection of child development and elementary school pedagogy, emphasizing relevant social and cultural factors as well as major theoretical views of physical, emotional, and personality growth. Subjective views of childhood experience will be contrasted with observations. Readings from Erikson, Freud, Hall, Goodall, and others.

LIBS 336 SPECIAL TOPIC WORKSHOPS (1-4)

Topics will vary from semester to semester. Course may be repeated for credit. Topics can only be repeated with permission.

LIBS 337 SPECIAL LITERARY PROJECT (2)

Faculty proposed special projects. For students working on faculty-initiated research projects.

LIBS 338 SPECIAL ART PROJECT (2)

Faculty proposed special projects. For students working on faculty-initiated research projects. May be repeated for credit.

LIBS 339 SPECIAL DRAMA PROJECT (2)

Faculty proposed special projects. For students working on faculty-initiated research projects. May be repeated for credit.

LIBS 340 SPECIAL SCIENCE PROJECT (2)

Faculty proposed special projects. For students working on faculty-initiated research projects. May be repeated for credit.

LIBS 341 ZEPHYR PUBLICATION (1)

In this course we will be putting together a Volume of Zephyr, the Hutchins Literary Journal. Students will create the thematic structure and recruit written and visual work from the entire Hutchins Community (including lower- and upper-division students, faculty, staff, degree completion students, masters students, and alumni). Students will also make all decisions regarding selection and editing, as well as organization and layout. The semester will culminate with the publication and distribution of Zephyr and the organization of a public reading for the Hutchins community. This course is repeatable.

LIBS 342 HUTCHINS COMMUNITY ART SHOW PREPARATION (1)

This course will give students a forum to create a Hutchins Community Art Showing. During class time, students will choose the dates and venue for the art showing, secure the necessary venue, publicize the event, create a call for entries, process the entries, decide which entries will be shown, hang show, plan and conduct reception, take down show. This course may be repeated for credit.

LIBS 360 SPECIAL TOPIC WORKSHOPS (1-2)

Topics will vary from semester to semester. Cr/NC only.

LIBS 361 HUTCHINS PEDAGOGY PROJECT (2)

The Hutchins Pedagogy Project workshop will combine project-based learning, Web CT, and in-class training to teach Hutchins students (future teachers) how to implement seminars and/or act as tutors in elementary, AVID, and high school classrooms. Hutchins students will use individual and small group work in addition to whole-class seminar discussions to increase critical thinking and collaboration skills of students in local Sonoma County classrooms.

LIBS 370 SEMINAR: CREATIVE PROCESS (2)

A series of exercises designed to give students fuller access to their capacities and to provide practice in putting those capacities to productive use — in the arts, in problem solving, and in daily life.

LIBS 371 SEMINAR: SELF-AWARENESS (2)

Methods of exploring and expanding self-awareness vary from semester to semester, and may include such techniques as autobiography, intensive journal-keeping, Gestalt exercises, dream analysis, and meditation.

LIBS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Students volunteer for unpaid placements within the community approved by the coordinator of the Hutchins Internship/Field Experience Plan. These placements include work in social service, education, and the media. Students participate in four meetings per semester focusing on work-related issues; they also prepare a short paper about their placement and keep a time log. Students may take up to 6 units in CIP, a maximum of 4 in any one semester. One unit is equivalent to 30 hours of volunteer work per semester. Units count as electives for graduation. They may not be applied to the Hutchins major requirement. For the University's CIP regulations, please see page 304. Cr/NC only.

LIBS 396 FIELD STUDY (1-4)

Field Study for juniors and seniors is a project conducted outside of the University classroom setting that is taken for credit/no credit. It may include work that is literally outside in the field, or other hands on experience (e.g., a research study). Field Study projects are co-designed by a student and a sponsoring faculty member; or a faculty member may design a project, with student participation solicited. A student consults with a faculty member on the project and develops a plan of study including number of units, project outcomes, number of meetings with the faculty sponsor, and deadline for completion. A Project Contract is submitted to Admissions after the beginning of the semester and before the last day to add classes. Consent of instructor. Cr/NC only.

LIBS 397 STUDY AWAY (1-4)

Study Away for both juniors and seniors is an educational experience that occurs away from SSU that is taken for credit/no credit. This might include study in the U.S. or abroad in an exchange program or an independently designed project. Study Away projects are co-designed by a student and a sponsoring faculty member or committee, with the terms of study and the expected outcomes written in contract form. A written report is required for Study Away projects upon completion. It is suggested that you begin the planning process early in the semester before you will undertake Study Away. The student must also follow University policies for leaving campus for Study Away. Required forms and procedures are available in the International Studies office. These forms must accompany the Project Contract and the Project Form to be signed by the sponsoring faculty and the Hutchins Provost. Prerequisite: completion of LIBS 302.

LIBS 399 STUDENT-INSTRUCTED COURSE (1-2)

The Hutchins faculty welcome proposals from students in the final stages of the major who, in consultation with a faculty advisor, would like to design and offer an interdisciplinary seminar on a topic of special interest to them. Guidelines for student-instructed courses are available in the Hutchins office. Students may count two student-instructed courses as elective units in the Hutchins major. Cr/NC only.

LIBS 402 SENIOR SYNTHESIS (4)

A capstone course required for the Hutchins major. Drawing on the papers collected for his or her portfolio, the student prepares a major paper and a Senior Project synthesizing aspects of that individual's own intellectual development. Each student makes an oral presentation of his or her project at the end of the semester. Must be taken in the student's final semester in the major.

LIBS 403 SENIOR SYNTHESIS-STUDY AWAY (4)

A capstone course required for the Hutchins major. Drawing on the papers collected for his or her portfolio, the student prepares a major paper synthesizing aspects of that individual's own intellectual development. This is done in a study away situation. Also available for students choosing a minor in Hutchins.

LIBS 410 INDEPENDENT STUDY (1-4)

Independent Study for seniors is an individualized program of study taken for a letter grade with a Hutchins faculty sponsor who is willing to supervise it. A student consults with a faculty member on a topic and develops a plan of study including number of units, project outcomes, number of meetings with the faculty, and deadline for completion. A Project Contract is submitted to Admissions after the beginning of the semester and before the last day to add classes. May be repeated for credit. Prerequisites: LIBS 302 and consent of instructor.

LIBS 411A SERVICE LEARNING: YOUTH ISSUES (3)

SSU students taking this course will go to local elementary and secondary schools and conduct seminar discussions that create a learning community.

LIBS 420A ELECTIVE SEMINAR CORE A (3)

Courses under this core area take as their focus the relationship between the individual and all kinds of human groups. The moral and ethical underpinnings of our patterns of social interaction are investigated with special attention paid to how these do and should affect issues such as race, gender, and class. Of particular importance to social scientists are questions concerning whether the goals of human dignity, political justice, economic opportunity, and cultural expression are being enhanced or destroyed by specific historical developments, cultural practices, economic arrangements, or political institutions.

LIBS 420B ELECTIVE SEMINAR CORE B (3)

Included in this core area are courses that deal with science and technology and their relationship to the individual and society. In today's world, any well-educated person should understand, at least at a general level, both the methods of science and important information which has been discovered through their applications. Here students build upon their understanding of the sciences and come to grips with some of the crucial issues posed by our culture's applications of science and technology. Students write on topics which address the idea of the material world: scientific aspects of social issues, the contribution science has made to your understanding of an issue of personal concern, and your sense of science as a social endeavor.

LIBS 420C ELECTIVE SEMINAR CORE C (3)

Through the arts and humanities we explore what and why humans create. These fields include the broad range of experiences in literature, epics, poetry, drama and other literary forms; the visual arts; languages; architecture; music; dance; the writings of philosophers; and the thought and literature of the world's religions. Study in the arts and humanities explores the inner world of creativity and individual values as well as the questions about how we arrive at a sense of meaning and purpose, ethical behavior, and a sense of beauty and order in the world.

LIBS 420D ELECTIVE SEMINAR CORE D (3)

What one endorses as really "real" is a result of many factors, some of them psychological, some biological, some philosophical, some social, and so forth. Courses in this core area will deal with such issues as the study of biology as it relates to psychology, consciousness as it affects and is affected by perceptions of reality, meaning-making as a necessary human achievement, and identity formation as it is understood in the light of developmental psychology and the nature-nurture controversy. You will have the opportunity to formulate your own thoughts about the status of human consciousness and reality and include that formulation in this section.

LIBS 480 SEMINAR FACILITATION (1-3)

This course provides students with an opportunity to enhance their facilitation skills through serving as a seminar leader in large lecture/discussion courses. Requires consent of course instructor. Course may be repeated for credit.

LIBS 497 MODERN MEDIA DIALOGUE SERIES (1)

The Modern Media Dialogue Series will provide students the opportunity to learn about the many aspects and consequences of our media age from journalism and censorship, to new forms of communication and information. Students will participate in a weekly dialogue with an invited guest and community members to deepen their understanding of modern media forms and practice.

LIBS 499 INTERNSHIP (1-5)

All students develop an internship working outside the classroom. Students also prepare a portfolio project based upon a larger topic implicit in their internship. They participate with other interns in an internship class once a week to discuss their internship experience and issues related to the larger society. Grade only. May be repeated for credit.

LIBS 595 SPECIAL STUDIES (1-4)

Individualized studies in areas beyond the scope of the established curriculum.

Interdisciplinary Studies (ITDS)

ITDS 200 CALIFORNIA CULTURAL ANALYSIS (3)

Within the context of readings related to California history and culture and their role in shaping contemporary California life, students practice the techniques of expository writing, oral expression, and reading and thinking critically. Satisfies GE Area A1. Prerequisites: completion of GE Areas A2 and A3.

ITDS 280 INTRO TO CALIF CULTURE STUDIES (3)

Introduction to California culture studies and its multi-ethnic, interdisciplinary, and multi-disciplinary perspectives, tasks, and methods. Course includes the study of a variety of California regionalisms and a range of topics from California geology to California philosophy and art. Students do fieldwork and take field trips to sites of historical and cultural interest (Jack London Park, Angel Island, Fort Ross, San Francisco Mission District, State Capitol, Steinbeck County). Fulfills GE Area C4.

ITDS 297 SELECTED TOPICS (1-4)

Exploration of basic human problems. Resource persons from various disciplines will participate. Please see the Schedule of Classes for areas to be emphasized. May be repeated for credit.

ITDS 300 CALIFORNIA CULTURAL STUDIES FACULTY FORUM (1-3)

California cultural studies faculty, students, and guests present topics for discussion of on-going research and study. Cr/NC may be repeated for credit up to 3 units. Prerequisite: major or minor in California Cultural Studies program, upper-division standing in programs affiliated with California Cultural Studies, or permission of the California Cultural Studies director.

ITDS 301 LECTURE SERIES (1-3)

A public lecture series on topics of general interest. Two units requires regular attendance and a final paper. Students who take three units additionally meet once a week in discussion groups and do further reading of selected texts.

ITDS 302 TOPICS AND THEMES IN CALIFORNIA CULTURE STUDIES (3)

Course includes California Regionalism, San Francisco, Representing Los Angeles, California, and the Environmental Imagination.

ITDS 345 DIRECTED READING AND WRITING TUTORIALS (1-4)

Directed studies of California themes and topics within the context of small group tutorials. Students develop individual reading projects and complete a capstone project or thesis. Prerequisite: major or minor status, participation in California Cultural Studies' integrated GE program, or consent of California cultural studies coordinator. Note: ITDS 345 may be taken for 1-2 units as part of the integrated GE program.

ITDS 395 COMMUNITY INVOLVEMENT PROGRAM (1-3)

An experience involving the application of methods and theories to community service work. Requirements: approval of a relevant project, a minimum of thirty (30) hours per unit of credit in the actual working situation, regular consultation with a faculty sponsor, and a paper. Prerequisites: major or minor standing and permission of program director.

ITDS 397 SELECTED TOPICS (1-4)

Exploration of basic human problems. Resource persons from various disciplines will participate. Please see the Schedule of Classes for areas to be emphasized. May be repeated for credit.

ITDS 444 THEORY AND RESEARCH METHODS (4)

Introduction to theory, method, and research strategies associated with regional cultural studies across a range of disciplines. Students engage in fieldwork and institutional projects (preservation, restoration, cultural resource development, collection, analysis and description of cultural artifacts, and historical preservation).

ITDS 486 INTERNSHIP IN CALIFORNIA CULTURAL STUDIES (1-4)

Students apply California cultural studies theory and practice as interns with public and private agencies, corporations, and institutions. Internships require the approval of California Cultural Studies faculty sponsor and director and a minimum of 45 hours of work per unit per semester. Includes regular consultation and evaluation by the faculty sponsor. Cr/NC only. May be repeated for credit.

ITDS 495 SPECIAL STUDIES (1-4)

Prerequisite: approved status as a special major or major in interdisciplinary studies.

ITDS 496 SENIOR PROJECT IN CALIFORNIA CULTURAL STUDIES (1-3)

Directed Studies in seminar and tutorial settings on topics selected by individual students. Combines secondary reading and original research leading to the completion of a capstone research thesis or project. Project is graded by supervising CCS faculty and is presented at the Faculty Forum.

ITDS 497 SPECIAL TOPICS (1-4)

Exploration of basic human issues. Resource persons from various disciplines will participate. Please see the Schedule of Classes for areas to be emphasized. May be repeated for credit.

ITDS 498 INTERNSHIP (1-4)

An internship is a supervised program of work and study in a governmental, community service, technical, business, or educational setting. ITDS 498 (or 598) is designed for students in the Special Major/Interdisciplinary Studies program or in one of the faculty-initiated special majors. Forty-five hours of on-the-job work are required for each unit of credit. For grade or Cr/NC, as determined by the student's program. May be repeated for credit.

ITDS 499 SENIOR PROJECT (3)

A senior paper or project to be prepared under the supervision of the student's Faculty Committee. The senior paper or project should present the synthesis of the student's interdisciplinary program of study. The paper or project will be graded by the student's Faculty Committee and will be presented orally to the ITDS Committee at the completion of the student's senior year.

ITDS 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

ITDS 595 SPECIAL STUDIES (1-4)

Prerequisite: approved status as a classified major in Interdisciplinary Studies.

ITDS 598 INTERNSHIP (1-4)

An internship is a supervised program of work and study in a governmental, community service, technical, business, or educational setting. ITDS 498 (or 598) is designed for students in the Special Major/Interdisciplinary Studies program or in one of the faculty-initiated special majors. Forty-five hours of on-the-job work are required for each unit of credit. For grade or Cr/NC, as determined by the student's program.

ITDS 599 MASTER'S PROJECT (6)

For M.A. action for a viable future students only. Design and implementation of culminating project and written component. Prerequisites: completion of individual study plan coursework and consent of student's graduate committee chair.

ITDS 599A THESIS AND ITDS RESEARCH (2-4)**ITDS 599B THESIS AND ITDS RESEARCH (2-4)****Jewish Studies (JWST)****JWST 200 INTRODUCTION TO JEWISH STUDIES (4)**

Introduction to Jewish Studies is an interdisciplinary survey course that introduces students to the culture, literature, history, philosophy, religion, and academic traditions of Jewish people from antiquity to the present. In this course, we will analyze how Jewish people have deployed a wide range of intellectual discourse to gain an understanding of the meaning of their identity as Jews. The course will also provide a historical overview of the Jewish Diaspora, from the Middle East to Africa to Europe to the Americas. The readings and class discussions will divide into three parts covering the ancient, medieval, and modern periods.

JWST 250 INTRODUCTION TO JUDAISM (4)

A survey of Jewish religious traditions from the Bible through the present day. Evolution of major religious ideas through classical texts.

JWST 251 TOPICS IN JEWISH BIBLICAL STUDIES (3-4)

Introduction to the academic study of the Hebrew Bible (Old Testament) through a variety of scholarly approaches to the Bible, including historical and literary analysis. Emphasis is on developing skills in critical thinking, reading, and writing about the Bible. Students can repeat course for credit; topics will vary per semester.

JWST 255 EVOLUTION OF ANTI-SEMITISM (4)

This course will introduce the origins and background of anti-Semitism and the Jewish response over the last two-and-a-half millennia. It has been referred to as "the longest hatred." The long history of anti-Semitism can serve as a case study of and cautionary tale for how societies deal with xenophobia, bias and prejudice toward "the other."

JWST 341 TOPICS IN JEWISH HISTORY: JUDAISM AND CHRISTIANITY OF THE GRECO-ROMAN PERIOD (4)

Course will explore various topics in Jewish History. Content will vary per semester. Topics may include: History of Anti-Semitism, History of Judaism and Christianity, and Jewish World Cultural History.

JWST 350 JEWISH RELIGION AND BIBLICAL VALUES (3)

This course explores the ideas — religious and political — and texts that have shaped Jewish thought and practice from its formation to the present.

Kinesiology (KIN)

KIN 101 PHYSICAL EDUCATION ACTIVITIES (1-2)

Activities classes. Classes are conducted in the following activities: aquatics (e.g., swimming, physical conditioning swimming, water polo, and scuba), individual sports (e.g., adapted activities, martial arts, tennis, indoor rock climbing), fitness (e.g., aerobics, conditioning, pilates, jogging/running and weight training), dance (e.g., recreational dance, yoga), outdoor activities, or team sports (e.g., basketball, soccer, softball, volleyball). Course offerings vary from semester to semester. Most sections meet twice weekly, with some sections meeting at specially arranged times according to the nature of the activity. Students may take, for credit, as many different 101 classes as desired. The same 101 activity class may be repeated 3 times for credit up to 8 units. Cr/NC only.

KIN 120 MOTOR SKILL DEVELOPMENT IN PUBLIC SCHOOLS (2)

Prepares students to teach motor skills to school-aged children. Topics including motor development, motor learning, and instructional design as related to motor skill acquisition are introduced. Students task analyze a variety of motor activities, plan developmentally appropriate lessons, and teach peer and public school-aged children in local schools.

KIN 201 FOUNDATIONS OF KINESIOLOGY (3)

This course is designed to orient students to kinesiology as a field of study. Students will be exposed to multiple disciplines within kinesiology. By engaging in discussions, activities, and field observations, students will explore and become prepared to select a career path within the field. Prerequisite: class open to Kinesiology majors only.

KIN 217 PERSONAL FITNESS AND WELLNESS (3)

Designed to introduce the concepts and practices involved in creating a personal life-long fitness and wellness program. General health topics will be emphasized, specifically cardiovascular fitness, nutrition, stress management, disease prevention, and current health trends and topics. Students will develop personal action plans for enhancing personal health and well-being. Satisfies GE Area E. Course restricted to freshmen and sophomore students only.

KIN 230 INTRODUCTION TO FIELD EXPERIENCE (1-2)

Provides lower-division students an opportunity to sample work experiences in a variety of settings in physical education, adapted physical education, athletic training, or exercise science. Thirty hours of supervised field work for each unit of credit. This course does not meet the field work requirement in the Kinesiology major concentrations. Prerequisites: overall 2.0 GPA and departmental approval. Course may be repeated for credit.

KIN 240 FIRST AID AND CPR (1)

Study of the basic principles and practical applications of first aid and CPR techniques required by a first-aiders to provide initial emergency care necessary to sustain life and minimize any consequences of injuries or sudden illness until qualified medical personnel can arrive.

KIN 241 EMERGENCY RESPONSE (3)

Study of the principles and practical applications of advanced first aid techniques required to provide the initial emergency care necessary to sustain life and to maintain life support until the victims of accidents or sudden illness are cared for by qualified medical personnel. Prerequisite: Kinesiology majors, BIOL 220 and BIOL 224.

KIN 242 PRINCIPLES OF MUSCULOSKELETAL INJURIES (3)

Lecture; laboratory. Designed to show students the proper methods of recognition, evaluation, and treatment of musculoskeletal injuries to the upper and lower extremities. Comprehension of anatomy, mechanism-of-injury, and pathology are stressed. Fee of \$10 required for this course. Prerequisites: Kinesiology majors, BIOL 220, and BIOL 224.

KIN 301 HISTORY AND PHILOSOPHY OF HUMAN MOVEMENT (4)

An introduction to significant historical and philosophical considerations in the development of human movement. Contemporary philosophical issues as well as active physical participation with an experiential emphasis will be studied. Prerequisites: Kinesiology majors, BIOL 220 and BIOL 224, ENGL 101 or 100B, upper-division standing, and consent of instructor for non-Kinesiology majors.

KIN 305 PSYCHOLOGICAL BASES OF HUMAN MOVEMENT (4)

Introduction to psychological factors influencing learning and performing motor skills and the psycho-social influences of sport, exercise, and physical activity on the developing individual. Emphasis will be on the application of current motor learning and sport and exercise psychology theories on such topics as learning, motivation, goal setting, stress, anxiety, group dynamics, leadership, moral development, and exercise adherence. Prerequisites: Kinesiology majors, BIOL 220 and BIOL 224, WEPT, upper-division standing, and consent of instructor for non-Kinesiology majors.

KIN 306 AQUATICS (1-2)

Lecture; activity laboratory. The aquatics course is designed to provide students in the pedagogy concentration with an understanding of the mechanics of the neuromuscular skills and functional application of the activities presented within the course. In addition, students will be involved in task-analyzing and teaching skills/activities contained within aquatics.

KIN 308 EDUCATIONAL GYMNASTICS (1)

Lecture; activity laboratory. The educational gymnastics course is designed to provide students in the pedagogy concentration with an understanding of the mechanics of the neuromuscular skills and functional application of the activities presented within the course. In addition, students will be involved in task-analyzing and teaching skills/activities contained within educational gymnastics.

KIN 309 RHYTHMS AND DANCE (1)

Lecture; activity laboratory. The rhythms and dance course is designed to provide students in the pedagogy concentration with an understanding of the mechanics of the neuromuscular skills and functional application of the activities presented within the course. In addition, students will be involved in task-analyzing and teaching skills/activities contained within rhythms and dance.

KIN 310 SELF DEFENSE (1)

Lecture; activity laboratory. The self defense course is designed to provide students in the pedagogy concentration with an understanding of the mechanics of the neuromuscular skills and functional application of the activities presented within the course. In addition, students will be involved in task-analyzing and teaching skills/activities contained within self defense.

KIN 311 SELECTED TOPICS (1-4)

Selected upper-division courses that are taught on a one-time basis. May be repeated for credit.

KIN 315 SOCIOLOGY OF SPORT (3)

Examines and utilizes basic sociological concepts and demonstrates their manifestations in the teaching of physical education and sports. Prerequisite: Kinesiology majors, BIOL 220 and BIOL 224, ENGL 101 or 100B, upper-division standing, and consent of instructor for non-Kinesiology majors.

KIN 316 WOMEN IN SPORT: ISSUES, IMAGES, AND IDENTITIES (3)

This course is designed to introduce students to an overview of issues, images, and identities of women participating at various levels of sport in the United States. Attention will be given to the historical, social, political, and economic contexts that have influenced the American woman's experiences in sport. Satisfies GE Area E. Prerequisite: junior- or senior-standing or consent of instructor.

KIN 320 CURRICULUM AND ASSESSMENT (3)

This course is designed to explore different curriculum and teaching models and assessment techniques used in standards-based physical education. Effective standards-based curriculum development and assessment will be discussed and opportunities given for students to put these into practice. Prerequisites: KIN 308 and 309 or consent of instructor.

KIN 325 INTRODUCTION TO ADAPTED PHYSICAL EDUCATION (3)

An introduction to the scope, basic concepts, and teaching methods of adapted physical education; a study of selected disabilities, with a primary focus on implications for physical education. Course includes 18 hours of practical experience in the field. Open to junior, senior, and graduate students only.

KIN 350 BIOMECHANICS (4)

Lecture; laboratory. Presents the quantitative and qualitative analysis of human movement and the anatomic concepts needed for understanding human movement in relation to mechanical effects such as application of force in relation to center of mass, displacement, velocity, acceleration of bodies, and buoyancy. Emphasis is on understanding and application of principles to any movement pattern. Prerequisites: Kinesiology majors, BIOL 220, BIOL 224, GE (B4) math, and upper-division standing. Consent of instructor for non-Kinesiology majors required.

KIN 360 PHYSIOLOGY OF EXERCISE (4)

Lecture; laboratory. Study of the acute and chronic effects of human activity and exercise. Laboratory and field experiences in selected areas, including exercise metabolism, skeletal muscle and cardiopulmonary physiology, body composition estimation, and nutrition as they pertain to clinical, fitness, and sports settings. Prerequisites: Kinesiology majors, GE math, Biol 220 and 224, and upper-division standing.

KIN 371 INTERCOLLEGIATE BASEBALL, MEN (2)

Activities include: soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 372 INTERCOLLEGIATE BASKETBALL, MEN (2)

Activities include: soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 373 INTERCOLLEGIATE CROSS COUNTRY, MEN (2)

Activities include: soccer, tennis, basketball, cross country, and baseball. May be repeated for credit.

KIN 374 INTERCOLLEGIATE FOOTBALL, MEN (2)

Activities include: soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 375 INTERCOLLEGIATE SOCCER, MEN (2)

Activities include: soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 376 INTERCOLLEGIATE TENNIS, MEN (2)

Activities include: soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 377 INTERCOLLEGIATE TRACK AND FIELD, MEN (2)

Activities include: track and field, soccer, tennis, basketball, and baseball. May be repeated for credit.

KIN 378 INTERCOLLEGIATE GOLF MEN (2)

Activities include: soccer, tennis, basketball, baseball, and golf. May be repeated for credit.

KIN 381 INTERCOLLEGIATE BASKETBALL, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 382 INTERCOLLEGIATE CROSS COUNTRY, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 383 INTERCOLLEGIATE SOCCER, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 384 INTERCOLLEGIATE SOFTBALL, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 385 INTERCOLLEGIATE TENNIS, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 386 INTERCOLLEGIATE GOLF, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 387 INTERCOLLEGIATE VOLLEYBALL, WOMEN (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 388 INTERCOLLEGIATE WOMEN WATER POLO (2)

Activities include: cross country, golf, soccer, volleyball, tennis, waterpolo, basketball, and softball. May be repeated for credit.

KIN 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Provides majors and non-majors the opportunity to gain volunteer experience working with individuals with disabilities in designated on-campus and community placements involving physical activity. Thirty hours of verified, supervised work and scheduled meetings with the instructor are required for each unit of credit. Requirements include a daily journal and portfolio. Prerequisite: permission of instructor. Course may be repeated for credit.

KIN 400 ELEMENTARY SCHOOL PHYSICAL EDUCATION (3)

An introduction to and practice in applying the concepts and principles of developmentally appropriate physical education for children. Prerequisite: upper-division Kinesiology majors or multiple-subject credential preparation candidates or by consent of instructor.

KIN 403 ETHICS, INCLUSION, AND EQUITY IN COACHING (3)

This course educates future coaches on the moral and ethical dilemmas typically encountered in competitive athletics. Students will also develop strategies to address various forms of exclusion and inequity in sports and athletics. Prerequisite: upper-division standing.

KIN 404 THEORY OF COACHING (2)

A survey of issues encountered by coaches in all sports. Topics will include, but are not limited to, communication with players, colleagues, and administration; ethical issues and responsibilities; coaching philosophies; relations with media and community; time management; coach and athlete motivation; mental training skills; and equipment and facilities management. Prerequisite: Kinesiology majors, ENGL 101, upper-division standing, and consent of instructor for non-Kinesiology majors.

KIN 404C THEORY OF COACHING (3)

A survey of issues encountered by coaches in all sports. Topics will include, but are not limited to, communication with players, colleagues, and administration; ethical issues and responsibilities; coaching philosophies; relations with media and community; time management; coach and athlete motivation; mental training skills; and equipment and facilities management. Prerequisite: Kinesiology majors, ENGL 101, upper-division standing, and consent of instructor for non-Kinesiology majors.

KIN 410 LIFESPAN MOTOR DEVELOPMENT (3)

Survey of the development of perceptual-motor function from birth through aging, with emphasis on gross motor performance. Prerequisite: upper-division standing.

KIN 420 MIDDLE SCHOOL PHYSICAL EDUCATION (3)

This course provides students with theory and practice designed to develop the skills necessary to be an effective middle school physical education teacher. Students are asked to put into practice their knowledge of standards-based physical education and developmentally appropriate teaching methods. Prerequisites: KIN 308, KIN 309, KIN 320 (may be taken concurrently), & KIN 400 or consent of instructor.

KIN 422 HIGH SCHOOL PHYSICAL EDUCATION (4)

Lecture, 3 hours; laboratory, 2 hours. This course will provide students with theory and practice designed to develop the skills necessary to be an effective high school physical education teacher. Students will be asked to apply previous learned concepts related to standards-based physical education at the high school level. Students will be involved in field observations, micro teaching, and lab experiences involving high school physical education students. Prerequisites: KIN 308, 309, 320, 400, and 420, or consent of instructor.

KIN 425 SEMINAR IN ADAPTED PHYSICAL EDUCATION (3)

Exploration and discussion of current research and professional issues in the field of adapted physical activity. Prerequisite: KIN 325 or consent of instructor.

KIN 426 INDIVIDUALIZED ASSESSMENT AND PROGRAM DESIGN (4)

Selection, administration, and interpretation of motor assessment instruments. Planning and developing appropriate activities and programs to meet individual needs for children and adults with disabilities. Prerequisites: KIN 410 and MATH 165 or consent of instructor.

KIN 427 INDIVIDUALS WITH DISABILITIES IN EDUCATIONAL AND RECREATIONAL SETTINGS (3)

Exploration of the role of psychosocial context in the design and implementation of effective learning environments for youth and adults with disabilities, using service-learning pedagogy. Class open to juniors, seniors, and graduate students only.

KIN 430A FIELD EXPERIENCE IN PHYSICAL EDUCATION (1-3)

Provides upper-division Kinesiology majors experiences in teaching in K-12 public or private school settings. Course requirements include a work journal, development of a personal portfolio, and verification of completion by immediate supervisor. Prerequisites: Kinesiology majors, upper-division standing, and a C average in major and support courses. May be repeated for credit.

KIN 430B FIELD EXPERIENCE IN INTERDISCIPLINARY STUDIES (1-3)

Provides qualified upper-division students experience in an area related to their interdisciplinary concentration. Course requirements include the development of a personal portfolio, a log of completed hours, a daily journal describing experiences and duties, and verification of completion by immediate supervisor. Prerequisites: completion of a minimum of three support and/or core courses related to the field experience; C average in major and support courses.

KIN 430C FIELD EXPERIENCE IN ADAPTED PHYSICAL EDUCATION (1-3)

Provides upper-division kinesiology majors specializing in adapted physical education an opportunity to work with individuals with disabilities in school or other settings. Course requirements include a daily journal, development of a personal portfolio, and verification of completion by immediate supervisor. Prerequisites: KIN 325; C average in major and support courses. May be repeated for credit.

KIN 430D FIELD EXPERIENCE IN EXERCISE SCIENCE (1-3)

Provides qualified upper-division students an opportunity to gain experience in either applied exercise physiology, biomechanics, or physical therapy. Course requirements include the development of a personal portfolio, a log of completed hours, a daily journal describing experiences, and verification of completion by immediate supervisor. Prerequisites: completion of a minimum of three support and/or core courses related to the field experience; C average in major and support courses. May be repeated for credit.

KIN 430E FIELD EXPERIENCE IN LIFETIME FITNESS (1-3)

Provide qualified upper-division students an opportunity to gain experience in private and public fitness settings. Course requirements include, but are not limited to a daily journal describing experiences, a log of completed hours, and verification of completion by an immediate supervisor. Prerequisites: completion of a minimum of three support courses and/or core courses related to the field experience; C average in major and support courses. May be repeated for credit.

KIN 442 MUSCULOSKELETAL EVALUATION, TRAINING, AND TREATMENT (4)

Lecture; laboratory. Students learn the HIPS technique for evaluating musculoskeletal conditions and injuries. The prevention of musculoskeletal injuries and proper disposition of the patient will be stressed. The theoretical basis of rehabilitation and the physics/mechanics of therapeutic modalities, as well as common musculoskeletal injuries to the axial skeleton will be studied. Prerequisite: Kinesiology majors and KIN 242, BIOL 220, and BIOL 224 required.

KIN 446 EXERCISE INSTRUCTION (3)

This course provides each student with practical learning experiences designed to develop the skills needed to be a competent exercise instructor/leader. The course allows students to put into practice their knowledge of exercise from their previous major coursework in biomechanics, exercise physiology, and conditioning for performance and health. Students will be involved in group-centered instruction, field observation, laboratory experiences, and skill execution practicals. Prerequisites: Kinesiology majors, BIOL 220, and BIOL 224 required.

KIN 460 CONDITIONING FOR PERFORMANCE AND HEALTH (3)

A review of methods for the conditioning of a broad range of people from exercising adults through competitive athletes. Emphasis during the first half of the semester will be on topics related to adult fitness, including cardiorespiratory fitness, resistive training, flexibility, weight management, and exercise for special populations. During the second half of the semester topics related to athletes will include endurance training, training for strength and power, nutritional considerations for athletes, and the use of various putative ergogenic aids. Prerequisite: KIN 360, BIOL 220, BIOL 224, and upper-division standing.

KIN 495A SPECIAL STUDIES IN PHYSICAL EDUCATION (1-4)

Includes completion of a project designed to meet a specialized advanced study need. The student should have prerequisite skills. The project should be planned and described in writing, in consultation with and with the consent of the faculty advisor. There are four areas of study: KIN 495A Special Studies in Physical Education, KIN 495C Special Studies in Adapted Physical Education, KIN 495D Special Studies in Exercise Science, and KIN 495E Special Studies in Lifetime Fitness. May be repeated for credit.

KIN 495C SPECIAL STUDIES IN ADAPTED PHYSICAL EDUCATION (1-4)

Includes completion of a project designed to meet a specialized advanced study need. The student should have prerequisite skills. The project should be planned and described in writing, in consultation with and with the consent of the faculty advisor. There are four areas of study: KIN 495A Special Studies in Physical Education, KIN 495C Special Studies in Adapted Physical Education, KIN 495D Special Studies in Exercise Science; and KIN 495E Special Studies in Lifetime Fitness. May be repeated for credit.

KIN 495D SPECIAL STUDIES: EXERCISE SCIENCE (1-4)

Includes completion of a project designed to meet a specialized advanced study need. The student should have prerequisite skills. The project should be planned and described in writing, in consultation with and with the consent of the faculty advisor. There are four areas of study: KIN 495A Special Studies in Physical Education, KIN 495C Special Studies in Adapted Physical Education, KIN 495D Special Studies in Exercise Science, and KIN 495E Special Studies in Lifetime Fitness. May be repeated for credit.

KIN 495E SPECIAL STUDIES: LIFETIME FITNESS (1-4)

Includes completion of a project designed to meet a specialized advanced study need. The student should have prerequisite skills. The project should be planned and described in writing, in consultation with and with the consent of the faculty advisor. There are four areas of study: KIN 495A Special Studies in Physical Education, KIN 495C Special Studies in Adapted Physical Education, KIN 495D Special Studies in Exercise Science, and KIN 495E Special Studies in Lifetime Fitness. May be repeated for credit.

KIN 497 SELECTED TOPICS IN KINESIOLOGY (1-4)

A single topic or set of related topics not ordinarily covered by the Kinesiology major curriculum. May be repeated for credit with a different topic.

KIN 500 INTRODUCTION TO SCHOLARLY INQUIRY IN KINESIOLOGY (2)

This course is designed to prepare graduate students in Kinesiology to formulate and carry out a research project as part of his/her M.S. degree. Both theoretical and practical aspects of research will be included: examination of research paradigms, critical review of literature, effective design of a study, concepts of statistical and qualitative analysis of data, and the use of the library and computers as research tools. Prerequisites: a course in descriptive statistics, an introductory computer course, and graduate standing, or consent of instructor.

KIN 505 SEMINAR IN PSYCHOLOGICAL BASES OF HUMAN MOVEMENT (3)

A critical review of current literature regarding the social and psychological factors involved in participation in sport, exercise and physical activity on individuals and groups over the lifespan. Prerequisites: KIN 305 and KIN 315 or equivalents, or consent of instructor.

KIN 520 PEDAGOGICAL METHODS (3)

This course will examine instructional theories and models of teaching while focusing on practical applications that can lead to improvement of teaching physical education. The teaching of physical education will be analyzed in context with various teaching approaches, systematic observation techniques, principles of supervision, and will endorse a "theory into practice" approach to teacher effectiveness. Prerequisite: KIN 320 or its equivalent, or consent of instructor.

KIN 521 CURRICULUM DESIGN AND ANALYSIS IN PHYSICAL EDUCATION (3)

Intensive study, evaluation, and application of current developments in curriculum theory and practice for public school Physical Education. Includes review of literature related to curriculum development, review of professional standards, and examination of curricula models, leading to the design of an innovative physical education curriculum plan. Prerequisite: KIN 520 Pedagogical Methods or its equivalent or consent of instructor.

KIN 522 RESEARCH AND ISSUES IN PHYSICAL EDUCATION TEACHER EDUCATION (3)

The central focus of this course is to introduce students to literature and research on teacher preparation, effective teaching, and research on effective schools. This includes an understanding of the research questions pursued, the methodologies employed, and the results generated. Prerequisite: KIN 520 Pedagogical Methods or its equivalent, or consent of instructor.

KIN 525 INDIVIDUALIZED MOVEMENT PROGRAMS FOR REHABILITATION EDUCATION (3)

The student will learn how to formulate individualized exercise programs for rehabilitation/development of fitness skills in people with orthopedic injuries, chronic diseases, and disabilities. This course will take both a medical and functional point-of-view in dealing with development/return of quality-of-life skills, as well as advanced athletic skills. Prerequisites: Human Anatomy/Human Physiology/Athletic Injuries/Adapted Physical Education or consent of instructor.

KIN 550 SEMINAR IN BIOMECHANICS (2)

This course uses topical published research articles to discuss the qualitative and quantitative analysis of human movement and their application for Kinesiology professionals. Topics will vary, however, the underlying objective will be to understand aspects of the research presented in these articles including: appropriateness of research design, methodology, statistical methods, analysis techniques, and limitations of studies. Prerequisite: KIN 350 or equivalent, or consent of instructor.

KIN 560 ADVANCED PHYSIOLOGY OF EXERCISE (2)

This course will center around the presentation and discussion of topics related to the application of exercise physiology to school, athletic, and adult fitness settings. Topics will include metabolism and nutrition as it pertains to exercise, the muscular system and resistive training, body composition and weight loss, the cardiovascular system as it relates to endurance training and cardiac rehabilitation, exercise in extreme environmental conditions, and commonly used ergogenic aids. Prerequisite: KIN 360 or equivalent, or consent of instructor.

KIN 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

KIN 590 GRADUATE INTERNSHIP (3)

KIN 590 students will have opportunity to apply kinesiological theories and methods in field experiences related to kinesiology professions. Internships require faculty approval and a minimum of 45 hours of work per unit, including regular consultation with and evaluation by the faculty sponsor. Prerequisites: graduate standing and consent of instructor.

KIN 595 SPECIAL STUDIES (1-4)

Includes completion of a project to meet a highly specialized advanced study need. Project to be selected in conference with the faculty advisor and approved by the departmental Graduate Studies Committee. Prerequisites: consent of instructor and approval of departmental Graduate Studies Committee before the study is initiated.

KIN 599 CULMINATING PROJECT (3)

KIN 599 Culminating Project is a scholarly investigation based on the students' concentration area. Students will complete one of the following: project, thesis, scholarly article, clinical project, or business/curriculum plan. Prerequisites: KIN 590 and an authorized Advancement to Candidacy form.

Linguistics (LING)

LING 400 LINGUISTIC ANALYSIS (4)

Introduction to phonological and grammatical analysis. Includes articulatory phonetics, methods and practice in the analysis of sound systems, with attention given to American English. Also includes grammatical analysis, methods and practice in the analysis of word and sentence structure, with emphasis on non-Western European languages. Prerequisite: LING 200 or equivalent.

LING 403 MEANING, CONTEXT, AND REFERENCE (3)

Introduction to the linguistic approach to the study of meaning, including the ways in which meaning is determined by language use. Includes issues of semantics and pragmatics. Prerequisite: LING 200 or consent of instructor.

LING 432 LANGUAGE IN SOCIOPOLITICAL CONTEXT (4)

Focus on such topics as language attitudes, political power and linguistic equality, language and sociopolitical institutions, and language planning. Practical introduction to the insights offered by discourse analysis to the study of language varieties reflected in particular geographical regions, and by members of particular social classes/groups. Prerequisite: LING 200 or consent of instructor. Cross-listed as ANTH 383.

LING 490 TOPICS IN LINGUISTICS (4)

In-depth examination of a specific topic within Linguistics. Topics vary with each offering. May be repeated for credit with departmental approval.

LING 495 SPECIAL STUDIES (1-4)

Students interested in Special Studies in linguistics must fill out a special studies application by the end of the first week of the semester. Prerequisites: LING 200 or an appropriate upper-division course in linguistics or another discipline; consent of supervising faculty member and approval of program coordinator.

LING 498 PRACTICUM FOR TEACHING ESL (2)

This final course in the TESL Certificate Program is a practical experience in teaching English as a Second Language. With the guidance of the coordinator/instructor, students will find placement in an ESL class. Students must complete approximately 90 hours of service with emphasis on actual classroom teaching, but the time commitment also includes lesson preparation, meetings, and grading papers. Students will be observed by the instructor (once or twice during the semester). There will also be three seminar meetings, times to be arranged.

LING 499 INTERNSHIP IN APPLIED LINGUISTICS (1-3)

Practical experience entailing 50-60 hours for the semester in teaching English as a second language or in the development of ESL materials. Prerequisite or co-requisite: LING 441 or 442.

LING 595 SPECIAL STUDIES (1-3)

Students interested in Special Studies in linguistics must complete a special studies application by the end of the first week of the semester. Prerequisites: graduate standing and consent of instructor.

Mathematics (MATH)

MATH 035 ELEMENTARY ALGEBRA (4)

This course focuses on real numbers, linear equations and inequalities, quadratic equations, polynomial operations, and radical and exponential expressions. Prerequisite: placement based on ELM examination taken within the past two years. Course credit is not applicable toward graduation.

MATH 045 INTERMEDIATE ALGEBRA (4)

This course focuses on linear, quadratic, radical, rational, exponential, and logarithmic functions and their graphs. Conic sections. Prerequisite: MATH 35 or equivalent, or placement based on ELM examination taken within the past two years. Course credit is not applicable toward graduation.

MATH 103 ETHNOMATHEMATICS (3)

This course examines the mathematics of many indigenous cultures, especially those of North and South America, Africa, and Oceania. It will examine the use of mathematics in commerce, land measure and surveying, games, kinship, measurement of time, navigation, data storage, and other topics. The mathematics involved includes number bases, probability, geometry, number theory, lattice theory, and many other topics of interest in modern mathematics. This class is recommended for liberal arts students who are interested in studying other cultures. Satisfies the Area B4 GE requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 104 INTRODUCTION TO MODERN MATHEMATICS (3)

A class designed to explore the beauty and relevance of mathematics. Topics may include puzzles, paradoxes, and logic; axiomatic systems; biographies; infinity of the counting numbers and higher infinities; historical crises and breakthroughs in mathematics; and uncertainty. This class is recommended for liberal arts students. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 105 MATHEMATICS AND POLITICS (3)

This course will explore mathematical achievements in the theory of politics. Topics may include: escalation, conflict, yes-no voting, political power, and social choice. This course has an enormous cultural content, while at the same time dealing with important mathematical ideas. This class is especially suitable for social science students. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 111 SYMMETRY IN THE ARTS AND SCIENCES (3)

Exploration of the mathematical theory of symmetry in the plane and in space. The theory uses the idea that the set of rigid motions comprises an algebraic structure called a group, and that composing rigid motions correspond to performing an algebraic operation. The course emphasizes how the mathematical theory aids in understanding the causes and consequences of symmetry in natural and man-made objects. A central theme is the contribution of mathematics to other fields, such as architecture and decorative art, engineering of mechanical devices, music and dance, evolution and anatomy, crystallography, chemical bonding and atomic structure, philosophy, and mathematical proofs. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 131 INTRODUCTION TO FINITE MATHEMATICS (3)

Designed to give students an understanding of finite mathematics applied in the modern world to social sciences, economic analysis, statistical analysis, and decision making. Topics include linear models, linear programming, financial mathematics, sets, combinatorics, probability, and statistics. Recommended for students with interests in the social sciences and management. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 141 STUDIES IN . . . (3)

Topics and approaches may vary. Please consult the current Schedule of Classes for details. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 142 DISCRETE STRUCTURES I (3)

A study of discrete structures that have applications in computer science. Topics may include logic, introduction to number theory, methods of proof, mathematical induction, set theory, relations, functions, directed graphs, Boolean algebras, and combinatorics. Prerequisite: MATH 160, or consent of instructor.

MATH 142E DISCRETE MATHEMATICS FOR ENGINEERING (2)

The first portion of MATH 142: a study of discrete structures needed for electronics and communications engineering. Topics may include logic, proofs, mathematical induction, set theory, Boolean algebra, and combinatorics. Prerequisites: MATH 160, or consent of instructor.

MATH 150 MODERN GEOMETRY (3)

A study of Euclidean geometry. It will cover topics such as compass and straight-edge constructions, proofs, parallel and perpendicular lines, triangles, circles, polygons, measurement, solids, transformations, tessellations, and the use of geometry software. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 160 PRECALCULUS MATHEMATICS (4)

Covers a brief review of college algebra; functional notation, composition, and decomposition of functions and inverse functions; behavior of families of functions such as polynomial, rational, exponential, and logarithmic; trigonometric functions, equations, and identities and some mathematical modeling. Emphasis on problem solving. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 160W PRECALCULUS (1)

A workshop designed to be taken with MATH 160. Exploration of precalculus concepts through problem solving in a group setting. Cr/NC only. Co-requisite: MATH 160.

MATH 161 DIFFERENTIAL AND INTEGRAL CALCULUS I (4)

Calculus I includes limits, continuity, the concept of the derivative, differentiation rules, and applications of the derivative, including curve sketching, extremum problems, L'Hopital's rule, implicit differentiation, related rates, Mean Value Theorem, introduction to integration, fundamental theorem of calculus, and substitution. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: MATH 160 or consent of instructor.

MATH 161W CALCULUS I WORKSHOP (1)

A workshop designed to be taken with MATH 161. Exploration of first-semester calculus concepts through problem solving in a group setting. Cr/NC only. Co-requisite: MATH 161.

MATH 161X DIFFERENTIAL AND INTEGRAL CALCULUS 1 EXTENDED (6)

A 6-unit version of Math 161 for students who feel that they need to refresh their algebra skills. Satisfies the GE requirement for mathematics, AreaB4. Prerequisite: Satisfaction of ELM requirement.

MATH 165 ELEMENTARY APPLIED STATISTICS (4)

This course is a technology-intensive introduction to elementary statistics. Topics include: elementary descriptive and inferential statistics and their application to the behavioral, natural, and social sciences; sampling; special distributions; central limit theorem; estimation; tests of hypothesis; analysis of variance; linear regression; and correlation. Satisfies the GE Area B4 requirement for mathematics. Prerequisite: satisfaction of ELM requirement.

MATH 175 MATHEMATICS COLLOQUIUM (1)

A student taking this course will be required to attend all presentations in the M*A*T*H Colloquium series during the semester and, in addition, keep a journal. May be taken three times for credit. Cr/NC only. Prerequisite: consent of instructor.

MATH 180 COMPUTING FOR MATHEMATICS AND SCIENCE (2)

This course will utilize a software system, such as Mathematica, to implement numerical, symbolic, and graphical computations useful in mathematics and science. It will also introduce students to procedural programming in that system. Prerequisite: MATH 161 or consent of instructor.

MATH 185 SELECTED TOPICS IN MATH (1-5)

Subject matter to be determined by instructor and may differ from semester to semester. This course may be repeated with different subject matter for up to 12 units. The course title will appear on the student's transcript. Prerequisite: consent of instructor.

MATH 195 SPECIAL STUDIES (1-4)

Special Studies may be arranged to cover an area of interest not covered in the lower-division courses offered by the department. Prerequisites: a college-level math course and consent of instructor.

MATH 200 DISCRETE MATHEMATICS (3)

Designed for elementary and middle school teachers, this course is a study of discrete mathematics with emphasis on its use in other areas of mathematics and in real world problems. Topics include selections from logic, proof, coding and cryptography, set theory, sequences, mathematical induction, combinatorics, graphs, and others as selected by the instructor. Prerequisite: a GE mathematics class or consent of the instructor.

MATH 210 INTRODUCTION TO PROOF (1)

Introduction to propositional logic and methods of proof, including direct proof, indirect proof, proof by "pick-a-point," and proof by mathematical induction. Students construct and analyze conjectures and counterexamples, and analyze and write proofs. Topics will include basic set theory, function theory, and equivalence relations, and may include examples from elementary number theory, algebra, and geometry. Does not count toward the Mathematics major, but satisfies the MATH 220 prerequisite for certain upper-division mathematics courses. Cr/NC only. Prerequisites: GE math and consent of instructor.

MATH 211 DIFFERENTIAL AND INTEGRAL CALCULUS II (4)

Calculus II includes the calculus of exponential and logarithmic functions, trigonometric and inverse trigonometric functions, numerical integration, techniques of integration, introduction to applications of integration including volumes and probability distributions, differential equations, Taylor polynomials, L'Hopital's rules, improper integrals, series, and introduction to partial derivatives. Prerequisite: MATH 161 or 161X or consent of instructor.

MATH 211S CALCULUS II-S (2)

First half of MATH 211. Prerequisites: MATH 161 or consent of instructor. Open only to students enrolled in programs that require MATH 211S.

MATH 211SW CALCULUS II-S WORKSHOP (1)

First half of MATH 211W. A workshop designed to be taken with MATH 211S. Exploration of second-semester calculus concepts through problem solving in a group setting. Cr/NC only. Co-requisite: MATH 211S.

MATH 211W CALCULUS II WORKSHOP (1)

A workshop designed to be taken with MATH 211. Exploration of second semester calculus concepts through problem solving in a group setting. Cr/NC only. Co-requisite: MATH 211.

MATH 220 REASONING AND PROOF (4)

This course will teach students to analyze and evaluate scientific and rhetorical reasoning, with emphasis on the reasoning used in Mathematical proofs. Students will identify and evaluate unstated assumptions in statistical tables and charts from real-world media, submit coherent and original proofs of theorems, and develop verbal and non-verbal skills for making persuasive oral arguments and presentations on mathematical topics. Satisfies GE area A3. Prerequisite: (MATH 161 and a Math/Stats course numbered 200 or above) or CS 242, or consent of instructor. Not repeatable for credit.

MATH 222 ELEMENTARY APPLIED LINEAR ALGEBRA (3)

A course in vector and matrix algebra applied to science and computing. Topics include systems of linear equations, determinants, Euclidean and general vector spaces, eigenvalues and eigenvectors, linear transformations. Prerequisite: MATH 160 or consent of instructor.

MATH 241 LINEAR ALGEBRA WITH APPLICATIONS IN DIFFERENTIAL EQUATIONS (4)

A course in vector and matrix algebra applied to the study of differential equations. Topics include vectors and matrices, linear independence, spanning, bases, linear transformations, first order differential equations and linear systems, phase planes, geometric and numerical methods. Prerequisite: MATH 211 or equivalent, or consent of instructor. Not repeatable for credit.

MATH 250 PROBABILITY AND STATISTICS FOR FUTURE TEACHERS (2)

A study of elementary probability and statistics and their real-world contexts. Topics include the binomial distribution, conditional probability, expected value, data collection and sampling, measures of location and variability, estimation and simple hypothesis testing. The course is designed for teachers and may not be substituted for MATH 165. Prerequisite: Math 300B or Math 161 or consent of instructor. Not repeatable for credit.

MATH 261 MULTIVARIABLE CALCULUS (4)

Multivariable calculus includes partial derivatives, multiple integrals, alternative coordinate systems, vector functions and their derivatives, line integrals, Green's Theorem, Stokes' Theorem, and Divergence Theorem. Prerequisite: MATH 241 or equivalent, or both PHYS 114 and MATH 211, or consent of instructor.

MATH 265 INTERMEDIATE APPLIED STATISTICS WITH SPSS (4)

This course is a technology-intensive examination of the application of statistical techniques to the real world using SPSS. The course extends the concepts learned in an elementary statistic course and introduces new topics; it is suitable for students with an interest in applying statistics to their field of interest. Topics selected from: theory of estimation, ANOVA (analysis of variance), multiple regression, principles of experimental design, sampling theory, time series analysis, non-parametric statistics, and multivariate analysis. Prerequisite: MATH 165 or MATH 250, or instructor consent.

MATH 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring, coaching, and reading for the blind. Students receive 1 to 4 units, depending on the specific tasks performed. No more than 3 units of credit in CIP may be applied toward any Mathematics degree. Cr/NC only.

MATH 300A ELEMENTARY NUMBER SYSTEMS (3)

This course, designed for prospective elementary and middle school teachers, explores numerical ideas underlying the K-8 mathematics curriculum. The emphasis is on understanding the mathematical ideas and procedures, and on representing them in ways that children can understand. Alternative ways of representing and solving problems are encouraged. Problem solving and logical thinking are emphasized throughout. Prerequisite: MATH 150 or another GE math course.

MATH 300B DATA, CHANCE, AND ALGEBRA (3)

This course is designed for prospective elementary and middle school teachers. The focus in algebra is on patterns and functions, algebraic structure, representations and connections, and reasoning and problem solving. The focus in data and chance is on developing solid understanding of fundamental concepts and skills in statistics and probability, and on enhancing students' understanding and skills in number and computation proportional reasoning, and algebra. Prerequisite: MATH 300A.

MATH 303 INTEREST THEORY (3)

Basic interest theory, including patterns of growth, interest operations, basic applications, level payment annuities, non-level payment annuities, yield rates, amortization and sinking funds, and bonds. Prerequisite: MATH 161 or equivalent, or consent of instructor.

MATH 306 NUMBER THEORY (4)

Topics include mathematical induction, Euclidean algorithm, congruences, primes, fundamental theorem of arithmetic, Fermat's little theorem, Euler's theorem, primitive roots, quadratic reciprocity, and polynomials over the real numbers. Additional topics may include Pythagorean triples, the Goldbach conjecture, perfect numbers, amicable numbers, Chinese remainder theorem, Fibonacci numbers, cryptography, prime number theorem, Möbius inversion. Prerequisite: MATH 220 or MATH 142 or CS 242. Not repeatable for credit.

MATH 308 COLLEGE GEOMETRY (4)

Topics include neutral geometry, plane and solid Euclidean geometry, isometries in the Euclidean plane (transformational geometry), and hyperbolic geometry. Additional topics may include the Hilbert postulates, construction of geometries from fields, and projective geometry. Prerequisite: MATH 220 or MATH 142 or CS 242. Not repeatable for credit.

MATH 310 HISTORY OF MATHEMATICS (4)

Mathematics from ancient times to the present. The student learns how to solve problems of the past using only the tools of the past. Students will complete a major project using adaptations of historical sources to link the history of mathematics to the teaching of mathematics. Prerequisite: MATH 161 or consent of instructor. Not repeatable for credit.

MATH 316 GRAPH THEORY AND COMBINATORICS (4)

A study of combinatorics, probability, and graph theory. Topics will include the elements of set theory, counting techniques such as permutations and combinations, discrete probability, Hamiltonian and Eulerian properties of graphs, graph isomorphism, coloring and planarity. Additional topics may include the pigeonhole principle, the inclusion-exclusion principle, generating functions, partitions and recurrence relations, Polya's theorem, matching, and trees, with applications in many disciplines. Students may not earn credit for both Math 316 and Math 416. Prerequisite: Math 142 or Math 220 or CS 242 or consent of instructor. Not repeatable for credit.

MATH 320 MODERN ALGEBRA I (4)

An introduction to the theory of groups, rings, and fields. Topics covered include permutation and cyclic groups, factor groups, ideals and factor rings, and isomorphism and homomorphism theory of groups and rings. Prerequisite: MATH 220 or consent of instructor.

MATH 322 LINEAR ALGEBRA (4)

Topics include vector spaces, linear transformations, matrices, linear equations, determinants, diagonalization, inner product spaces, and additional topics such as the Cayley-Hamilton Theorem, Singular Value Decomposition, or Canonical Forms. Prerequisite: MATH 220 and MATH 241 or consent of instructor. Not repeatable for credit.

MATH 330 TECHNIQUES OF PROBLEM SOLVING (1)

Cultivates by experience and example the mental disciplines for generating creative solutions to challenging problems. The problems to be considered will be taken largely from recent examinations in the William Lowell Putnam Mathematical Competition, sponsored by the Mathematical Association of America. No more than 4 units of credit in this course may be applied toward any Mathematics degree. May be taken four times for credit. Cr/NC only. Prerequisite: MATH 161 or consent of instructor.

MATH 340 REAL ANALYSIS I (4)

Topics may include construction of the real numbers, sequences, topology of the real numbers, metric spaces, continuity, the derivative, and the Riemann integral. Prerequisites: MATH 220 and (MATH 241 or MATH 261), or consent of instructor.

MATH 342 DISCRETE STRUCTURES II (3)

A study of discrete structures that have applications in computer science. Topics will include combinatorics and counting, probability and statistics, matrices, recurrence relations, generating functions, and graph theory. Throughout the course, applications to computer science will be discussed. Prerequisites: consent of instructor or MATH 211 and one of the following: MATH 142, MATH 200, or MATH 220.

MATH 345 PROBABILITY THEORY (4)

Topics include probability spaces, discrete and continuous random variables, selected probability distributions for random phenomena, distributions of functions of random variables, moment generating functions, expected value, covariance and correlation, conditional expectation, law of large numbers and central limit theorem, and sampling distribution of estimators. Prerequisite: MATH 261 or consent of instructor.

MATH 345E PROBABILITY THEORY FOR ENGINEERING (2)

Lecture, 2 hours. This is a two-unit one-half semester introduction to probability theory for Engineering students. Topics covered include basic set theory, probability, combinatorics, discrete and continuous random variables, probability distribution and density functions, first and second moments, and functions of random variables. Prerequisite: Math 211 or consent of instructor.

MATH 352 NUMERICAL ANALYSIS (4)

Selected numerical and iterative processes for solving mathematical problems and their applications. Topics include finding roots with bisection and Newton's method; solving systems of linear equations using LU decomposition and Gauss-Seidel methods; polynomial approximation using Taylor's Theorem, Lagrange interpolations, and the theory of spline functions; numerical integration using Simpson's rule and Gaussian integration; and numerical solutions to ODEs using Euler's and modified Euler's method. Prerequisites: MATH 241 (may take concurrently) and MATH 180, or consent of instructor. Not repeatable for credit.

MATH 367 STATISTICAL CONSULTING AND COMMUNICATION (2)

This course is a blending of theoretical and practical aspects of statistical consulting. Students learn how to consult with professionals in various fields, find creative statistical solutions to real-world problems, and present results in oral and written form. Students also learn about research and statistical software packages. Prerequisite: MATH 265 or consent of instructor.

MATH 375 M*A*T*H COLLOQUIUM (1)

Students will be required to attend presentations, keep a journal, and write a significant paper on one of the presentations. May be taken three times for credit. No more than 3 units may be applied to the upper-division major or minor requirements. May not be taken concurrently with MATH 175. Prerequisites: consent of instructor and upper-division standing.

MATH 381 COMPUTING FOR STATISTICS: SAS PROGRAMMING LANGUAGE (2)

Students will learn how to write SAS programs in order to perform data management tasks, statistical analysis, and to generate summary graphs and SAS reports. Topics include essential programming concepts (the environment and steps), typical data processing tasks, data management techniques (working with SAS libraries and different types of data, data set input and output, validation, merging, and subsets), statistical analyses (descriptive statistics, histograms and bar charts, k analysis of variance, regression analysis), and generation of SAS reports. Prerequisite: MATH 265 or concurrent enrollment, or consent of instructor.

MATH 390 FIELDWORK AND SEMINAR: SECONDARY MATHEMATICS TEACHING (2)

Forty-five hours of observation in middle school, junior high, and/or high school mathematics classrooms, plus a weekly seminar. Students begin to view school mathematics from the vantage point of a teacher. Intended primarily for Mathematics majors in the secondary teaching track or students considering a career in this field. This course satisfies the 45 hours of field observation required for acceptance into SSU's Single Subject Credential Program, and initiates the development of the Mathematics Portfolio required for Mathematics majors in the secondary teaching track. Cr/NC only. Prerequisite: MATH 161 or consent of instructor.

MATH 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in the community performing such tasks as tutoring, coaching, and reading for the blind. Students receive 1 to 4 units, depending on the specific tasks performed. No more than 3 units of credit in CIP may be applied toward any Mathematics degree. May be repeated for a total of 6 units. Cr/NC only.

MATH 399 PRACTICUM IN MATHEMATICS (1-4)

Supervised unpaid instructional work experience in Mathematics. May include tutoring, assisting with classroom activities, and leading supplementary course workshops. Thirty hours of contact time is required for each unit. Does not count for credit in the major or the minor, except for one unit in the Integrated Program. May be repeated for up to 4 units of credit. Prerequisites: requires previous or concurrent enrollment in an upper-division mathematics course and consent of instructor. Cr/NC only.

MATH 416 GRAPH THEORY AND COMBINATORICS (4)

A study of combinatorics, probability, and graph theory. Math 416 covers the same topics as Math 316. Students taking Math 416 will work advanced problems from these topics and do a special research project which requires a significant paper and an oral presentation. Students may not earn credit for both Math 316 and Math 416. Prerequisite: Math 142 or Math 220 or CS 242 consent of instructor. Not repeatable for credit.

MATH 418 TOPOLOGY (4)

Topics include definition of a topology, open & closed sets, continuous mappings, subspaces, bases and subbases of a topology, compact topological spaces, separation axioms, connected, path connected, normal spaces, regular spaces, metric spaces, product spaces, and quotient spaces. Will also include homotopy, the fundamental group, and covering spaces as time permits. Theorems include the Urysohn lemma, Tietze Extension Theorem, and the Tychonoff Theorem. Prerequisite: MATH 340 or consent of instructor. MATH 320 is recommended. Not repeatable for credit.

MATH 420 MODERN ALGEBRA II (4)

A continuation of MATH 320. Advanced topics in the theory of groups, rings, and fields. Depth in Algebra at a level expected of entering graduate students. Coverage will include topics such as the direct product of groups, finite Abelian groups, Sylow Theorems, unique factorization domains, field extensions, and Galois Theory. Prerequisites: Math 320 or equivalent. Not repeatable for credit.

MATH 430 LINEAR SYSTEMS THEORY (3)

Topics may include correlation, convolution, Fourier, Laplace and z-transform; difference equations; fast Fourier transforms; and state variable theory. Prerequisite: one semester of differential equations (such as MATH 241), or consent of instructor. Cross-listed as ES 400 and CES 400.

MATH 431 APPLIED PARTIAL DIFFERENTIAL EQUATIONS (4)

Topics covered in this course will include Introduction and Classification of PDEs, Mathematical models in physics and engineering, Theory and solution of quasi-linear first-order PDEs, Power series solutions of an ODE, The Sturm separation theorem for second-order linear equations, Second-order linear and nonlinear PDEs including applications, Fourier series, boundary-value problems, Fourier and Laplace transforms, numerical methods and solutions, and approximation of solutions using the finite-difference method. Prerequisites: Math 241 and Math 180, or consent of instructor. Not repeatable for credit.

MATH 440 REAL ANALYSIS II (4)

Topics include sequences and series of functions, Taylor series, Weierstrass approximation theorem, orthogonal functions, Fourier series, Lebesgue measure, the Lebesgue integral, and square-integrable functions. Prerequisite: Math 340 or consent of instructor. Not repeatable for credit.

MATH 441 OPERATIONS RESEARCH (3)

A course in operations research and industrial problem solving. Topics may include optimization, simplex algorithm for linear programming, queueing theory, game theory, PERT least time path analysis, and mathematical modeling of industrial problems. Prerequisites: MATH 345 and either MATH 241 or MATH 222, or consent of instructor.

MATH 445 MATHEMATICAL STATISTICS AND OPERATIONS RESEARCH (4)

Topics include: properties of statistics, convergence in probability, theory of estimation and confidence intervals, Bayesian statistics, tests of significance, power and uniformly most powerful tests, random processes (with emphasis on queueing theory), and stationarity. Prerequisite: MATH 345 or consent of instructor.

MATH 460 COMPLEX ANALYSIS (4)

Topics will include the complex field, functions, limits, continuity, differentiation, the Cauchy-Riemann equations, conformal mappings, path integration, Cauchy's Integral Theorem and Integral Formulas, the Liouville Theorems, the Laurent Expansion, singularities, poles, residues, and contour integration. Additional topics may include topics such as Mittag-Leffler's Partial-fractions Theorem and Riemann surfaces. Prerequisite: MATH 340 or consent of instructor. Not repeatable for credit.

MATH 465 EXPERIMENTAL DESIGN AND REGRESSION ANALYSIS (4)

Advanced course in simple and multiple linear regression analysis; nonlinear and nonparametric regression analysis. Design of experiments and analysis of variance including one-way, two-way and block design; nonparametric techniques and multiple comparison methods. Prerequisite: MATH 265 and either MATH 241 or another course in linear algebra, and MATH 345 or consent of instructor.

MATH 467 STATISTICAL CONSULTING, COMMUNICATION, AND PROJECT MANAGEMENT (2)

This course is a blending of theoretical and practical aspects of statistical consulting. Students learn how to consult with professionals in various fields, find creative statistical solutions to real-world problems, and present results in oral and written form. Students also learn about research and statistical software packages. MATH 467 covers the same topics as MATH 367. In addition, students taking MATH 467 will also learn how to oversee a statistical project completed by a team. Prerequisite: MATH 367 or consent of instructor.

MATH 470 MATHEMATICAL AND STATISTICAL MODELING (4)

The process of expressing scientific principles, experiments, and conjectures in mathematical terms. Topics include: gathering reliable data, exposing underlying assumptions, variables, relationships, levels, refining of models, and stochastic models. Deterministic vs. stochastic, discrete vs continuous, and deductive vs statistical models. Applications to biology, physics, chemistry, geology, social science, and environmental sciences. Prerequisite: MATH 211 or consent of instructor. Not repeatable for credit.

MATH 485 SELECTED TOPICS IN . . . (1-3)

Subject matter and number of units to be determined by the instructor and may differ from semester to semester. Some of the possible areas of study are multivariable analysis, calculus of variations, convex geometry, differentiable manifolds, graph theory, Galois theory, algebraic topology, and integral equations. This course may be repeated for up to 6 units. The course title will appear on the student's transcript. Prerequisite: consent of instructor.

MATH 490 CAPSTONE SEMINAR: SECONDARY MATHEMATICS**TEACHING (1)**

Seminar focusing on connections among undergraduate coursework, secondary school curriculum, and learning and teaching mathematics. Students present their completed Mathematics Subject Matter Program portfolios for final evaluation. Students draw upon their portfolios, experiences, and readings in mathematics education to present information and engage fellow students in discussion of relevant issues. Prerequisite: senior-level standing or consent of instructor.

MATH 495 SPECIAL STUDIES (1-4)

Prerequisites: a lower-division math course and consent of instructor. May be repeated for credit.

MATH 496 PROSEMINAR IN MATHEMATICS (1-3)

A mutual exploration of selected current issues in mathematics by members of the Mathematics faculty and Mathematics majors. Non-majors may enroll by permission of the instructors. Prerequisite: upper-division standing.

MATH 499 INTERNSHIP IN MATHEMATICS (1-3)

Field experience in mathematics, computer science, or statistics. Cr/NC only. Prerequisite: prior arrangement with instructor.

MATH 595 SPECIAL STUDIES IN MATHEMATICS (1-4)

Subject matter and number of units to be determined by instructor and may differ from semester to semester. This course may be repeated with different subject matter for up to 12 units. The course title will appear on the student's transcript. Prerequisite: consent of instructor.

Modern Languages and Literatures (MLL)

MLL 101 SPECIAL TOPICS IN FOREIGN LANGUAGE (1-4)

MLL 102 SPECIAL TOPICS IN FOREIGN LANGUAGE (1-4)

MLL 160A HUMANITIES LEARNING COMMUNITY (4)

MLL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 160B HUMANITIES LEARNING COMMUNITY (4)

MLL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 161A CRITICAL ENCOUNTERS IN LANGUAGES AND CULTURES (2)

MLL 161 A/B is a year long course, which, combined with FR 101, GER 101, or SPAN 201, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE categories.

MLL 161B HUMANITIES LEARNING COMMUNITY (2)

MLL 161 A/B is a year long course, which, combined with FR 101, GER 101, or SPAN 201, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MLL 195 ELEMENTARY SPECIAL STUDIES (1-4)

Directed, individual, lower-division study in a modern language.

MLL 214 WORLD LITERATURES IN ENGLISH (4)

Introduction to selected works of world literature from Asia, Africa, Europe, North America, Latin America and Mexico, and from the classic literatures of Greece and Rome. Background lectures on literature, literary genres, and the different cultural histories will be given. Basic techniques of reading, analysis, and composition will be emphasized. Satisfies GE Area C2 (Literatures, Philosophies, and Values). Prerequisite: ENGL 101. May be repeated for credit.

MLL 314 WORLD LITERATURES IN ENGLISH TRANSLATION (4)

Studies in world literatures in English translation. Topics may include non-western cultural and religious values, colonialism versus emerging nationalisms, and the quest for identity, personal, cultural, and national. Satisfies GE Area C2 (Literatures, Philosophies, and Values). Prerequisite: ENGL 101. May be repeated for credit.

MLL 495 SPECIAL STUDIES (1-4)

Directed and individual study on subject(s) of special interest. Students must prepare a proposal which is subject to the approval of the department chair. May be repeated once for credit for a total of 4 units.

Music (MUS)

MUS 101 INTRODUCTION TO MUSIC (3-4)

What does music mean? Why does music matter? These questions will shape the development of listening tools and cultural perspectives appropriate to the diverse and changing roles music plays in different times and places. No prior background in music is required. Satisfies GE Area C3 (Comparative Perspectives and/or Foreign Languages).

MUS 105 MUSIC THEORY FOR NON-MAJORS (4)

Through writing and analysis, this course incorporates the following concepts: rhythm and meter, basic properties of sound, intervals, diatonic scales and triads, diatonic chord progressions, basic cadential formulas, melodic and phrase structure, dominant seventh, and the use of music notation software. Not open to Music majors. Satisfies GE Area C1 (Applied Arts Combining Studio and Theory).

MUS 106 FUNDAMENTALS OF MUSIC THEORY (3)

Intensive practice in developing skill and fluency reading music notation. Aural and written practice recognizing, writing, and using intervals, scales, and key signatures. Beginning sight-singing and dictation using simple pitch and rhythmic materials. Should be taken concurrently with MUS 109. Restricted to Music majors and minors; open to non-majors only with consent of instructor.

MUS 109 INTENSIVE KEYBOARD LAB I (2)

A course designed for prospective music majors who fail to meet the keyboard competencies required for entry into the program. Those students who also lack knowledge of theory fundamentals should take MUS 105 with this course. Prerequisites: open to Music majors and minors only and recommendation of a music advisor.

MUS 110 THEORY I: DIATONICISM (3)

This course incorporates the concepts from MUS 105. In addition, through writing and analysis, the course will include: introduction to sequence, secondary dominants, modulation to closely related keys, secondary leading tones, diminished seventh and non-dominant 7th chords, and borrowed chords will be addressed. Figured bass, non-harmonic tones, melodic and phrase structure, and voice leading involving 4 part choral writing. Use of music notation software. A concurrent laboratory experience in ear training and sight-singing including melodic, harmonic, and rhythmic dictation is required. See Ear Training I. Prerequisite: MUS 105 or 106, or consent of instructor.

MUS 115 VOCAL METHODS (1)

Group and individual explorations of the fundamental techniques of singing. Develop strategies to address tone production, breath control, diction, repertory, and interpretation. Music Education students learn basic vocal pedagogy. Offered for upper-division credit as MUS 415 with additional course requirements. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 118 GUITAR METHODS (1)

An exploration of basic performance techniques, and pedagogy and teaching strategies for guitar. Offered for upper-division credit as MUS 418. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 120 EAR TRAINING I (2)

Development of sight-singing and dictation skills using pentatonic and diatonic materials. Techniques include moveable-do solfa, drills in intervals, triads, and dictation, augmented by computer software and group work. Also emphasizes development of broad listening skills, using examples of great works based upon simple diatonic melodies. Prerequisite: MUS 106 or equivalent.

MUS 122 STRING METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with orchestral string instruments. Offered for upper-division credit as MUS 422. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 123 WOODWIND METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with band and orchestral woodwind instruments. Offered for upper-division credit as MUS 423. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 124 BRASS METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with band and orchestral brass instruments. Offered for upper-division credit as MUS 424. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 129 PERCUSSION METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with standard percussion instruments. Offered for upper-division credit as MUS 429. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 133 PRIVATE INSTRUCTION-STRINGS (1)

Private instruction on one instrument. May be repeated for credit. Prerequisite: audition.

MUS 134 PRIVATE INSTRUCTION-WOODWINDS (1)

Private instruction on one instrument. May be repeated for credit. Prerequisite: audition.

MUS 137 PRIVATE INSTRUCTION-BRASS (1)

Private instruction on one instrument. May be repeated for credit. Prerequisite: audition.

MUS 138 PRIVATE INSTRUCTION-PERCUSSION (1)

Private instruction on percussion instruments. May be repeated for credit. Prerequisite: audition.

MUS 139 PRIVATE INSTRUCTION-KEYBOARD (1)

Private instruction on one keyboard instrument. May be repeated for credit. Prerequisite: audition.

MUS 141 PRIVATE INSTRUCTION-VOICE (1)

Private voice instruction. Advanced individual study of voice. May be repeated for credit. Prerequisite: audition.

MUS 143 PRIVATE INSTRUCTION-GUITAR (1)

Private guitar instruction. May be repeated for credit. Prerequisite: audition.

MUS 147 APPLIED MUSIC STUDIES (1)

Advanced individual study of instrument or voice. Instructor permission required. May be repeated for credit.

MUS 149 REHEARSAL OBSERVATION SERIES (1)

The Rehearsal Observation Series is a Credit / No Credit course, which brings students to the forefront of the music making process. It corroborates the "doing/experiencing" philosophy of the music department, linking that directly to curriculum. It helps non-musicians particularly understand how this mystery that is music actually works. Rehearsal observations occur on a regular basis. Attendance is mandatory and a required Rehearsal Observation Form is submitted after each rehearsal. Satisfies GE Area C1. Prerequisite: MUS 150, or may be taken concurrently.

MUS 150 SURVEY OF U.S. MUSIC (3)

An introductory course with lectures and demonstrations dealing with the broad range of music in the United States from the Colonial period to the present. Satisfies GE Area C1 (History of the Fine Arts).

MUS 151 REPERTORY CLASS-PRIVATE INSTRUCTION (1)

This class provides an opportunity for students to perform their repertory in a group setting. Private instruction faculty coach students in technique, interpretation, and presentation. Classes are normally offered for voice and classical instrumental. Also offered for upper-division credit as MUS 451. May be repeated for credit. Prerequisite: concurrent enrollment in appropriate private instruction course.

MUS 160A HUMANITIES LEARNING COMMUNITY (4)

MUS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MUS 160B HUMANITIES LEARNING COMMUNITY (4)

MUS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

MUS 189 JAZZ IMPROVISATION I (2)

An exploration and development of basic jazz vocabulary, including scales, chords, rhythm, and techniques used in melodic improvisation. May be repeated for credit with consent of instructor. Prerequisites: MUS 105, MUS 106, and consent of instructor.

MUS 199 STUDENT-INSTRUCTED COURSE (1-3)

Topic will differ each semester. Cr/NC only.

MUS 201 MUSIC IN ACTION (4)

Experience live classical, jazz and world music performances created by today's musicians, students, and professionals. In-class discussions allow students to build a vocabulary about the performances they will review. The capstone experience is a small group presentation on an area of music mutually chosen. Attendance is required at seven on-campus, free-admission performances. Satisfies GE Area C3.

MUS 209 INTENSIVE KEYBOARD LAB II (2)

A continuation of work begun in MUS 109. Prerequisite: MUS 109, or consent of the instructor.

MUS 210 THEORY II: CHROMATICISM (3)

This course incorporates the concepts from Music Theory II. In addition, through writing and analysis, the course will include: Neapolitan and augmented sixth chords; chromatic harmony; altered chords and dominants; mixture chords; modulation to distantly related keys; 9th, 11th, and 13th chords; melodic, phrase, and theme structure; and voice leading involving 4 part choral writing. Use of music notation software. A concurrent laboratory experience in ear training and sight-singing including melodic, harmonic, and rhythmic dictation is required. See Ear Training II. Prerequisite: MUS 110 or consent of instructor.

MUS 212 JAZZ HARMONY AND ARRANGING I (3)

Study of basic melodic and harmonic materials commonly used in jazz. Application through arranging projects for small jazz groups. Prerequisite: MUS 110 or consent of instructor.

MUS 220 EAR TRAINING II (2)

Continuation of Ear Training I. Sight-singing progresses to two-, three-, and four-part music, incorporating the most common chromatic tones. Dictation focuses upon triad inversions and seventh chords, continuing development of melodic and rhythmic dictation skills, and the introduction of polyphonic dictation. Listening skills are pursued using great works. Prerequisite: MUS 120 or equivalent.

MUS 250 SURVEY OF EUROPEAN MUSIC (3)

An introductory course with lectures and demonstrations dealing with classical European music from the Middle Ages to contemporary music. Satisfies GE Area C1 (History of the Fine Arts).

MUS 251 HISTORY OF WESTERN MUSIC, ANCIENT WORLD TO 1750 (3)

History of Western music from the ancient world to 1750. The course examines the evolution of musical genres and styles, from the ancient Greeks and the earliest plainchant of the Medieval church to the intricate polyphony of the High Baroque including the music of Bach and Handel. Listening and analytical study of specific compositions requires the student to have a working knowledge of musical notation and theory. Prerequisite: MUS 110, or consent of the instructor.

MUS 252 HISTORY OF WESTERN MUSIC, 1750-PRESENT (3)

History of music in the Western tradition, dating from 1750 to the present. The course includes the study of representative composers such as C.P.E. Bach, Mozart, Beethoven, Brahms, Stravinsky, and Cage as well as analytical studies of their works. This course requires a working knowledge of musical notation and theory. Prerequisite: MUS 210, or consent of instructor.

MUS 259 MUSIC TECHNOLOGY: TOOLS AND APPLICATIONS (2-3)

A hands-on survey of hardware and software resources for music notation, midi sequencing, digital recording, and synthesizer operation. The focus will be on building basic skills for using these tools in real-world situations. Required for Music Education students; open only to Music majors.

MUS 289 JAZZ IMPROVISATION II (3)

Basic voiceleading techniques for improvising on common functional chord progressions: blues, "Rhythm" changes, and various "standards." Prerequisites: MUS 110 and MUS 189, or consent of instructor.

MUS 292 JAZZ PIANO I (1)

An introduction to jazz improvisation at the keyboard. Emphasis is placed on developing skill in reading lead sheets, in chord substitution and voicing at the keyboard, and in creating an improvised "piano trio" texture. Prerequisite: MUS 209 or consent of instructor.

MUS 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring, coaching, and performing for hospitals and schools. Students taking CIP through the Music Department must arrange for supervision by a Music Department advisor. Students in the Music Education concentration must see their advisor about special requirements. Cr/NC only.

MUS 300 SEMINAR (3)

An intensive study, for Music majors, of the history, theory, or research methodology of a specific topic in music. May be repeated for credit under different subtitles. Prerequisites: 9 units of theory and concurrent enrollment in MUS 320, or consent of instructor.

MUS 309A KEYBOARD PROFICIENCY LAB (1)

The study of functional keyboard: figured bass, harmonization, transposition, and sight-reading. Prerequisite: placement test. Students who lack sufficient keyboard fluency may take pre-major Intensive Keyboard Labs (MUS 109 and 209) to meet the required competency.

MUS 309B KEYBOARD PROFICIENCY LAB (1)

The study of functional keyboard: figured bass, harmonization, transposition, and sight-reading. Prerequisite: placement test. Students who lack sufficient keyboard fluency may take pre-major Intensive Keyboard Labs (MUS 109 and 209) to meet the required competency.

MUS 310 THEORY III: FORM AND ANALYSIS (3)

This course incorporates the concepts from Music Theory I and II. In addition, through analysis from the macro to the micro large-scale form, orchestration, motive identification and tracking, and detailed harmonic progression (sonorities, functions, and modulation types) are studied. Variation techniques, binary and ternary forms, sonata forms, and contrapuntal forms are included in the study of such composers as Bach, Mozart, Beethoven, and Mahler. Use of music notation software. A concurrent laboratory experience in ear training and sight-singing including melodic, harmonic, and rhythmic dictation is required. See Ear Training III.

MUS 312 JAZZ HARMONY AND ARRANGING II (3)

A continuation of MUS 212. Study of advanced melodic and harmonic materials commonly used in jazz. Application through arranging projects for small (saxophone ensemble) and large (big band) jazz groups. Prerequisite: MUS 212.

MUS 314 ORCHESTRATION (2)

An exploration of fundamental techniques of instrumental and choral arranging. Students will develop familiarity with instrumental and vocal ranges, transpositions, the characteristic sounds of different families of instruments, and various tone color combinations. Students will create arrangements for a variety of ensembles. Prerequisites: MUS 210, MUS 220. Familiarity with woodwind, brass, and/or string instruments is recommended. Consent of instructor.

MUS 315 DICTION - ENGLISH/ITALIAN (1-2)

This hands-on course complements vocal instruction and theatre arts classes through diction training. Students will learn to use the "International Phonetic Alphabet" to help them analyze and transliterate English and dialects for the stage, Italian and English songs, and arias.

MUS 316 DICTION - FRENCH AND GERMAN (1-2)

A continuation of MUS 315. Students will learn to use the "International Phonetic Alphabet" to help them analyze and transliterate songs and texts in French and German.

MUS 320 EAR TRAINING III (2)

Continued development of sight-singing and dictation skills. Techniques include solfa using moveable do and drills in rhythm and meter, intervals, triads, and full melodies. Emphasizes broad listening skills and memory through frequent melodic and harmonic dictation exercises. Through examples from the 18th and 19th centuries the course will explore modes, chromatic melodies and harmonic progressions, secondary dominants, and modulation. Prerequisite: MUS 220 or equivalent.

MUS 321 AURAL SKILLS PRACTICUM (1)

Focus varies each semester. Will stress the development of such practical skills as sight-singing, dictation, oral tradition, transcription, repertory building, score-reading, rhythm training, and sight-reading of various periods, cultures, and styles. May be repeated for credit. See each concentration for number of semesters required.

MUS 323 CHAMBER SINGERS (1-2)

Small vocal ensemble. Repertoire may include madrigals, motets, masses, and partsongs from the Medieval, Renaissance, Baroque, Classical, Romantic, and 20th century periods. Emphasis is placed on the development of comprehensive musicianship, interpretive skills, and ensemble sensitivity. Frequent public performances. Admission by audition. May be repeated for credit.

MUS 325 SYMPHONIC CHORUS (1-2)

Large chorus featuring a wide range of accompanied and a cappella literature. Emphasis placed on development of vocal technique, musicianship skills, and preparation of repertoire. Includes public performances. No previous choral experience required; singers will be given a placement audition after enrolling. May be repeated for credit.

MUS 326 GUITAR ENSEMBLE (1-2)

The course focuses on all aspects of the literature for multiple guitars — performance, listening, sight-reading, and technique. A wide variety of repertory is covered and a public performance is required. Project proposals from class members are welcomed. Prerequisite: consent of instructor.

MUS 327 SYMPHONIC WIND ENSEMBLE (1-2)

The SSU Symphonic Wind Ensemble is a large wind band dedicated to the study and performance of a wide variety of wind band literature. Membership is open to all University students. Auditions for part assignments are held at the beginning of each semester. The SWE performs 2-4 concerts each semester. This course has a mandatory concert performance requirement. May be repeated for credit.

MUS 328 STRING ORCHESTRA (1-2)

This string-based ensemble will explore concert and opera literature from several periods, and eventually will include woodwinds, brass, and percussion players. This course is open to students, faculty, and staff. May be repeated for credit.

MUS 329 CHAMBER MUSIC ENSEMBLES (1-2)

Enrolled students will be assigned to various ensembles according to instrumentation and expertise. During each semester outstanding musicians from the Bay Area will coach each ensemble. Course culminates in a series of public performances. Admission by audition. May be repeated for credit.

MUS 330 MUSICAL THEATRE PRODUCTION (1-3)

A course devoted to the student and public performance of major works of operatic and musical theatre literature. Designed for singers, actors, and others interested in music theatre. The capstone is a fully staged, orchestrally accompanied performance. May be repeated for credit. Prerequisite: by audition, in August only.

MUS 340 MUSICAL THEATRE SCENES WORKSHOP (1-3)

A performance course designed to broaden student's familiarity with the opera and musical theatre repertoire. Students have input regarding literature and often write their own scenes. The class is open to all students. May be repeated for credit.

MUS 342 HISTORY OF JAZZ (1-3)

The study of jazz from its origins to the present. Listening to music is the core of the class; emphasis is on developing skill in recognizing and describing what happens in classic performances. The changing styles of jazz are related to the social and cultural context of the music in each style period.

MUS 343 STUDIES IN MUSICAL GENRES (3)

An in-depth study of a particular type of music. Course activities will include lecture, listening, and in-class performances. Prerequisite: MUS 101, MUS 201, or consent of instructor. Satisfies GE Area C1. May be repeated for credit.

MUS 344 STUDIES-SPECIFIC COMPOSERS (3)

An in-depth study of the life and works of a single composer. Course activities will include lecture, listening, and in-class performances. May be repeated for credit. Prerequisite: MUS 101, 201, or consent of instructor. Satisfies GE Area C1.

MUS 346 STUDIES IN MUSIC THEORY (1-3)

The detailed study of a particular theoretical system in music. May be repeated for credit with consent of the instructor.

MUS 347 STUDIES IN WORLD MUSIC (1-3)

The detailed study of the music of a particular country or area outside the Western European musical tradition.

MUS 350 SURVEY OF WORLD MUSIC (4)

This class examines the world's musical cultures with an emphasis on musical repertoires and how they relate to social, cultural, and religious contexts. Students are encouraged to show their musical talents and participate in learning a few melodies and rhythms. Satisfies GE Area C3 (Comparative Perspectives).

MUS 353 INDIAN SINGING ENSEMBLE (1-2)

Experience the joy of Indian singing as we explore the philosophical and spiritual concept of Nada Brahma (the universe is sound, music being eternal bliss). No requirements; bring your throat. May be repeated for credit.

MUS 376 CHAMBER WIND ENSEMBLE (1-2)

The Chamber Wind Ensemble is a small, one-on-a-part wind band dedicated to the study and performance of a wide variety of music for small ensembles. Instrumentation is flexible to accommodate various styles of music. The CWE performs 2-3 concerts each semester. This course has a mandatory concert performance requirement. May be repeated for credit. Membership is open to all University students. Prerequisite: consent of instructor.

MUS 377 BRASS ENSEMBLE (1)

This ensemble is a vibrant group of interested trumpet, horn, baritone, trombone, and tuba players who perform a wide array of pieces from Gabrieli antiphonal music to jazz works as well as music in the Philip Nones brass repertoire. The group meets weekly and plays concerts on and off campus.

MUS 378 PERCUSSION ENSEMBLE (1)

An outgrowth of the Symphonic Wind Ensemble, the Percussion Ensemble performs a mixture of historically relevant repertoire as well as pieces of the modern repertoire. The ensemble affords its members the chance to cultivate sensitive chamber music skills and to explore performance techniques on all the various percussion instruments. May be repeated for credit.

MUS 379 LATIN JAZZ BAND (1-2)

Rehearsal and performance of literature from the Latin diaspora, focusing on the music of the Caribbean and South America. May be repeated for credit. Prerequisite: consent of instructor.

MUS 389 JAZZ IMPROVISATION III (3)

A continuation of MUS 289. Advanced chord-scale and chord substitution techniques for improvising on functional chord progressions. Prerequisite: MUS 289.

MUS 390 JAZZ ORCHESTRA (1-2)

An 18-20 piece Big Band that performs the best literature from the traditional Swing Era to the present day. May be repeated for credit.

MUS 391 CONCERT JAZZ ENSEMBLE (1-2)

Rehearsal and performance of literature in traditional and contemporary jazz idioms. Repertory includes original arrangements especially designed for the ensemble by music faculty and students. May be repeated for credit. Prerequisite: consent of instructor.

MUS 392 JAZZ PIANO II (1)

Continuation of MUS 292. Prerequisite: MUS 292 or consent of instructor. May be repeated for credit.

MUS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring, coaching, and performing for hospitals and schools. Students taking CIP through the Music Department must arrange for supervision by a Music Department advisor. Students in the Music Education concentration must see their advisor about special requirements. Cr/NC only. May be repeated for credit.

MUS 399 STUDENT-INSTRUCTED COURSE (1-3)

Topic differs each semester. Cr/NC only. May be repeated for credit.

MUS 400 MUSIC FOR THE CLASSROOM (2)

Philosophy, concepts, and materials for music teaching in the classroom. The structure, nature, and function of music in children's lives. Prerequisite: MUS 105 or equivalent, or consent of instructor.

MUS 401 CONDUCTING TECHNIQUE (2)

An introduction to the basics of conducting with an emphasis on conducting patterns, baton technique, and the development of effective rehearsal procedures common to instrumental and vocal ensembles. Prerequisites: MUS 110, MUS 120, and at least two of the following: MUS 115/415, MUS 122/422, MUS 123/423, MUS 124/424, and MUS 129/429.

MUS 402 CHORAL CONDUCTING AND METHODS (3)

Advanced conducting techniques, and choral rehearsal and performance skills. Prerequisite: MUS 401 or consent of instructor.

MUS 403 INSTRUMENTAL CONDUCTING AND METHODS (3)

Advanced instrumental conducting techniques. Students will further develop expressive conducting skills and explore a variety of teaching methods and strategies necessary for conducting and rehearsing instrumental ensembles. Students in the course function as a live ensemble, providing a live laboratory to explore various conducting concepts and issues. Mandatory 20 hours of observation outside of class. Prerequisites: MUS 401, MUS 402, and consent of instructor.

MUS 410 THEORY IV: 20TH CENTURY TECHNIQUES (3)

A study of melodic, rhythmic, harmonic, and formal organization of 20th century music. Prerequisites: MUS 210, 220, 150, and 250 or consent of instructor.

MUS 412 JAZZ COMPOSITION (3)

Study of form and techniques for jazz composition. Students will compose 5 tunes.
Prerequisite: MUS 312 or 389.

MUS 415 VOICE METHODS (1)

Group and individual explorations of the fundamental techniques of singing. Develop strategies to address tone production, breath control, diction, repertory, and interpretation. Music Education students learn basic vocal pedagogy. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 418 GUITAR METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies for guitar. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 420 EAR TRAINING IV (2)

Continuation of Ear Training III. Begins with Mozart, and proceeds through Beethoven and the Romantics into music of the 20th century. Emphasizes accurately singing and hearing music of increasing chromatic complexity and using an intervallic approach to augment tonal hearing. Listening and analysis activities focus upon selection of great works from Mozart to Stravinsky. Prerequisite: MUS 320 or equivalent.

MUS 422 STRING METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with orchestral string instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 423 WOODWIND METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with band and orchestral woodwind instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 424 BRASS METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with band and orchestral brass instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 425 COMPOSERS FORUM (1)

Individual projects in creative work. Individual projects in jazz performance. May be repeated for credit.

MUS 426 JAZZ FORUM (1)

Required for Jazz Performance majors every semester. Students interact with guest artists and clinicians from around the world. May be repeated for credit.

MUS 429 PERCUSSION METHODS (1)

An exploration of basic performance techniques, pedagogy, and teaching strategies associated with standard percussion instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 433 PRIVATE INSTRUCTION-STRINGS (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 133 and audition.

MUS 434 PRIVATE INSTRUCTION-WOODWINDS (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 134 and audition.

MUS 437 PRIVATE INSTRUCTION-BRASS (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 137 and audition.

MUS 438 PRIVATE INSTRUCTION-PERCUSSION (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 138 and audition.

MUS 439 PRIVATE INSTRUCTION-KEYBOARD (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 139 and audition.

MUS 440 VOCAL/INSTRUMENTAL PROFICIENCY JURY (1)

A performance illustrating proficiency as well as knowledge of the technique and tone production in voice; on guitar; and on string, woodwind, brass, and percussion instruments. For students in the Music Education concentration or the California Music Subject Matter Competency Program. Cr/NC only. Prerequisites: MUS 415, 418, 422, 423, 424, and 429.

MUS 441 PRIVATE INSTRUCTION-VOICE (1)

Advanced individual study of voice. May be repeated for credit. Prerequisites: MUS 141 and audition.

MUS 442 PRIVATE INSTRUCTION - INDIAN SINGING (1)

Private instruction in Indian classical singing. May be repeated for credit. Prerequisites: MUS 353 and consent of instructor.

MUS 443 PRIVATE INSTRUCTION-GUITAR (1)

Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 143 and audition.

MUS 445 PRIVATE INSTRUCTION-COMPOSITION (1-2)

Private instruction in composition for advanced students. May be repeated for credit. Prerequisite: MUS 425 or consent of instructor.

MUS 446 PRIVATE INSTRUCTION-CONDUCTING (1-2)

Private instruction in conducting for advanced students. May be repeated for credit. Prerequisite: audition.

MUS 447 APPLIED MUSIC STUDIES (1)

Advanced individual study of instrument or voice. Instructor permission required. May be repeated for credit.

MUS 448 VOCAL ACCOMPANYING WORKSHOP (1-2)

This course offers pianists and vocalists an opportunity to explore and perform their shared repertoire. Emphasis will be placed on developing communication skills between performers and on improving sight-reading proficiency. The course culminates in a recital presented by class members. May be repeated for credit.

MUS 451 REPERTORY CLASS-PRIVATE INSTRUCTION (1)

This class provides an opportunity for students to perform their repertory in a group setting. Private instruction faculty coach students in technique, interpretation, and presentation. Classes are normally offered for voice and classical instrumental. May be repeated for credit. Prerequisite: concurrent enrollment in the appropriate private instruction course.

MUS 453 ADVANCED INDIAN SINGING ENSEMBLE (1)

This course is designed for advanced singers of Indian classical music. It is open to those who have taken 3 semesters of MUS 321/353 or have the consent of the instructor. Course may be repeated for credit.

MUS 460 TEACHING ASSISTANT IN MUSIC (1-4)

May be repeated for credit.

MUS 480 SPECIAL TOPICS (1-4)

Topic will vary from semester to semester. Consult Schedule of Classes for current offering. May be repeated for credit.

MUS 481 SPECIAL TOPICS WORKSHOP (1-3)

Activity will vary from semester to semester. Consult Schedule of Classes for current offering. May be repeated for credit.

MUS 489 JAZZ IMPROVISATION IV (3)

Continuation of MUS 389. Advanced rhythmic concepts and techniques for improvising on contemporary modal and free-form compositions. Prerequisite: MUS 389.

MUS 490 SENIOR PROJECT (1-3)

A course in which the work of the Music major reaches culmination. Group or individual projects in research, analysis, theory, or performance that bring together all the skills and proficiencies developed by the student. For the Music Education Concentration the project is a summative portfolio. Prerequisites: completion of all music major requirements or consent of instructor.

MUS 491 SENIOR RECITAL (2-3)

The preparation and presentation of a senior recital is the culminating activity for Music majors in the Performance Concentration. Prerequisites: completion of all performance concentration requirements or consent of instructor.

MUS 495 SPECIAL STUDIES (1-4)

Individualized studies in topics beyond the scope of the regular curriculum. Contract with an instructor, specifying work to be completed. A regular schedule of contract hours is necessary. Prerequisite: consent of instructor. May be repeated for credit.

MUS 499 INTERNSHIP (1-4)

Work experience in organizations and projects related to music. Prerequisites: appropriate preparation for successful completion of internships and consent of instructor. May be repeated for credit.

MUS 500 INTRODUCTION TO GRADUATE STUDY (3)

A course in the methods and materials for research in music. Proficiency in an imaginative use of the resources for accessing musical data will be developed through projects in bibliography. Required of first-semester graduate students.

MUS 595 SPECIAL STUDIES (1-4)

Individualized studies in topics beyond the scope of the regular curriculum. Contract with an instructor, specifying work to be completed. A regular schedule of contract hours is necessary. Prerequisite: consent of instructor.

Native American Studies (NAMS)

NAMS 160A HUMANITIES LEARNING COMMUNITY (4)

NAMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

NAMS 160B HUMANITIES LEARNING COMMUNITY (4)

NAMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

NAMS 165 NATIVE CULTURES OF NORTHERN CALIFORNIA (4)

An introduction to the local and regional diversity of American Indian communities. Through the local and regional lenses, students will gain an understanding of the broader perspectives on Native American history, experience, and contemporary issues. This is a large lecture format with discussion sub-sections. Fulfills GE Area C2 and the Ethnic Studies requirement.

NAMS 200 INTRODUCTION TO NATIVE AMERICANS (3)

A survey of the various geographical environments of tribes living in North America. The emphasis is upon precontact cultures, but includes cultural and historical changes to tribes during the settling of this country by Europeans. Satisfies GE Area D1 (Individual and Society) and the Ethnic Studies requirement.

NAMS 205 INTRODUCTION TO NATIVE AMERICAN ARTS (4)

NAMS 205 is a general introduction to traditional and contemporary American Indian arts in the U.S. The course is a survey of Native American art in major indigenous cultural regions from pre-Colonial times to the present. Includes information on the culture that produced the art forms and will explore the interplay between tradition and innovation. Satisfies GE Area C1 and the Ethnic Studies requirement.

NAMS 300 EXPERIMENTAL COURSES (1-4)

Content varies from semester to semester. The majority of these courses are designed as short-term field excursions into various areas of the country where American Indians lived or are living.

NAMS 305 NORTH AMERICAN INDIAN HISTORY (4)

A survey-lecture course. It will chronologically follow the economic, military, social, and legal relationships between North American Indians and Euro-American colonists. Special emphasis will be placed on the relations with the federal and state governments from the Colonial period to the 20th century.

NAMS 338 NATIVE AMERICANS AND THE CINEMA (4)

This course examines and critiques the depiction of American Indians in American cinema, including Hollywood movies, independent films, and documentaries. These works are analyzed through an exploration of the social construction of stereotypes, film theory, and historical and cultural contexts. Films by American Indians and non-Indians will be examined and analyzed. Satisfies GE Area C1 and the Ethnic Studies requirement.

NAMS 346 PHILOSOPHIC SYSTEMS AND SACRED MOVEMENTS IN NATIVE NORTH AMERICA (4)

NAMS 346 is designed to give students an overview of a broad range of topics arising in the study of diverse Native American philosophical systems and sacred movements, pre-contact to the present. Regional and historical approaches are utilized in the analysis of American Indian religious movements and philosophic systems; archaeoastronomy, art forms, and ceremonies; and a variety of literary genres are investigated as expressions of religious belief and activity. Satisfies GE Area C2 and the Ethnic Studies Requirement.

NAMS 354 NATIVE AMERICAN LITERATURES (4)

A general introduction to American Indian literatures that includes early translations, oral literatures, autobiographies, and contemporary poetry and fiction. The course also focuses on the American Indian writers' connection to a "home landscape." The study of the scope and nature of various representations of American Indians in literary texts are explored. Satisfies GE Area C2 and the Ethnic Studies requirement.

NAMS 399 SELECTED TOPICS (1-3)

This student-instructed course is offered periodically on various Native American subjects. The course is offered when instructors are available with unique knowledge and skill not available through the regular faculty.

NAMS 400 SPECIAL TOPICS (1-4)

Special topics courses in Native American studies are offered occasionally, depending on student interests and faculty availability. Typically, courses might be: Native American Law, Health Issues in the Native American Community, and Native American Tribal Government.

NAMS 410 SEMINAR: INDIVIDUAL NATIVE AMERICAN CULTURE (4)

An in-depth focus on the cultural experience of an individual Native American people.

NAMS 412 NATIVE CALIFORNIA HISTORY AND CULTURE (4)

A survey of the cultures and histories of Native California Indians. Special emphasis on local Indians.

NAMS 414 NATIVE AMERICAN CULTURES OF THE AMERICAN SOUTHWEST (4)

An examination of the prehistory, ecology, settlement patterns, social organization, cosmological and ritual systems, material culture, mythology, language and status of Southwestern Native Americans.

NAMS 418 REGIONAL HISTORICAL STUDIES (4)

This course is a seminar that provides students with an opportunity to pursue various regional studies of Indian groups from precontact times to the present. Prerequisite: NAMS 200 or consent of instructor.

NAMS 420 FUNDAMENTALS OF NATIVE AMERICAN EDUCATION (1-4)

This course is appropriate for those who will be teaching Native American students K-12 or those who wish to develop curriculum materials about American Indians. A survey of North American Indian educational history will be followed by practical projects stressing appropriate teaching strategies.

NAMS 430 ADVANCED NATIVE AMERICAN ART WORKSHOP (0)

Emphasizes the practical application of traditional and contemporary Native American art forms, designs, and techniques. This course attempts to advance students' utilization of and appreciation for the various methods and skills of Native American arts while promoting individual creativity.

NAMS 440 THE CONTEMPORARY NATIVE AMERICAN (4)

A seminar on the status of Native Americans in modern American society, including economic, political, and legal aspects; the role of the federal government; and the emergence of pan-Indianism and political activism.

NAMS 442 CONTEMPORARY AFFAIRS: NATIVE AMERICANS OF CALIFORNIA (3-4)

An intensive study of the contemporary problems, issues, and developments involving American Indians in California.

NAMS 495 SPECIAL STUDIES (1-4)

Prerequisites: an upper-division core course; approval of supervising faculty member, and approval of program coordinator. May be repeated for credit.

Nursing (NURS)

NURS 301 NURSING CARE OF THE ADULT CLIENT I (9)

Seminar, 5 hours; practicum, 4 hours. This course is an introduction to nursing therapeutics underlying the basic skills and concepts in the practice of professional nursing. The focus is on concepts related to physical, emotional, spiritual, social and cultural needs and mechanisms for maximizing health. Basic pharmacology is included. Emphasis is placed on the application of the nursing process in maintaining health for adults. Prerequisites: Nursing majors only.

NURS 302 NURSING CARE OF ADULT CLIENT II (6)

Seminar, 4 hours; practicum, 2 hours. This course continues the application of nursing therapeutics underlying the basic skills and concepts in the practice of professional nursing. The focus is on concepts related to physical, emotional, spiritual, social, and cultural needs and mechanisms for maximizing health. Basic pharmacology is included. Emphasis is placed on the application of the nursing process in maintaining health and older adult populations. Prerequisites: NURS 301, NURS 303, and Nursing majors only.

NURS 303 MATERNITY & WOMEN'S HEALTH CARE (6)

Seminar, 4 hours; practicum, 2 hours. Principles and concepts of health and illness in childbearing and childrearing families are covered with an emphasis on preventive and therapeutic aspects for the pregnant and postpartum client. Use of community resources is introduced. Clinical experiences apply the caring process to childbearing and childrearing families with a focus on the principles and concepts of health promotion and maintenance to families in various phases of the health and illness continuum. Prerequisites: Nursing majors only.

NURS 304 PSYCHIATRIC AND MENTAL HEALTH NURSING (6)

Seminar, 4 hours; practicum, 2 hours. Students are introduced to the principles of mental health and illness. Nursing care therapeutics with populations experiencing mental health, stresses, and psychiatric illnesses are examined and applied. Prerequisites: NURS 301, NURS 303, and Nursing majors only.

NURS 310 NURSING RESEARCH AND EVIDENCE-BASED PRACTICE (3)

Seminar, 3 hours. This course examines sources of evidence, the nature of inquiry, basic research concepts, language, and processes. Approaches to research and ways of knowing in nursing and related sciences are explored. Qualitative and quantitative research methods are compared. Students critically appraise and interpret studies in order to enhance their understanding of the research process. Theoretical frameworks for research are explored. Levels of evidence are explored and the evidence-based practice brief is created. Prerequisite: course restricted to Nursing majors only.

NURS 312 BACCALAUREATE NURSING PERSPECTIVES I (4)

This course provides the foundation for critically examining the current healthcare system, evidenced-based nursing practice, safety and quality standards in healthcare delivery, and interdisciplinary communication and collaboration. Prerequisites are admission to the nursing major.

NURS 313 BACCALAUREATE NURSING PERSPECTIVES II (4)

This course expands knowledge about the role of the professional nurse in society by exploring leadership and advocacy as integral components of professional nursing. It examines goals of current health care system reform including nursing's expanded professional role in promoting health and mitigating health care disparities and inequities. Prerequisites: Course restricted to Nursing majors only.

NURS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP involves students in community problems related to the promotion of health and the prevention of illness. Credit may be given for such activities as volunteer work in health agencies and planning and participating in community health projects. A total of 6 units may be applied toward a degree. May be taken by petition only. Prerequisites: admission to the Nursing major, consent of advisor, and department chair.

NURS 396 SELECTED TOPICS IN NURSING (1-3)

A single topic or set of related topics not ordinarily covered by the Nursing major curriculum (e.g., sexuality, death and dying, health planning and policy). Prerequisite: consent of instructor.

NURS 407 NURSING CARE OF THE ADULT CLIENT III (6)

This course continues the application of nursing therapeutics underlying the basic skills and concepts in the practice of professional nursing. The focus is on concepts related to physical, emotional, spiritual, social, and cultural needs and mechanisms for maximizing health. Advanced pharmacology is included. Emphasis is placed on the application of the nursing process in maintaining health for complex adults and older adult population. Prerequisites: NURS 301, 302, 303, 304 & 310 and Nursing majors only.

NURS 409 NURSING CARE OF THE CHILD IN THE FAMILY (6)

This course continues the application of nursing therapeutics, skills, and concepts in the practice of professional nursing specific to the care of the child. The focus is on concepts related to physical, emotional, spiritual, social, and cultural needs and mechanisms for maximizing health. Basic pharmacology is included. Emphasis is placed on the application of the nursing process in maintaining health for children and families. Prerequisites: NURS 301, 302, 303, 304, and Nursing majors only.

NURS 410 NURSING POWER, POLICY, AND POLITICS (5)

This course examines the role of nursing in influencing health care from an economic, legal/ethical, political, interdisciplinary, and multicultural framework. Topics for discussion are based on current issues and trends in nursing practice, leadership, and the socio-political landscape. Prerequisites: Completion of NURS 310 and Nursing majors only.

NURS 412 COMMUNITY/PUBLIC HEALTH NURSING (5)

This course explores populations focused nursing the context of health promotion and protection for individuals, families, and communities. Determinants of health such as epidemiology, environmental health, and public health science will be addressed along with a focus on social cultural factors which impact health of communities. The practicum will involve enhancing the health promotion efforts of individuals, communities, and families. Completion of NURS 310 and Nursing majors only. Concurrent enrollment with 412L.

NURS 414 CLINICAL NURSING PRECEPTORSHIP (5)

Clinical application of theories and concepts from nursing and related sciences is applied in the nursing care of selected populations. Evidence-based knowledge and pertinent theoretical frameworks are utilized to respond to complex and specific health care needs of these populations. Integration and synthesis of concepts, personal development, and leadership/management abilities are expanded through professional nursing practice. Prerequisites: Completion of NURS 310 and Nursing majors only.

NURS 416 APPLICATION OF BACCALAUREATE PERSPECTIVES (3)

Application of theories and concepts from nursing and related sciences is applied in the nursing care of selected populations for the post-licensure B.S.N. student. Evidence-based knowledge and pertinent theoretical frameworks are utilized to respond to complex and specific health care needs of self-selected populations. Integration and synthesis of concepts, personal development, and leadership/management abilities are expanded through professional nursing practice. Prerequisites: completion of all 300 level nursing courses, R.N. licensure, and Nursing majors only.

NURS 480 HEALTH, SEXUALITY, AND SOCIETY (3)

Seminar, 3 hours. Examines issues in human sexuality as they relate to the health and well-being of self and others. A range of human sexual experience will be explored. Satisfies GE Area E. Open to non-nursing majors. Prerequisite: upper-division standing.

NURS 495 SPECIAL STUDIES (1-4)

This course involves individual or group study, under guidance of an advisor, of special issues in nursing. Prerequisites: admission to the nursing major and/or consent of instructor and department chair. Specific guidelines available from the Nursing department. May be repeated for credit.

NURS 497 NURSING EXTERNSHIP (2-6)

Clinical laboratory, 6 to 18 hours. Work study course offered in cooperation with selected clinical agencies. Students apply previously learned nursing theory and clinical skills in assigned patient care setting under the supervision of selected Registered Nurse preceptors. The course is offered for 2-6 units. CR/NC only. Prerequisites: NURS 385 and permission of instructor.

NURS 498 TEACHING ASSISTANT PRACTICUM (1-4)

Supervised unpaid instructional work experience in Nursing. May include tutoring, assisting with classroom activities, and leading clinical skills laboratory activities. Intended for professional growth for undergraduates. May be repeated for up to 4 units. Prerequisites: consent of instructor whose course the student will be working, and an approved petition to enroll.

NURS 501 HEALTH PROMOTION: RIGHTING DISPARITIES (4)

Online course. Advanced concepts to assess and promote the behaviors that enhance the health of clients across the lifespan, taking into account the multiple dimensions of and the attendant risks unique to the dimension of Person. Principles and theories of the behavioral sciences, epidemiology, family health, psychology, sociology, genomics, and ethical decision-making are investigated. Prerequisite: Admission to the F.N.P. Program. Co-requisites: NURS 509.

NURS 502 PATHOPHYSIOLOGY BASIS OF NURSING CARE (3)

Seminar, 3 hours. Physiological and pathophysiological processes are examined and integrated within the context of the human experience.

NURS 505 ETHICS IN HEALTHCARE (2-3)

Seminar, 3 hours. Bioethics in healthcare is critically discussed from both a theoretical and practical viewpoint. Separate modules address various ethical aspects of healthcare delivery related to clinical, educational, and administrative topics.

NURS 506 SYSTEMS MANAGEMENT IN HEALTHCARE (4)

Seminar, 4 hours. Systems Management utilizes systems theory in understanding organization behavior and change. The content of the course includes selected issues in organization environment, structure, culture, human resources, politics, and system leadership. The process of the course will focus on effecting organization change.

NURS 507 COMMUNITY HEALTH NURSING THEORY (3)

Seminar, 3 hours. Explores population-focused nursing in the context of promotion, protection, and improvement of health for individuals, families, and communities. Determinants of health and operations of the health care system will be discussed with an emphasis on social, cultural, and environmental factors which impact the health of the greater community.

NURS 509 ADVANCED HEALTH ASSESSMENT (4)

This hybrid course reviews and expands upon concepts and skills of human assessment basic to advanced practice clinical decision-making and the caring process. Lab Fee. Prerequisite: Admission to the F.N.P. Program. Co-requisites: NURS 501

NURS 514 COMMUNITY HEALTH NURSING PRACTICUM (3)

Clinical practice, 9 hours. Students apply knowledge and skills from nursing and public health science to provide clinical care of clients, individuals, and families in their communities. Cultural diversity and vulnerable populations are emphasized while exploring the community as client. Prerequisite or co-requisite: NURS 507.

NURS 515A FINANCIAL MANAGEMENT IN HEALTH CARE**ORGANIZATIONS I (3-4)**

Seminar, 3 or 4 hours. Provides theory and experience with the elements of budget development. The course is divided into segments: 1) pre-budget, 2) budget preparation, and 3) monitoring variance. Students select a clinical site and mentor to provide experience with budget preparation and monitoring. D.E.M.S.N. students take this course for 3 units; all other Leadership and Management students take this course for 4 units.

NURS 515B FINANCIAL MANAGEMENT IN HEALTH CARE**ORGANIZATIONS II (4)**

Seminar, 3 hours. Continuation of NURS 515A provides hands-on experience with budget control and variance.

NURS 516 PATHOPHYSIOLOGICAL AND PHARMACOLOGICAL ISSUES IN CLINICAL NURSING (3)

Seminar, 3 hours. Advances knowledge of pathophysiological and pharmacological issues in support of the clinical nurse leader role functions of advocate, educator, systems analyst/risk anticipator, clinician, and outcomes manager.

NURS 522A INSTRUCTION PROCESS IN HIGHER EDUCATION I (4)

Seminar, 4 hours. First in a series on current teaching strategies in higher education. Students will explore the core competencies of nursing education including theoretical foundations of teaching/learning, curriculum development, learning environments, diverse classrooms, technology/curriculum delivery systems, simulation, clinical coaching, promotion, and assessing critical thinking and evaluation in the academic arena.

NURS 522B INSTRUCTIONAL PROCESS IN HIGHER EDUCATION II (4)

Seminar, 4 hours. The second in a series of two courses on current teaching strategies in higher education. Students will explore the core competencies of nursing education including theoretical foundations of teaching/learning, curriculum development, learning environments, diverse classrooms, technology/curriculum delivery systems, simulation, clinical coaching, promotion, and assessing critical thinking and evaluation in the academic arena. Prerequisite: NURS 522A.

NURS 525 CLINICAL PRACTICUM (3)

Clinical laboratory, 9 hours. Clinical application of theories and concepts from nursing and related sciences is applied in the nursing care of selected populations. Research-based knowledge and pertinent theoretical frameworks are utilized to respond to complex and specific health care needs of these populations. Integration and synthesis of concepts, personal development, and leadership/management abilities are expanded through professional nursing practice.

NURS 526 CLINICAL NURSE LEADER PROFESSIONAL ROLE DEVELOPMENT (2)

Provides leadership in the application of the nursing process to client care, organizational processes, and/or systems, improving outcomes at the unit or service level.

NURS 530 NURSING LEADERSHIP THEORY (4)

Seminar, 4 hours. Theories of organizations and management are analyzed in relation to health care and nursing care delivery systems. Emphasis is placed on analyzing and evaluating the relationship between clinical nursing practice and organizational management. Organizations are analyzed according to structure, functions, and organizational behaviors. Prerequisite: concurrent enrollment in NURS 535A.

NURS 535A RESIDENCY (3)

Field Work, 9 hours. Focus is on the synthesis of theoretical nursing knowledge and role development in areas of education, management, or clinical nurse leader. Select assignments provide for practice with a preceptor in a designated practice or educational setting.

NURS 535B RESIDENCY (2)

Field work, 6 hours. Continues from NURS 535A with a focus on the synthesis of theoretical nursing knowledge and role development in areas of education, management, or clinical nurse leader. Select assignments provide for practice with a preceptor in a designated practice or educational setting. Prerequisite or co-requisite: NURS 535A.

NURS 536 CNL PROFESSIONAL ROLE DEVELOPMENT (2)

Clinical residency informing and demonstrating the clinical nurse leader role functions of advocate, member of profession, team manager, information manager, systems analyst/risk anticipator, clinician, outcomes manager, and educator. Prerequisites: R.N. licensure and completion of NURS 506, NURS 502, NURS 509, NURS 507, NURS 515A, NURS 500A, NURS 500B, and NURS 514.

NURS 540A PATHOPHYSIOLOGICAL CONCEPTS IN PRIMARY CARE I (3)

Hybrid course. Develops a foundation for the diagnosis and management of common acute and chronic illnesses in advanced primary care nursing practice. Research and theory from various disciplines are used to evaluate unique interaction patterns of person and environment as a basis for selecting strategies to promote health and minimize the effects of illness. Emphasizes interdisciplinary aspects of primary health care through partnerships with patients as a basis for collaboration, consultation, and referral. Prerequisites: NURS 501, NURS 509, NURS 549. Co-requisite: NURS 552, NURS 550A.

NURS 540B PATHOPHYSIOLOGIC CONCEPTS IN PRIMARY CARE II (3)

Hybrid course. Continue to develop a pathophysiological conceptual foundation for the diagnosis and management of common acute and chronic illnesses in advanced primary care nursing practice. Research and theory from various disciplines are used to evaluate unique interaction patterns of the person and environment as a basis for selecting strategies to promote health and minimize the effects of illness. Emphasized interdisciplinary aspects of primary health care through partnerships with patients as a basis for collaboration, consultation, and referral. Prerequisites: N501, N509, N549, N552, N540A, N550A, and concurrently enrolled in N550B.

NURS 549 HEALTH PROMOTION PRACTICE IN PRIMARY CARE (3)

This clinical course correlates with and supports the student in applying the theoretical concepts in NURS 501. The course provides the student with a comprehensive understanding of health promotion and disease prevention in clients across the life span. The course provides the students with the skills to evaluate the health status of a client, taking into account the unique dimensions of a person including culture, ethnicity, socioeconomic status, educational status, and religious and spiritual status when developing a health promotion plan. Prerequisite: Admission to the F.N.P. Program. Co-requisites: NURS 501, NURS 509.

NURS 550A CLINICAL PRACTICE IN PRIMARY CARE I (4)

Beginning clinical practice in primary care settings is implemented. Specialized knowledge and skills are utilized to assess physical, emotional, social, cultural and spiritual needs of patients. Concepts from various disciplines are integrated to provide a framework for developing and applying strategies for health promotion and illness management. Begin to develop advanced nursing role identity as FNP. Prerequisites: NURS 549, NURS 501, NURS 509. Co-requisites: NURS 540A, NURS 552. Laboratory fee payable at time of registration.

NURS 550B CLINICAL PRACTICE IN PRIMARY CARE II (4)

Continued implementation of clinical practice in primary care settings. Further develops and expands FNP clinical judgment and practice skills in family primary care. Research findings and theory-based knowledge are applied to formulating diagnosis and management plans. Personal and professional parameters of the nurse practitioner role are examined. Prerequisite: NURS 501, NURS 509, NURS 549, NURS 550A, NURS 540A, and NURS 552. Corequisite: NURS 540B; NURS 560 can be a prerequisite or corequisite.

NURS 550C CLINICAL PRACTICE IN PRIMARY CARE III (4)

Expanded clinical practice in primary and extended care settings. Facilitates the integration of nursing and other theories and research in providing health care to individuals, families, and groups. Conceptual perspectives are applied as a foundation for complex decision-making in advanced nursing practice. Professional identity is expanded to integrate the multiple aspects of the nurse practitioner role. Prerequisites: NURS 501, NURS 509, NURS 540A/B, NURS 549, NURS 550A/B, NURS 552, and NURS560. Corequisite: NURS 562, NURS 564, NURS 566.

NURS 552 PHARMACOLOGY IN PRIMARY CARE (3)

This online course develops a foundation for safe and effective management of client's pharmacological needs in the care of common acute and chronic illnesses. Research findings and theory-based knowledge are applied in assessing the needs of the individual client for medications and patient education. Parameters of legal practice, including the prescribing of schedule II drugs, and community standards of care are addressed. Meets state educational requirement for NP furnishing license. Prerequisites: NURS 509, NURS 549, NURS 501, or permission of instructor. Co-requisites: NURS 540A, NURS 550A, or permission of instructor required.

NURS 553 PHARMACOLOGY FOR CNL (2)

Seminar, 2 hours. Develops a foundation for safe and effective management of pharmacological needs of clients with acute and chronic illness. Research findings and evidence-based knowledge are applied. Emphasizes the role of the nurse in critically evaluating medication effects, side effects, and interactions. Principles of pharmacology relative to human physiology are reviewed.

NURS 555 FNP EXPANDED CLINICAL PRACTICE (2-4)

To enhance and expand clinical decision-making skills via extended clinical practice in preceptorship for Family Nurse Practitioner students. To synthesize and concisely report clinical findings via written or dictated chart notes and verbal presentation to preceptor.

NURS 560 RESEARCH AND THEORY APPLIED TO PRIMARY CARE (4)

Online course. Linkages between theory, research, and advanced practice are developed to provide the student with the necessary skills to critically analyze and apply research in primary care. Prerequisite: NURS 501, 509, 540A, 550A, 552.

NURS 562 ADVANCED PRACTICE IN PRIMARY CARE SYSTEMS (4)

Online course. Nurse Practitioner practice issues are examined with a focus on quality assurance, safe delivery, and ethical patient care within the legal parameters of Nurse Practitioner practice from a local, state, and national perspective. Organization and management theory are analyzed in relation to primary care and Nurse Practitioner role and practice. Prerequisites: NURS 501, NURS 509, NURS 549, NURS 540AB, NURS 552, NURS 550AB, NURS 560. Co-requisites: NURS 564, NURS 550C, NURS 566.

NURS 564 HEALTH POLICY AND ADVOCACY IN PRIMARY CARE (4)

Online course. Course reviews the principal way health care and specifically primary care is organized and financed, and identifies current issues in health care organizations and financing. Prerequisites: NURS 501, NURS 509, NURS 549, NURS 540AB, NURS 552, NURS 550AB, NURS 560. Co-requisites: NURS 564, NURS 550C, NURS 566.

NURS 566 CULMINATING EXPERIENCE (2)

The Culminating Experience will be the capstone course for the FNP student. The Culminating Experience is in the form of a Clinical Simulated Exam (CSE) and will be based on a standardized client. There are three parts to the Experience that will simulate a clinical encounter with a client: the student must demonstrate the ability to 1) gather subjective and objective data from a client, 2) develop and present a logical assessment and plan for a client, and 3) in a scholarly manner apply theoretical principles to client care. Prerequisites: NURS 501, NURS 509, NURS 540AB, NURS 549, NURS 550AB, NURS 552, NURS 560. Co-requisites: NURS 550C, NURS 562 NURS 564.

NURS 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

NURS 595 SPECIAL STUDIES (1-4)

Individually arranged course for one or more students who wish to pursue academic interests beyond the scope of the regular curriculum. Prerequisites: acceptance into the master's program in Nursing, and consent of instructor and department chair. May be repeated for credit.

NURS 596 SELECTED TOPICS IN NURSING (1-5)

A single topic or set of related topics not ordinarily covered in the graduate curriculum (e.g., nursing administration and supervision, curriculum development and teaching methods). The course may be repeated for credit with a different topic, to a maximum of 12 units. Prerequisite: consent of instructor.

NURS 599 MASTER'S THESIS (2-6)

Research on thesis developed by student in consultation with Nursing department faculty, and approved by the department and the student's Thesis Committee. Prerequisites: NURS 503A and approval of thesis prospectus.

Organization Development (OD)

OD 497 SELECTED TOPICS (1-5)

Intensive study of topics in the field of Organization Development that are not currently included in the regular curriculum. Topics will vary from semester to semester. Does not fulfill requirements for M.A. degree, but is intended to provide supplemental learning opportunities for graduates as well as potential applicants. May be repeated for credit. Prerequisite: consent of instructor

OD 513 FACILITATION AND TRAINING (3-4)

Theories of adult development, learning styles, and experience-based training. In-class practice in assessing needs, defining objectives, designing and planning training experiences, presentation methods and skills, and evaluating outcomes. Students apply emerging methods for managing meetings and facilitating groups for effective planning, problem-solving, and communication. Limited to students in the Organization Development Program.

OD 514 ORGANIZATION AND TEAM DEVELOPMENT (3-4)

Contributions of systems theory and organization development practice for guiding constructive change and self-renewal in groups, organizations, and communities. Students integrate theory and practice of process-oriented leadership and consultation, in the context of a supervised field experience with an actual organization. Prerequisite: PSY 513.

OD 518A ADVANCED INTERVENTION METHODS IN ORGANIZATION DEVELOPMENT (2)

Intensive workshops and short seminars on advanced topics and methods for guiding change such as: open systems planning, future search conference, dialogue, open space, participative redesign, conflict resolution, and strategic planning. Two semesters. Limited to students in the Organization Development program.

OD 518B ADVANCED INTERVENTION METHODS IN ORGANIZATION DEVELOPMENT (2)

Intensive workshops and short seminars on advanced topics and methods for guiding change such as: open systems planning, future search conference, dialogue, open space, participative redesign, conflict resolution, and strategic planning. Two semesters. Limited to students in the Organization Development program.

OD 533A GROUP DYNAMICS IN ORGANIZATION DEVELOPMENT (2-3)

Experiential and conceptual study of group and interpersonal interaction processes, with an emphasis on the unfolding dynamics within the class group itself. Interpersonal feedback in the service of personal and professional development. Developmental models of group behavior. Intervention and facilitation methods and skills. Limited to students in the Organization Development program. (Two semesters.)

OD 533B GROUP DYNAMICS IN ORGANIZATION DEVELOPMENT (2-3)

Experiential and conceptual study of group and interpersonal interaction processes, with an emphasis on the unfolding dynamics within the class group itself. Interpersonal feedback in the service of personal and professional development. Developmental models of group behavior. Intervention and facilitation methods and skills. Limited to students in the Organization Development program. (Two semesters.)

OD 533C GROUP DYNAMICS IN ORGANIZATION DEVELOPMENT (1-3)

Experiential and conceptual study of group and interpersonal interaction processes, with an emphasis on the unfolding dynamics within the class group itself. Interpersonal feedback in the service of personal and professional development. Developmental models of group behavior. Intervention and facilitation methods and skills. Limited to students in the Organization Development program. (Two semesters.)

OD 544A QUALITATIVE RESEARCH IN ORGANIZATIONS (1-3)

This course introduces the principles and techniques of qualitative research that are relevant for designing and carrying out research in organizations. Topics may include phenomenology, action research, social construction, grounded theory, and discourse analysis. The course goal is to facilitate the design, analysis, and reporting of research projects relevant to the practice of organization development. Open to students in the Organization Development Program only.

OD 544B QUALITATIVE RESEARCH IN ORGANIZATION (1-3)

This course introduces the principles and techniques of qualitative research that are relevant for designing and carrying out research in organizations. Topics may include phenomenology, action research, social construction, grounded theory, and discourse analysis. The course goal is to facilitate the design, analysis, and reporting of research projects relevant to the practice of organization development. Open to students in the Organization Development Program only.

OD 554 ORGANIZATIONAL SYSTEMS INQUIRY (3-4)

Study of human systems and organizations based on core and emerging theories and research. Emphasis on application of systemic perspectives for understanding the functioning and dynamics of organizations, including structure, culture, technology, leadership, environment, and change. Limited to students in the Organization Development Program.

OD 556 SOCIO-TECHNIC SYSTEMS REDESIGN (2-4)

A seminar in the design or redesign of work organizations to increase productive effectiveness while enhancing the quality of the human work experience. Emphasis on the application of systems concepts and methods for understanding and jointly optimizing the social and technical aspects of work environments. Both classical and emerging models for addressing whole system change are considered. Prerequisite: PSY 554. Limited to students in the Organization Development Program.

OD 557 HUMAN SYSTEMS REDESIGN (1-4)

The social construction of meaning in the context of interrelated human systems, including individuals, relationships, teams, families, organizations, communities, and the global society. This course considers analytical perspectives as well as their application to the practice of change facilitation and leadership. Open only to students in the Organization Development Program.

OD 572A INTERNSHIP AND PROFESSIONAL PRACTICE IN ORGANIZATION DEVELOPMENT (4)

Seminar in current and emerging topics related to professional practice as an internal consultant, external consultant, or change leader. Students carry out 180 hours of approved supervised field projects applying Organization Development concepts and methods with groups, organizations, or communities. Two semesters. Limited to students in the Organization Development program.

OD 572B INTERNSHIP IN ORGANIZATION DEVELOPMENT (4)

Supervised practical experience applying organization development concepts and methods in profit or nonprofit settings. Limited to students in the Organization Development Program only.

OD 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree.

OD 596 GRADUATE TUTORIAL (1-4)

Seminar in selected topics. Consult semester class schedule for current offerings.

OD 598 CULMINATING PAPER TUTORIAL (1-4)

This tutorial provides specific guidance and consultation at each phase of the students' work on the culminating paper for the Psychology M.A. in Organization Development.

Philosophy (PHIL)

PHIL 101 CRITICAL THINKING (4)

Critical thinking is the best defense against intellectual trickery and self-delusion. It provides specific techniques and tools whereby we can avoid basic fallacies in our own thinking and detect them in the thought of others. Reasoning is a highly complicated human activity and cannot be satisfactorily studied in an intellectual vacuum. Hence, in this course, critical and uncritical thought are contrasted in the context of the world of human interests and activities — social, political, and scientific. All of the basic “tricks” for persuading people to accept false premises and conclusions as true are systematically laid out and their detection practiced. Satisfies GE Area A3 (Critical Thinking).

PHIL 101A CRITICAL THINKING (2)

Critical thinking is the best defense against intellectual trickery and self-delusion. It provides specific techniques and tools whereby we can avoid basic fallacies in our own thinking and detect them in the thought of others. Reasoning is a highly complicated human activity and cannot be satisfactorily studied in an intellectual vacuum. Hence, in this course, critical and uncritical thought are contrasted in the context of the world of human interests and activities — social, political, and scientific. All of the basic “tricks” for persuading people to accept false premises and conclusions as true are systematically laid out and their detection practiced. Satisfies GE Area A3 (Critical Thinking).

PHIL 101B CRITICAL THINKING (2)

Critical thinking is the best defense against intellectual trickery and self-delusion. It provides specific techniques and tools whereby we can avoid basic fallacies in our own thinking and detect them in the thought of others. Reasoning is a highly complicated human activity and cannot be satisfactorily studied in an intellectual vacuum. Hence, in this course, critical and uncritical thought are contrasted in the context of the world of human interests and activities — social, political, and scientific. All of the basic “tricks” for persuading people to accept false premises and conclusions as true are systematically laid out and their detection practiced. Satisfies GE Area A3 (Critical Thinking).

PHIL 102 INTRODUCTION TO LOGIC (4)

An introduction to the nature of contemporary systems of logic and their application. Students will learn how to abbreviate arguments in ordinary language to deduce conclusions, and to locate fallacies. Recommended for students of the sciences, computer programming or mathematics, and the general student interested in the structure of arguments. Satisfies GE Area A3 (Critical Thinking).

PHIL 120 INTRODUCTION TO PHILOSOPHY (4)

This course provides an introduction to some of the enduring questions of thinking: What is the nature of knowledge of morality, of justice, of the self, of religion, of the search for wisdom, of reality? Topics and approaches may vary from section to section. Consult the department office for current information. Satisfies GE Area C2.

PHIL 160A HUMANITIES LEARNING COMMUNITY (4)

PHIL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

PHIL 160B HUMANITIES LEARNING COMMUNITY (4)

PHIL 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

PHIL 165A HUMANITIES LEARNING COMMUNITY (4)

PHIL 165 A/B is a year long course, which, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking and C3 (Comparative Perspectives and/or Foreign Languages) GE categories. This course also fulfills the Ethnic Studies requirement.

PHIL 165B HUMANITIES LEARNING COMMUNITY (4)

PHIL 165 A/B is a year long course, which, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking and C3 (Comparative Perspectives and/or Foreign Languages) GE categories. This course also fulfills the Ethnic Studies requirement.

PHIL 200 PHILOSOPHICAL ISSUES (3)

Students practice the techniques of reading and thinking critically, of expository writing, and of oral expression as they reflect together on philosophical issues. Recent topics have included Human Consciousness, Foundations of Greek and Chinese Thought, and Philosophical Issues in Global Climate Change. As students read and discuss the semester's topic, they will reflect consciously on the principles of thinking, speaking, and writing. This skills-oriented course reflects the assumption that we master skills more thoroughly when we are working on an interesting set of issues that are significant and relevant to our lives. Prerequisites: completion of GE Areas A2 and A3. May be repeated for credit.

PHIL 201 BUDDHISM, PHILOSOPHY & CULTURE (4)

This course explores foundational teachings, Buddhist philosophy, religion, arts and culture, and examines the interactions between those teachings and Western science, philosophy, and culture. Students read original writings from the Buddha as well as Buddhist scholars, selections from Western philosophy and contemporary scientific research that deals directly with Buddhism.

PHIL 202 PROSEMINAR (3)

This course is designed to help students acquire the skills required to successfully major or minor in Philosophy, skills such as making effective oral presentations or critically evaluating demanding philosophical texts. The course will be based on an investigation of important contemporary or historical problems, and attention will be paid to both analytic and continental approaches to these problems. Possible topics of discussion are: postmodern critiques of science, moral relativism, arguments for the existence of God, the good life, the nature of emotions, and the nature of beauty. Topics will vary from year to year depending on the interests of faculty. Prerequisite: current Philosophy major or minor, or permission of instructor.

PHIL 204 APPLIED ETHICS (4)

The focus of this course is the philosophical examination, from a moral standpoint, of pressing issues that we as human beings face today. For example, depending on the faculty member teaching, the course might focus on the ethics of science and technology, environmental ethics, bioethics, or business ethics. Students will gain an understanding of moral theory in this course but always through a practical field of study. The course is essentially interdisciplinary.

PHIL 207 PHILOSOPHICAL MOVEMENTS (4)

A class dedicated to a range of alternative historical movements in philosophy. They can be chosen from ancient, medieval, modern, or contemporary examples. As movements they have some degree of unity or cohesiveness within their historical period, and their study seeks to describe, besides their internal characteristics, this historical context. Previous examples of movements taught have included: existentialism, phenomenology, ordinary language philosophy, American pragmatism, deconstruction, and the Frankfurt School.

PHIL 275 RACE, RACISM, LAW, AND SOCIETY (4)

This course covers theoretical, practical, and legal issues surrounding race and racism. Topics may include: what counts as racist; when discrimination is allowable; racial profiling; tolerating cultural differences; whether race-thinking makes sense; and the nature of racial identities like white or Latino. This course fulfills GE Area C3 and Ethnic Studies.

PHIL 301 PHILOSOPHY OF SCIENCE AND TECHNOLOGY (4)

Recently the scope and speed of scientific discovery and technological change has noticeably accelerated with the advent of information technology. Fantastic claims have been made in regards to our potential to understand through science and control through technology nearly every aspect of the natural world, including our own bodies and minds. We will look at science and technology as a human practice that inherently fosters certain social values at the expense of others.

PHIL 302 ETHICS AND VALUE THEORY (4)

An introduction to the philosophical analysis of ethics, morality, and values, and a survey of the various systems of moral philosophy. The course covers such issues as: What is the good life? What considerations are relevant to making moral decisions? Are moral principles universal, or relative to a given society? How, if at all, can moral judgments be justified or moral disagreements resolved? Satisfies GE Area C2. Consult Schedule of Classes for the topic to be studied.

PHIL 303 SOCIAL AND POLITICAL PHILOSOPHY (3)

A philosophical examination of the Western tradition of social and political thought. The course will discuss topics such as justice and the ideal society, the question of justified revolution, the role of private property, freedom, individual rights and social welfare, different forms of government, and the role of values in political deliberation.

PHIL 306 CONTEMPORARY TOPICS IN PHILOSOPHY (3)

This course introduces students to themes, thinkers, and debates within contemporary philosophy. While the specific emphasis may vary, the course engages with the open-ended problems and concerns that currently animate philosophical research. Students will be encouraged to think self-reflexively about the nature of philosophical thinking and the ways in which philosophy participates in public debates today. Topics may include globalization and financial crisis, democracy and violence, post-colonialism, neo-liberalism, market critique, religious pluralism, media and pop culture, law, and social movements.

PHIL 307 PHILOSOPHICAL FIGURES (4)

This course provides students with an in-depth study of one or more figures from the philosophical literature. Faculty will select the specific figures in light of their current research interests and projects. The course can range over historical and contemporary texts. Possible topics might include Hegel, Kant, Nietzsche, Aristotle, Heidegger, and Habermas. Per faculty interest, students may study philosophical figures from non-Western traditions, such as Buddhism.

PHIL 370 ADVANCED LOGIC (3)

This course is designed for students who have taken an introductory course in logic. The goal of this course is twofold. First, to consider some more complex logical languages and systems, and second, to consider some of the more properly philosophical issues raised by discussion of those systems. Possible topics of discussion include modality and modal propositional languages; probability calculus and its application to problems of induction and confirmation; decision theory, and some of the paradoxes of rationality that it seems to give rise to; and game theory, and its relation to economic and moral reasoning.

PHIL 375 PHILOSOPHY OF LAW (3)

This course represents an advanced introduction to seminal problems and themes in the philosophy of law. Of central concern will be two themes: 1) the differences and relation between law, morality, and politics; and 2) the nature of legal reasoning and modes of justification. The course will examine historical and cultural influences on legal institutions and introduce students to rival philosophical approaches such as legal positivism, natural law, and legal realism. Specific course emphases and themes may vary depending on faculty interest.

PHIL 390 ADVANCED TOPICS IN PHILOSOPHY (1-6)

Topics courses are intended to cover some particular aspect of a philosophical problem, a particular philosopher, or some philosophical issue not normally explored in detail in any of the standard course offerings. Topics include: philosophy in literature, American philosophy, phenomenology, advanced logic, philosophy of science, Eastern world views, and 20th century philosophy. May be repeated (with a different focus) for credit.

PHIL 399 STUDENT-INSTRUCTED COURSE (1-3)

An introductory or advanced course designed by a senior or graduate student and taught under the supervision of faculty sponsor(s).

PHIL 400 SENIOR SEMINAR (3)

A seminar for students in their senior year. Topics vary from semester to semester. May be repeated for credit.

PHIL 450 SENIOR THESIS (A) (3)

Writing of a paper deemed acceptable by a faculty director and reader. Superior papers nominated for distinction will be defended before the philosophy faculty. Students wishing to be candidates for graduation "with distinction" are urged to write a thesis. Prerequisite to PHIL 452: PHIL 450. Prerequisites: advanced standing and instructor consent.

PHIL 452 SENIOR THESIS (B) (3)

Writing of a paper deemed acceptable by a faculty director and reader. Superior papers nominated for distinction will be defended before the philosophy faculty. Students wishing to be candidates for graduation "with distinction" are urged to write a thesis. Prerequisite to PHIL 452: PHIL 450. Prerequisites: advanced standing and instructor consent.

PHIL 462 RESEARCH ASSISTANT IN PHILOSOPHY (1-6)

Intended to give selected students experience in participating in the construction of a professor's research project. Prerequisites: advanced standing and a faculty invitation. May be repeated for credit.

PHIL 470 TEACHING ASSISTANT IN PHILOSOPHY (1-6)

Intended to give students experience in assisting the instructor in a philosophy course by doing research and tutoring students in the class. Prerequisites: advanced standing and consent of the instructor. May be repeated for credit.

PHIL 490 CRITICAL THINKING WORKSHOP (1)**PHIL 495 SPECIAL STUDIES (1-4)**

Advanced individualized instruction and research with one or more members of the philosophy faculty. The course is designed to provide advanced students with an opportunity to do specialized research and study under strict faculty supervision. Prerequisite: consent of the instructor. May be repeated for credit.

PHIL 499 INTERNSHIP (1-4)

Supervised training and experience in applied philosophy for advanced students in community organizations. Internship contracts are required. Cr/NC only. Prerequisite: consent of the instructor.

PHIL 595 SPECIAL STUDIES IN PHILOSOPHY (1-6)

Advanced research and writing. Students work under close supervision of faculty members. Subject matter variable. May be repeated for credit.

Physics (PHYS)

PHYS 100 DESCRIPTIVE PHYSICS (3)

Lecture, 3 hours. A descriptive survey of the important principles of physics. Satisfies GE Area B1 or B3 (Physical Sciences). Registration for Chemistry, Physics, or Mathematics majors requires Physics and Astronomy Department consent.

PHYS 102 DESCRIPTIVE PHYSICS LABORATORY (1)

Laboratory, 3 hours. Experimental demonstrations, exercises, and field trips illustrating the methods by which physicists have learned what they claim to know about the world. Instruction is at the PHYS 100 level. Satisfies GE Area B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisite: previous or concurrent enrollment in PHYS 100 or ASTR 100, or consent of instructor.

PHYS 114 INTRODUCTION TO PHYSICS I (4)

Lecture, 4 hours. The first of three basic sequential courses in physics for science and mathematics majors. Introduction to vectors; classical mechanics, including particle dynamics and fluid mechanics; simple harmonic motion; thermodynamics and kinetics. Satisfies GE Area B1 or B3 (Physical Sciences). Prerequisite: MATH 161.

PHYS 114W PHYSICS I WORKSHOP (1)

A workshop designed to be taken with PHYS 114. Exploration of first-semester calculus based physics concepts through inquiry based learning and problem solving in a group setting. Cr/NC only. Corequisite: PHYS 114

PHYS 116 INTRODUCTORY LABORATORY EXPERIENCE (1)

Laboratory, 3 hours. Demonstrations and participatory experiments are used to increase the student's familiarity with gravitational, electromagnetic, and nuclear forces in nature. Applications include biological, geophysical, medical, and environmental phenomena. Satisfies GE Area B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisite: prior or concurrent enrollment in PHYS 114.

PHYS 209A GENERAL PHYSICS LABORATORY (1)

Laboratory, 3 hours. Laboratory experiments to accompany PHYS 210A and develop the student's ability to perform measurements of physical phenomena and to increase their appreciation of the sense of the physical universe gained through experimentation. 209A satisfies GE Area B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisites: high school algebra and trigonometry and a high school physical science, and previous or concurrent enrollment in PHYS 210A.

PHYS 209B GENERAL PHYSICS LABORATORY (1)

Laboratory, 3 hours. Laboratory experiments to accompany PHYS 210B and develop the student's ability to perform measurements of physical phenomena and to increase their appreciation of the sense of the physical universe gained through experimentation. Prerequisites: PHYS 209A or PHYS 116.

PHYS 210A GENERAL PHYSICS (3)

Lecture, 3 hours. A basic course in physics for students majoring in Biology, Geology, or preprofessional programs. Fundamentals of kinematics, Newton's laws, work, momentum, harmonic motion, and an introduction to fluids and concepts of temperature. Registration by Mathematics majors requires Physics and Astronomy Department approval. Satisfies GE Area B1 or B3 (Physical Sciences). Prerequisites: high school algebra and trigonometry or MATH 160.

PHYS 210B GENERAL PHYSICS (3)

Lecture, 3 hours. A basic course in physics for students majoring in Biology, Geology, or preprofessional programs. Topics include: electric charges, potentials, fields and currents, magnetism, electromagnetic waves, and optics. Registration by Mathematics majors requires Physics and Astronomy Department approval. Prerequisite: PHYS 210A or PHYS 114.

PHYS 214 INTRODUCTION TO PHYSICS II (4)

Lecture, 4 hours. The continuation of PHYS 114. This course focuses on electrostatics, quasistatic fields and currents, and magnetostatics; electromagnetic induction; waves; and physical and geometric optics. Prerequisites: PHYS 114 and MATH 211.

PHYS 216 INTRODUCTORY LABORATORY (1)

Laboratory, 3 hours. Selected experiments to increase the student's working physical knowledge of the natural world. Prerequisites: PHYS 114 and 116 and MATH 211. Concurrent enrollment in PHYS 214 is strongly recommended.

PHYS 300 PHYSICS OF MUSIC (3)

Lecture, 3 hours. Introduction to physical principles encountered in the study of music, applicable laws of mechanics and acoustics, harmonic analysis, musical scales, sound production in musical instruments, and elements of electronic music.

PHYS 313 ELECTRONICS (3)

Lecture, 3 hours. A comprehensive review of DC and AC circuit theory; applications of diodes, transistors and operational amplifiers; electronic test instruments; electronic transducers; waveform generators; noise; logic gates and Boolean algebra; number systems and codes; combinational logic circuits; and applications of circuit simulation programs. Concurrent enrollment in PHYS 313L is mandatory. Prerequisites: MATH 160, PHYS 210B, or 214; or consent of instructor.

PHYS 313L ELECTRONICS LABORATORY (1)

Laboratory, 3 hours. Laboratory to accompany PHYS 313. Experiments in this lab are designed to address the major topics of the PHYS 313 lecture course. Students will experiment with physical and simulated circuits. Concurrent enrollment in PHYS 313 is mandatory. Prerequisites: MATH 160, PHYS 209B, or 216; or consent of instructor.

PHYS 314 INTRODUCTION TO PHYSICS III (4)

Lecture, 4 hours. The continuation of PHYS 214. This course focuses on special relativity, elementary quantum mechanics, the Bohr atom and deBroglie waves, the Schrödinger wave equation with applications to simple one-dimensional problems and to atomic structure, elementary nuclear physics, introduction to equilibrium statistical mechanics, the partition function, and Boltzmann statistics. Prerequisites: PHYS 214 and MATH 261.

PHYS 320 ANALYTICAL MECHANICS (3)

Lecture, 3 hours. This course is an exploration into the principles of Newtonian, Lagrangian, and Hamiltonian mechanics. It also includes a treatment of noninertial reference frames, rigid body rotation, central force problems, and the dynamics of a system of particles. Prerequisites: PHYS 114 and PHYS 325.

PHYS 325 INTRODUCTION TO MATHEMATICAL PHYSICS (3)

Lecture, 3 hours. This course examines advanced mathematical methods and serves as a foundation for future courses. Topics include coordinate systems and vectors, vector calculus, series expansions, differential equations, orthonormal functions, solutions of systems of linear equations, matrices and tensors, complex numbers, eigenvalues and eigenfunctions, Fourier series and Fourier integrals, and use of mathematical symbolic processing software. Prerequisites: PHYS 214 and MATH 261, or consent of instructor.

PHYS 340 LIGHT AND OPTICS (3)

Lecture, 3 hours. An examination of the properties of light from geometric and physical optics perspectives. Topics include: ray optics, refraction, diffraction, coherence, interference, and polarization. The course will present Fermat's principle, Huygens' principle, and Fourier optics. Prerequisite: PHYS 314 or 325.

PHYS 342 LIGHT AND COLOR (3)

Lecture, 3 hours. A descriptive, nonmathematical, but analytical treatment of the physical properties of light, the camera, telescope, microscope, and laser; holography, mirages, rainbows, and the blue sky; colors in flowers, gems, and pigments; and human and animal vision and visual perception. Satisfies GE Area B3 (Specific Emphasis in Natural Sciences). Prerequisite: any physical science course or consent of instructor.

PHYS 366 INTERMEDIATE EXPERIMENTAL PHYSICS (3)

Lecture 2 hours; laboratory 3 hours. An introduction to contemporary techniques and problems in physics. Selected topics in lasers and photonics, materials science (including high-magnetic field measurements and surface analysis using scanning electron and atomic force microscopy), X-ray analysis, applied nuclear physics, and adaptive optics. Prerequisites: PHYS 314 and 216, or consent of instructor.

PHYS 381 COMPUTER APPLICATIONS FOR SCIENTISTS (2)

Lecture, 1 hour; laboratory, 3 hours. A survey of problem solving techniques including computer modeling and simulation for the physical sciences. The student is introduced to high-level programming languages such as C++ and various mathematical tools such as Excel, Mathematica, and MatLab. Topics include modern programming techniques, use of graphics and mathematical function libraries, linear least squares data fitting techniques, numerical solution of algebraic and differential equations, and error analysis. Prerequisites: PHYS 114 and MATH 211.

PHYS 395 COMMUNITY INVOLVEMENT PROGRAM (1-2)

CIP involves students in basic community problems related to physics and astronomy — performing such tasks as tutoring; reading to the blind; service to local, county, and state agencies; and service as teacher aides to elementary schools. Students receive 1-2 units, depending on the specific task performed. Not more than 4 CIP units will be applicable to the Physics major requirements. May be taken by petition only.

PHYS 396 SELECTED TOPICS IN PHYSICS (1-4)

A course of lectures on a single topic or set of related topics not ordinarily covered in the Physics curriculum. The course may be repeated for credit with a different topic. Prerequisite: consent of instructor.

PHYS 430 ELECTRICITY AND MAGNETISM (3)

Lecture, 3 hours. An investigation into the fundamentals of electromagnetic theory and its applications. Topics include vector analysis, electrostatics, method of images, magnetostatics, electric currents, electromagnetic induction, electric and magnetic fields in matter, Maxwell's equations, electromagnetic waves, potentials, and fields. Prerequisites: PHYS 214 and PHYS 325. Cross-listed as ES 430.

PHYS 445 PHOTONICS (3)

Lecture, 3 hours. A practical examination of Gaussian beams; guided-wave optics; fiber optics; optical resonators; resonant cavities; laser oscillation and amplification; laser excitation; optical pumping; solid state, gas, dye, chemical, excimer, and free electron lasers; semiconductor lasers; laser spectroscopy; fiber optic communication; photomultiplier and semiconductor radiation detectors including photoconductors and junction photodiodes; p-i-n diodes and avalanche photodiodes; and detector noise. Prerequisite: PHYS 314 or consent of instructor. Cross-listed as CES 430 and ES 445.

PHYS 450 STATISTICAL PHYSICS (2)

Lecture, 2 hours. An introduction to statistical methods. Topics include ideal gas, heat capacities, entropy, enthalpy, and the laws of thermodynamics; Boltzmann, Bose, and Fermi statistics; and applications such as engines and refrigerators. Prerequisite: PHYS 314.

PHYS 460 QUANTUM PHYSICS (3)

Lecture, 3 hours. This course examines the Schrödinger equation and its solution for free particles, potential wells, harmonic oscillators, central potentials, and the hydrogen atom. Other topics may include Hilbert space, Hermitian operators, Dirac notation, angular momentum and spin, scattering, wave function symmetry, and elementary perturbation theory. Prerequisites: PHYS 314 and 325.

PHYS 466 ADVANCED EXPERIMENTAL PHYSICS (3)

Lecture, 2 hours; laboratory, 3 hours. Advanced topics in lasers and photonics, materials science (including high-magnetic field measurements and surface analysis using scanning electron and atomic force microscopy), X-ray analysis, applied nuclear physics, and adaptive optics. Prerequisites: PHYS 314 and 216, or consent of instructor.

PHYS 475 PHYSICS OF SEMICONDUCTOR DEVICES (3)

Lecture, 3 hours. A detailed study of semiconductors and their applications. Topics include semiconductor materials, crystal structure and growth, energy bands and charge carriers, conductivity and mobility, metal-semiconductor and p-n junctions, p-n junction diodes, bipolar junction transistors, field-effect transistors, CCDs, photonic devices, and integrated circuits. Conductivity and contact resistance measurements, I-V and C-V characteristics of diodes, and characterization of transistors are also discussed. Prerequisite: PHYS 314 or consent of instructor. Cross-listed as CES 432 and ES 432.

PHYS 492 INSTRUCTIONAL DESIGN PROJECT (2)

A directed project to develop at least one laboratory experiment and/or classroom activity that teaches basic concepts in undergraduate physics. Both written and oral presentations (including a demonstration of the experiment or activity) will be required. Prerequisites: PHYS 214 and 216 or PHYS 210B and 209B. Course may be repeated for credit.

PHYS 493 SENIOR DESIGN PROJECT (2)

A directed project to develop either a working prototype or a detailed conceptual design for an operational laboratory device. Both written and oral presentations (including a demonstration) will be required. Prerequisite: PHYS 313L. Application form required prior to enrollment. Course may be repeated for credit.

PHYS 494 PHYSICS SEMINAR (1)

A series of lectures on topics of interest in physics, astronomy, and related fields. May be repeated for credit up to 3 units maximum. Prerequisite: consent of instructor.

PHYS 495 SPECIAL STUDIES (1-4)

The Physics and Astronomy Department encourages independent study and considers it to be an educational undertaking. Students wishing to enroll for special studies are required to submit proposals to their supervising faculty members that outline their projects and exhibit concrete plans for their successful completion. May be repeated for credit.

PHYS 497 UNDERGRADUATE RESEARCH IN PHYSICS (2)

Supervised research in an area of physics that is currently under investigation by one or more members of the Physics and Astronomy Department's faculty. This course may be repeated for up to 6 units of credit. Both written and oral presentations will be required. Prerequisites: junior-level standing and consent of instructor.

Political Science (POLS)

POLS 151 CREDIT BY EXAM: CALIFORNIA GOVERNMENT (1)

The state code requirement in California state and local government may be satisfied by passing an examination in the political science department.

POLS 199 MEDIA: CONTEMPORARY ISSUES (2)

POLS 200 AMERICAN POLITICAL SYSTEM (3)

An examination of American politics and governmental institutions. Introduces students to the political system and how to participate in it, should the need arise. Satisfies the code requirements in American Constitution and California state and local government. Satisfies GE Area D4 (U.S. Constitution and State and Local Government).

POLS 201 IDEAS AND INSTITUTIONS (4)

An analysis of the basic political values and their impact on society. Students will be introduced to the relationship between values, ideology, and the political process. Political science majors are expected to take this course, which stresses written expression, during their first year in the department. Satisfies GE Area D5 (Contemporary International Perspectives).

POLS 202 ISSUES IN MODERN AMERICAN POLITICS (4)

Leaders and issues in American political life considered in relation to major policies and movements, e.g., progressivism, isolationism, the New Deal, and containment. Open to majors and minors in political science. Meets code requirements in American Constitution and California state and local government. Satisfies GE Area D4 (U.S. Constitution and State and Local Government).

POLS 292 SOCIAL SCIENCE LIBRARY RESEARCH (1)

A basic introduction to social science library research sources, with special emphasis on political science. Course includes learning library research skills and practice with print resources and electronic sources.

POLS 302 SOCIAL SCIENCE RESEARCH METHODS (4)

Social science research and statistical methods, which includes as a significant component computer-based data analysis using the SPSS (Statistical Package for the Social Sciences) programs. It may include building data files and data analysis using multivariate tables, correlations, and regression techniques in a directed research project. The course includes a two-hour laboratory.

POLS 303 COMPARATIVE POLITICAL ANALYSIS (4)

Reviews the principal concepts and theories of comparative politics, and assesses the institutions that comprise varied systems of government. Concrete examples taken from modern systems will be applied throughout the course. Special attention is focused on the political systems of Britain, France, Japan, Russia, and China. Students are assigned research projects on political systems of developing nations.

POLS 304 THEORY AND ANALYSIS OF INTERNATIONAL RELATIONS (4)

An introductory analysis of the dynamics of the international political system, stressing the roles of supranational organizations, and internal and external factors in foreign policy formulation by nation-states. Review of traditional and contemporary theories of international interaction.

POLS 307 PERSPECTIVES ON THE HOLOCAUST AND GENOCIDE (4)

This course is a weekly lecture series on the Holocaust, selected genocides, and human rights. Guest lecturers and SSU faculty provide a variety of political and interdisciplinary perspectives on the topics. The course explores the intellectual, emotional, and ethical aspects of the Holocaust and genocides and seeks to deepen students' understanding of organized society, political leadership, democratic participation, and human nature. Students also attend a weekly discussion group to explore and synthesize information presented in the weekly lectures. Prerequisite: upper division or graduate standing. Satisfies upper-division GE Area D5, (Contemporary International Perspectives.)

POLS 310 CLASSICAL POLITICAL THOUGHT (2-4)

A comprehensive look at the foundations of Western political thought, with particular attention to the theories of Plato, Aristotle, and Thomas Aquinas.

POLS 311 MODERN POLITICAL THOUGHT: MACHIAVELLI TO OBAMA (4)

Examination of the major writings from Machiavelli to the present. Emphasis on original sources and development of student opinions on ideas discussed.

POLS 312 AMERICAN POLITICAL THOUGHT (4)

An examination of the development of American political ideas as reflected in the works and careers of representative writers and political leaders.

POLS 313 CRITICAL THEORY: RACE AND GENDER (4)

Using race and gender as analytical tools, we investigate how major authors in the field "deconstruct" concepts such as rights, democracy, the autonomous individual, and freedom. We will evaluate the central proposition of critical theory that these political principles have been used to "disguise" disparities in power and resources in this country. The ultimate question students will answer is how useful critical theory is in reevaluating our political values as we face an increasingly diverse and interdependent world.

POLS 315 MODERN POLITICAL IDEOLOGIES (3-4)

Examination of the major ideas of important theorists about the relationships among democracy, capitalism, and socialism. A consideration of the actual strengths and shortcomings of some of the current world's major political/economic systems that attempt to put these ideas into practice. Satisfies GE Area D5 (Contemporary International Perspectives).

POLS 320 STATE, CITY, AND COUNTY GOVERNMENT (4)

An introductory study of the political structure and process at the state, county, and municipal levels, with emphasis on urban and regional problems. The changing relationships between the state and federal governments will be explored. Political decision making at all three levels will be discussed in depth. Satisfies, by petition, the state code requirement in California state and local government. Can be used to fulfill prerequisite courses for the M.P.A. program for structure of state and local government agencies, as well as the political science requirement for the California cultural studies major.

POLS 330 RACE, ETHNICITY, AND POLITICS (4)

A survey of the unique impact of race and ethnicity on American politics, including analysis of constitutional, legal, and historical factors affecting the status of persons of color. Attention to the role race and ethnicity play in the media, elections, political participation and representation, public opinion, public policy, and popular culture.

POLS 345 MODEL UNITED NATIONS (MUN) (4)

Introduction to the political structure and functions of the United Nations, with emphasis on team participation at the Western MUN or National MUN in New York. Students play decision-maker roles that they research for preparation of position papers on agenda items. Consent of instructor required.

POLS 350 EUROPEAN PARLIAMENTARY DEMOCRACIES (4)

The theory and practice of democratic government in Britain, France, and Germany. Using the United States as a basis for comparison, the course will consider the many important variations in the ways parties, parliaments, bureaucracies, and executives have developed and perform in the European political arena.

POLS 351 POLITICS OF RUSSIA (4)

The political evolution of Russia in the post-Soviet era. Evaluation of Russian political institutions and political culture. Appraisal of the most significant problems affecting democratic transition. Review of Soviet political traditions.

POLS 352 POLITICS OF EASTERN EUROPE (4)

The political development of the East European nations from the interwar period to the present. Special attention is paid to the problems and prospects for democratic transition in the region, with particular concentration on Hungary, the Czech Republic, Poland, and the former Republics of Yugoslavia.

POLS 354 COMPARATIVE POLITICAL PARTIES (4)

A comparative approach to the structure and dynamics of political parties, party systems, and electoral law. The course will consider parties and their impact on the political process in the United States, Europe, and selected cases in other global areas.

POLS 390 SPECIAL TOPICS (1-4)

A seminar lecture series on a specific theme or topic presented by members of the department, other SSU faculty, and guest speakers. May be audited or taken for credit. May be repeated for credit with different topic.

POLS 391 GENDER AND POLITICS (4)

This course explores how gender is used to interpret American politics. Major works in the field are used to investigate the explanatory power of gender as an analytic category. Specific topics include the Constitution, elections, the media, social movements, race, sexuality, and comparative issues. How these aspects of American politics affect, and are affected by, men and women will be addressed.

POLS 406 INTERDISCIPLINARY SEMINAR (1-4)**POLS 415 EXPLORATIONS IN POLITICAL THEORY (3-4)**

A seminar dealing with selected topics in political theory, including contemporary theories of the political system, the political novel, revolutionary theorists, and socialist theory. A different area of emphasis will be offered each year. Consult Schedule of Classes for current offering.

POLS 420 AMERICAN POLITICAL DEVELOPMENT (4)

The development of American Political institutions including the Congress, the Presidency, the Political Party System, the Public Bureaucracy, and Federalism over time from the early years of the republic to the present. Emphasis will be upon explaining stability, critical junctures, and political change on those institutions understood from a development perspective.

POLS 421 FEDERAL AND INTERGOVERNMENTAL RELATIONS (3-4)

This course examines how the different levels of government interact in the creation and implementation of public policies at the federal, state, and local levels. The class provides students with an understanding of the theory and reality of federalism in the American political system. Can be used to fulfill prerequisite course for M.P.A. program for intergovernmental relations.

POLS 423 INTRODUCTION TO CONSTITUTIONAL LAW (4)

Judicial interpretation of the Constitution, with particular emphasis upon separation of powers, presidential powers, relationship between state and national government control of interstate commerce, and jurisdiction of the courts. Cross-listed as CCJS 404.

POLS 424 THE BILL OF RIGHTS, CIVIL LIBERTIES, AND THE CONSTITUTION (4)

Judicial interpretation of the Constitution in the areas of civil liberties, freedom of speech, freedom of religion, rights of persons accused of crimes, citizenship, and the government's responsibility to protect persons from discrimination. Cross-listed as CCJS 489.

POLS 425 THE AMERICAN PARTY SYSTEM (4)

An examination of political parties in the American system. Comparison with party systems in other democratic countries, Independent voters, third parties, proposed reforms, and the nature of the electorate. Satisfies, with Political Science department chair's signature, the state code requirement in U.S. constitution and California state and local government.

POLS 426 THE LEGISLATIVE PROCESS (4)

An examination of the organization and operation of the American Congress. For comparative purposes, legislatures in selected American states and Western European democracies will be briefly considered. Satisfies, with Political Science department chair's signature, the state code requirement in U.S. Constitution and California state and local government.

POLS 427 THE AMERICAN PRESIDENCY (4)

An examination of the place of the Presidency in the American governmental system. Emphasis will be placed upon the interplay between the president and other elements of the system, particularly the Congress, the bureaucracy, and the media. Satisfies, with Political Science department chair's signature, the state code requirements in U.S. Constitution and California state and local government.

POLS 428 SEMINAR IN CALIFORNIA POLITICS AND GOVERNMENT (4)

Analysis of the California political system. Attention is given to governmental institutions, but primary emphasis is upon parties, interest groups, public opinion, ideologies, and leadership. Satisfies, with Political Science department chair's signature, the state code requirement in U.S. Constitution and California state and local government. Can be used to fulfill prerequisite courses for the M.P.A. program for structure of state and local government agencies, as well as the political science requirement for the California Cultural Studies major.

POLS 429 INTEREST GROUPS (4)

The role of interest groups in the American policy-making process. Group formation, the influence of money and P.A.C.s on election outcomes, and lobbying reform. Satisfies, with Political Science department chair's signature, the state code requirement in U.S. constitution and California state and local government.

POLS 430 INTRODUCTION TO PUBLIC ADMINISTRATION (4)

An introduction to the field of public administration, with emphasis upon bureaucratic life, leadership, and decision-making. Cross-listed as CCJS 365.

POLS 431 POLITICS AND THE MEDIA (4)

The role of the mass media in American political life. Emphasis on television, news magazines, major newspapers, and political columnists, and their interrelationship with American political institutions.

POLS 439 POLITICAL SCIENCE INTERNSHIP (1-6)

Field experience in city, county, state, and federal agencies. May be repeated three times for credit. Note that no more than a total of 6 internship and special studies units may be counted in the 40-unit major. Prerequisite: prior arrangement with a faculty member.

POLS 444 UNITED STATES FOREIGN POLICY (4)

An analysis of the forces, governmental and non-governmental, that influence the formulation of U.S. foreign policy. An examination of the organizational structure charged with the formulation and execution of that policy, as well as the content of policy since World War II.

POLS 445 INTERNATIONAL ORGANIZATIONS (4)

An analysis of the theories and concepts guiding the study of international organizations, followed by an examination of the United Nations, the European Union, NATO, the WTO and other financial institutions, and various non-governmental organizations.

POLS 446 INTERNATIONAL RELATIONS OF THE MIDDLE EAST: ISRAEL, THE PALESTINIANS, AND THE UNITED STATES (4)

An examination of the evolution of the Palestinian-Israeli conflict with an emphasis on how regional and world power factors have affected, and been affected by, this conflict. The course will cover the historical background of modern European imperialism, the nature and character of the Palestine Mandate period, followed by discussion of the creation of the state of Israel in 1948 and the simultaneous emergence of the Palestinian Problem. The 1956, 1967, and 1973 Arab-Israeli wars and their relation to the rise of the Palestinian Resistance Movement will then be covered, followed by an analysis of the "peace process" of the 1990s and its breakdown.

POLS 447 NONVIOLENT STRATEGIES IN INTERNATIONAL RELATIONS (4)

The use of force is often considered to be the most effective form of power, yet nonviolent strategies of action can, in many cases, provide more efficient and successful means to achieve one's goals than the ultima ratio of violence. Those who rely on "just war theory" to advocate for the necessity of war should note that in the 20th century (and early 21st century), nonviolent forms of resistance to oppressive authority generated more profound social and political transformations than violence. Most recently, direct nonviolent action has helped facilitate democratic transitions and is proving to be the most promising means to bring justice and overcome oppression in current struggles in Burma, Egypt, Iran, Iraq, Western Sahara, Zimbabwe, and Belarus. This course will draw on a range of literature, theory, and case studies in international relations to examine these and other questions: "When is nonviolence a preferable alternative, both ethically and strategically?", "How does the regime context (e.g., open society vs. dictatorship) influence the menu of nonviolent options?", "Why have some nonviolent movements been successful while others have failed?", and "What insights does the application of nonviolent action provide to the global community?"

POLS 448 POLITICAL VIOLENCE, TERRORISM, AND LAW (4)

An examination of political violence, terrorism, and legal structures affecting management of conflict. Includes introduction to scientific methodologies used to study political violence and both current and historical conflicts. Course learning objectives include: gaining an understanding of social science conceptions of "terrorism" and "political violence"; increasing knowledge of terrorism actors, motivations, organizations, and forces that mark the use of violence for political gain; gaining knowledge of the historical epochs of political violence and the controversies that result from a response by targeted nations and actors; and creating, examining, and analyzing theories and concepts that inform our understanding of legal structures, terrorism, and political violence.

POLS 450 POLITICS OF ASIA (4)

A comparative analysis of the political development of Asia. After a review of the legacy of colonialism and those theories related to economic development and democratic transition, this course will examine the political systems of selected countries in the region.

POLS 452 POLITICS OF THE DEVELOPING WORLD (4)

A comparative analysis of politics and political development of Third World countries. International and domestic obstacles to modernization will be studied. The general analysis will be supplemented by an intensive scrutiny of selected countries and regions.

POLS 453 POLITICS OF LATIN AMERICA (4)

A comparative analysis of the political development of Latin America. After a review of the major theories related to economic development, revolution, and democratic transition, this course will compare the political systems of selected countries in the region.

POLS 458 COMPARATIVE SOCIAL POLICY (4)

Comparative analysis of social policies in advanced industrial democracies. The course will look at relationships between politics, political culture, and public policy.

POLS 466 POLITICAL PSYCHOLOGY (4)

An examination of the psychological sources of political leadership and decision-making. A study of the roots of political belief and extremism, as well as the acquisition of civic outlook in childhood and adolescence.

POLS 475 URBAN POLITICS AND POLICY (4)

Examination of the structure and process of urban and regional governments within the context of state sovereignty. This course also focuses on such aspects of local government, in both large and small urban areas, as planning, bureaucratic administration, social services, economic issues, the political policy-making process, and civil rights will be discussed in depth.

POLS 481 POLITICS OF REGULATION AND LAND USE (3-4)

An examination of regulatory policies as they affect business and land use decisions in the United States. Structural, legal, and procedural aspects of the regulatory process are explored along with reform and deregulation. Explores the economic, environmental, and political consequences of land use control.

POLS 483 POLITICS OF WEALTH AND POVERTY (4)

Course focuses upon conditions and causes of poverty; wealth and income inequality in the U.S.; and the variety of economic, social, governmental, and political responses that have occurred in recent decades. Of particular concern are the role of the government's income redistribution and social programs, and the function of values, political interest groups, and social science findings in shaping these policies.

POLS 484 ELECTIONS AND VOTER BEHAVIOR (4)

Course examines the impact of the new styles and techniques of political campaigning on both the public decision-making process and control over public policy. Modern techniques of analysis and voter manipulation are discussed, along with the characteristics and behavior of the electorate and their historical patterns of political participation.

POLS 485 POLITICAL POWER AND SOCIAL ISOLATION (4)

The course explores a wide variety of personal, social and political meanings of community, including the decline of social and civic participation, political powerlessness, and theories of social fragmentation and political change. Recent theories link both economic development and community improvement to an ability to increase levels of "social capital." Given its focus, this course will be of particular interest to those concerned with these policy areas, or with a general discussion of the societal milieu of politics and government.

POLS 486 SELECTED ISSUES: INTERNATIONAL POLITICS (3-4)

An examination of current topics and developments in global politics, such as regional conflicts, North-South issues, economic interdependence, and environmental issues. Title varies to reflect specific content each semester. May be repeated for credit with different topic.

POLS 487 SELECTED TOPICS IN COMPARATIVE POLITICS (4)

Focus on dynamic political issues and developments in selected regions.

POLS 494 SELECTED TOPICS IN POLITICAL SCIENCE (1-4)

May be repeated for credit with different topic.

POLS 495 SPECIAL STUDIES IN POLITICAL SCIENCE (1-4)

A student may be invited by a faculty member to participate in a continuing research project under the faculty member's direction. The research may extend for more than a single semester. Seniors who participate in this course may have their work considered for graduation with honors. This course may be repeated for credit. Note that no more than a total of 6 special studies and internship units may be counted toward the 40-unit major.

POLS 498 SENIOR SEMINAR (4)

An opportunity for senior majors and graduate students to integrate their basic understanding of political science by exploring the interrelationship between the substantive subfields, basic concepts, and the major modes of analysis current in political science today. All Political Science majors must take POLS 302 prior to enrolling in POLS 498.

POLS 501 THE ADMINISTRATIVE STATE (4)

This core course examines a variety of public administration literature, including aspects of organizational structure, group behavior, and policy studies. Special attention will focus upon specific topics within the field: organizational behavior, power, leadership, personnel, control and administrative responsibility, and discretion.

POLS 502 ORGANIZATIONAL THEORY AND ANALYSIS (4)

Presents basic analytic tools that can be used in diagnosing political and organizational situations. The nature and use of influence, strategic thinking, and bargaining in organizations.

POLS 503 BUDGET AND FISCAL ADMINISTRATION (2)

An examination of the budgeting process with emphasis upon theories and politics of budgeting, and budgeting process reform. Required for all M.P.A. students.

POLS 503A PUBLIC FINANCE (2)

An examination of applied issues in public budgeting and fiscal management. Public policy formation and evaluation of results as revealed in the budget will be explored. Required for public management track students.

POLS 503B FISCAL MANAGEMENT OF NONPROFIT AGENCIES (2)

An examination of applied issues in nonprofit budgeting and fiscal management. Fund accounting, cash flow analysis, expenditure control, long-range financial planning, audits, grants, and contracts in nonprofit agencies are studied. Required for nonprofit track students.

POLS 504A HUMAN RESOURCES FOR THE PUBLIC SECTOR (2)

The evolving character of public personnel administration in the United States will be considered. Topics include civil service, personnel management, work life in organizations, employee participation, diversity, labor-management relations, and the relationship of public personnel to democracy.

POLS 504B PERSONNEL ADMINISTRATION FOR NONPROFIT ORGANIZATIONS (2)

Examination of current issues in the management of employees and volunteers in nonprofit organizations. Topics include board-staff relations; staff recruitment, selection, training, and management; staff development; performance evaluation of paid and unpaid staff; labor-management relations; diversity; and compliance with state/federal regulations.

POLS 505 RESEARCH METHODS (4)

Lecture and laboratory. An examination of quantitative research techniques required by agency and program managers. Course includes work in data analysis, introduction to computer usage techniques of needs assessment and program evaluation, and use of simple analytic models.

POLS 506 PUBLIC POLICY PROCESS (4)

The course will look at the public policy-making process with emphasis on the role of ideas and analysis. Agenda setting, implementation, policy, and design will be discussed.

POLS 507 ETHICS IN ADMINISTRATION (4)

A seminar designed to help public administrators cultivate an awareness of ethical dilemmas, develop ways of conceptualizing them, and practice ways of thinking about their resolution.

POLS 508 PUBLIC POLICY (4)

A comparison of selected social policies in North America and western Europe, with emphasis on explaining the national differences in policy content in such areas as education, environment, and aging policy.

POLS 509 POLITICS OF HEALTH CARE AND AGING (4)

The course will be an examination of health care and aging policy in the United States. Comparisons with policy in several other democracies will be included. Also included will be a look at policies such as Medicare and the Older Americans Act, as well as the politics of these and others. Cross-listed as GERN 561.

POLS 511 LABOR RELATIONS (2)

A course that looks at the historical and current development in labor relations in both the public sector and also in the not-for-profit sector. The course looks at changing concepts and their implications for the existing institutions, processes, and values for both sectors of the economy.

POLS 512 ORGANIZATIONAL DEVELOPMENT (4)

An exploration of values, methodologies, strategies, and theories of organization development.

POLS 513 LEADERSHIP AND SUPERVISION (4)

Examines the role of leader and of leadership in administrative agencies, together with an examination of techniques of supervision and administrative control.

POLS 537 BARGAINING, POLITICS, AND ADMINISTRATION (4)

An examination of the politics of administration, with an emphasis on the dynamics of budgeting and interagency conflict. Of special interest in this course will be the focus on new theories of decremental budgeting — budgeting and political coalition building in an era of decreasing resources.

POLS 538 ADMINISTRATIVE LAW (2-4)

Introduction to the legal process within the framework of administrative agencies and procedures. The function of administrative law, including the role of legal agencies, delegation of powers, administrative procedures and statutes, and development of the current body of case law.

POLS 539 PROGRAM IMPLEMENTATION (4)

Focuses upon the critical movement from statute or authorization to an actual functioning program. The course will concentrate primarily on a series of case studies involving human services, environmental, economic development, and criminal justice programs at the federal, state, and local levels.

POLS 550 PLANNING AND EVALUATION (4)

Techniques of administrative analysis and program evaluation. Included are examinations of techniques for assessment of policy impact and effectiveness, analysis of program objectives, evaluation methodologies, and the administration of evaluation systems. Prerequisite: Political Science graduate students.

POLS 551 ORGANIZATIONAL COMPUTER USAGE (4)

An investigation of contemporary developments in the area of information systems, this course views computer usage from the organizational rather than data processing perspective. Central areas of concern are organizational planning and change and the development of information systems that meet the planning challenge.

POLS 560 SPECIAL ISSUES IN PUBLIC POLICY (4)

An examination of selected issues in public policy/public affairs. Specific topics will be offered on the bases of student interest and current issue development.

POLS 564 AGING SERVICES ADMINISTRATION (4)

For individuals interested in careers in the administration of health care, residential, and social services for the elderly. An introduction to the field of long-term care administration through the use of lectures and structured case studies. Specifically addresses management decision-making in the operation of skilled nursing facilities, congregate care facilities, day care, home health care, and retirement communities. Open to undergraduates. No prerequisites.

POLS 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the masters degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

POLS 580 NONPROFIT DYNAMICS: POLITICS AND COMMUNITY ENVIRONMENT (2)

Introduction to nonprofits and the environment in which they operate. Analysis of nonprofit's role and effectiveness in meeting public and private sector community needs. Topics include organizational models, needs assessment and asset mapping, and trends in intra-sector and cross sector partnerships. Required for all M.P.A. students.

POLS 581 NONPROFIT GOVERNANCE AND LEGAL ISSUES (2)

Examination of the historical development of the non-profit sector, its changing social contract, and critical legal/tax issues. Topics include board governance, mission, start up, life cycles, executive director-board-staff relationships, legal status, fiscal sponsorship, and IRS status and rulings.

POLS 582 PLANNING AND NONPROFIT AGENCIES (2)

This course addresses techniques of strategic and operational planning appropriate to nonprofit agency operation. Topics include needs and service assessment, marketing analysis, program evaluation, organization development, and strategic management techniques.

POLS 583 RESOURCE DEVELOPMENT FOR NONPROFIT AGENCIES (4)

Course focus is on the techniques and importance of developing and implementing a comprehensive organizational resource development plan for funding, volunteers, and donations, as well as ensuring a diversified agency revenue base. In addition, the course covers fund-raising, major donor development, as well as the legal restrictions for nonprofit agencies and the funding criteria used by corporate, community, and private foundation funding sources.

POLS 585 MARKETING AND PUBLIC RELATIONS FOR NONPROFIT AGENCIES (2)

An examination of the role of marketing and public relations for nonprofit agencies, together with techniques for designing and implementing realistic marketing and public relations programs. Course will stress adaptation of marketing techniques to not-for-profit organizations, and will explore the types of access to press, electronic, and other media available to nonprofits. Course restricted to Political Science graduates only.

POLS 587 GRANT WRITING AND ADMINISTRATION (2)

Focus upon full process of prospect research, proposal development, application, and contract management and administration of foundation, government, and corporate grants.

POLS 588 ISSUES IN NONPROFIT ADMINISTRATION (4)

An investigation of current issues and developments in the operation of nonprofit agencies.

POLS 595 SPECIAL STUDIES IN POLITICAL SCIENCE (1-4)

A student may be invited by a faculty member to participate in a continuing research project under the faculty member's direction. The research may extend for more than a single semester. May be repeated for credit.

POLS 596 GRADUATE TUTORIAL - EXAM (4)

An independent, intensive review of the literature in specific areas of concentration, in Public Administration to include the M.P.A. Core and Track course materials. Prerequisite materials to be included in this review. Prerequisite: completion of all master's degree requirements.

POLS 597 GRADUATE INTERNSHIP (1-4)

Intensive field experience in a public or private agency. The student must define a current political problem and a discipline-related strategy for dealing with the problem, and work toward implementing the strategy. Cr/NC only. Repeatable for credit up to 4 units total.

POLS 599 MASTER'S THESIS (2-4)

Prerequisite: submission of an authorized Advancement to Candidacy form.

Psychology (PSY)**PSY 250 INTRODUCTION TO PSYCHOLOGY (3)**

Theories, research, and applications that constitute psychology. An important goal is to help students become informed consumers of psychological knowledge. The role of culture is emphasized. Prerequisite to upper-division courses in the major for students who enter Sonoma State University as first-time freshmen and students who transfer into psychology from other majors at Sonoma State. Satisfies GE Area D1 (Individual and Society).

PSY 270 PSYCHOLOGY OF SELF-DISCOVERY (4)

Introduction to psychological theory, research and practice relevant to developing self-knowledge as it applies to people of diverse backgrounds. Possible approaches include humanistic, positive, depth, Buddhist; and indigenous psychology, and basic skills and practices in self-reflection, mindfulness, dreamwork, and earth-based practices. A foundation for the Holistic Breadth area. Required for major.

PSY 280 PSYCHOLOGICAL RESEARCH METHODS (4)

Introduction to the variety of ways psychologists collect research evidence. Students will be asked to try different research methods -conduct interviews, observe behaviors, write an attitude scale, and design an experiment. Upon completing this course, students should be able to understand and critically evaluate major research methods in psychology and the social sciences. Prerequisites: PSY 250 and admission to the Psychology major.

PSY 302 LIFE SPAN DEVELOPMENT (3)

A multidisciplinary examination of the cognitive, social, cultural, emotional, and physical development of the human being. Shows how research and theories relate to and assist individuals in their own self-development. Satisfies upper-division GE Area E (The Integrated Person). Breadth Area: Development.

PSY 303 THE PERSON IN SOCIETY (3)

How humans behave, think and feel in interpersonal relationships, families, workplaces, communities, and natural environments. How each of these social contexts affects the way people behave with others. Interrelationships with larger political and economic variables are explored, drawing from other disciplines that offer relevant insights and knowledge including cross cultural perspectives. Methodology issues relevant to under represented populations will be emphasized. Upper Division Elective. Satisfies GE Area D1 (Individual and Society).

PSY 306 HISTORY OF MODERN PSYCHOLOGY (4)

Perspectives on the field of psychology. Includes past and present understandings of human experience, integrating issues, and controversies. Includes epistemology; traditional scientific and clinical methodologies; and behavioral, psychoanalytic, and Gestalt psychologies. Psychology majors only. Upper Division Elective.

PSY 307 HUMANISTIC, EXISTENTIAL, AND TRANSPERSONAL PSYCHOLOGY (4)

Theories, methods, and research in humanistic, existential, and transpersonal psychology, including cultural variations. Psychology majors only. Breadth Area: Holistic.

PSY 311 PSYCHOLOGY DIALOGUE SERIES (1-2)

A lecture series that explores current topics of interest to psychologists. Topics include research, diversity, social justice, clinical, developmental, professional and academic fields in psychology. CR/NC only. Upper Division Elective.

PSY 313 CAREERS IN PSYCHOLOGY (2-4)

Offers students an opportunity to explore and discover their values, skills, interests, lifestyle preferences, and the undertaking of the personal strategies necessary to formulate career paths and alternatives. Upper Division Elective.

PSY 322 MYTH, DREAM, AND SYMBOL (3-4)

Exploration of the creative unconscious in individual growth. Myths, dreams, and symbols are explored from the standpoint of theory, symbolic work, art process, guided meditation, and group process. Approaches vary by instructor and may draw from texts by Jung, Campbell, Johnson, Hillman, Edinger, Singer, and others. Prerequisite: junior-level standing. Breadth Area: Holistic.

PSY 325 SOCIAL PSYCHOLOGY (4)

This course examines how the social situation influences how individual people feel, think, and behave. Topics covered include: attitudes, perceptions of others, helping behavior, the self, attraction, aggression, conformity, prejudice, and cross-cultural variations. Satisfies GE Area D1 (Individual and Society). Breadth Area: Social/Personality.

PSY 327 PSYCHOLOGY OF ORGANIZATIONS (4)

Applies social science methods and principles to organizational behavior. Topics include: teams in organizations, motivation, individual differences, attitudes and emotions relevant to work, stress and well-being, fairness and diversity within organizations, and leadership and organizational change. Application of topics to underrepresented populations is addressed. The goal of organizational psychology is to maximize both employee well-being and organizational effectiveness. Prerequisites: PSY 250, PSY 380, or permission from the instructor. Breadth Area: Social/Personality.

PSY 328 CROSS-CULTURAL PSYCHOLOGY (4)

Didactic and experiential in nature, this course introduces students to the field of multicultural psychology as it pertains to concepts, issues, professional practice, and research. The focus is on self-exploration and understanding one's world view regarding race/ethnicity, culture, gender, sexual orientation, aGEdisability, religion and socio-economic status. Students reflect on the psychological and social implications of prejudice, racism, oppression, and discrimination on identity development, and social justice issues in a multicultural society like the United States. Breadth Area: Social/Personality.

PSY 329 GROUP PROCESS (3-4)**PSY 335 MEMOIR AND AUTOBIOGRAPHY (3-4)**

Storytelling and the storied nature of human experience, in research, counseling, therapy, and history. Uses methodology from psychology, literature, and other branches of the social sciences and humanities. Includes biography and autobiography, interview, and students' own oral and written narratives as it applies to people of diverse backgrounds. Breadth Area: Holistic.

PSY 338 PSYCHOLOGY OF CREATIVITY (4)

The study of creative people, processes, and environments. Current and historical theory and research on creativity in personal and professional situations, humanities, science, business, education, everyday life and across cultures. Emphasis on individual and group projects. Service-learning course. Breadth Area: Holistic.

PSY 342 THE PSYCHOLOGY OF MEDITATION (4)

An exploration of meditative practice as a means of developing awareness, self-growth, and psychological insight. Basic instruction in various meditation techniques, actual meditation practice, and readings and discussions of the psychodynamics of meditation. Breadth Area: Holistic.

PSY 352 PSYCHOLOGY OF YOGA (3-4)

An introduction to the literature and practice of Yoga. The course normally includes separate lecture and practice sessions. Focus on the application of Yoga to enhance well being, prevent psychological problems, and treat psychological conditions. Breadth Area: Holistic.

PSY 358 HEALTH PSYCHOLOGY (3-4)

Focuses on the relationship between the body and the mind in physical health, psychological well being, and personal growth. Students learn to: (1) critically evaluate empirical research reports and popular claims about mind-body practices; (2) develop an individualized long-term mind-body practice that can be used to promote health, well-being, and personal growth; and (3) apply psychological principles and strategies for helping others adopt and maintain health and wellness promoting mind-body practices. Cross-cultural issues are included. Prerequisites: admission to the Psychology major and junior-level standing. Breadth Area: Holistic.

PSY 360 PEAK PERFORMANCE PSYCHOLOGY (4)

Focuses on the mental training techniques used by the most successful women and men around the world to enhance performance at work, in sport, and in life. This highly practical course will teach you how to create the optimal mental state necessary for success and happiness in almost any endeavor. Students learn how to increase concentration, overcome fatigue, create positive emotions, build confidence, and effectively master the mental, emotional, and physical challenges of school, work, sport, and life. This course is for students who wish to learn how to perform at their full potential with poise, calm, and grace. Includes readings, lectures, discussions, presenting to peers, participation in a mental skills training program, and practicing the mind-body arts of Tai Chi and Qigong. Prerequisites: admission to the Psychology major and junior-level standing. Breadth Area: Clinical/Counseling.

PSY 362 HUMAN SEXUALITY (4)

Covers the biological, social, developmental (across the life span), behavioral, and cultural dimensions of human sexuality. Examples of issues that will be addressed in the class include: intimacy, sexual expression, gender identity, sexual education, sex and the media, and sexual practices across cultures. Breadth Area: Cognitive/Physiological.

PSY 399 GRADUATE STUDENT-INSTRUCTED COURSE (1-3)

Each graduate student-instructed course (SIC) is designed by an advanced student under the guidance of a faculty sponsor. Each course proposal is carefully reviewed by the department Executive Committee before approval is granted. The course should address cultural variations or diversity issues. Consult the Schedule of Classes for the topic studied. May be repeated once for credit. Only two SICs may be credited toward the Psychology major. Upper Division Elective.

PSY 404 PSYCHOLOGY OF WOMEN (3-4)

Examines women's development and women's place in the world from a psychological perspective. Material is drawn from contemporary research and thinking, longitudinal studies, case studies, personal narratives, and story. Prerequisite: junior-level standing. Breadth Area: Social/Personality.

PSY 405 THE PSYCHOLOGY OF GENDER (4)

Explores gender through a social psychological perspective. Topics include gender socialization, the structure and function of gender stereotypes, masculinity, and gender discrimination. Cross-listed as WGS 405. Breadth Area: Social/Personality.

PSY 408 TRANSITIONS IN ADULT DEVELOPMENT (4)

This course explores how women and men experience and shape the transitions that occur as they mature socially and psychologically. Inquiry includes normative life cycle transitions as well as unexpected, unusual, or "off-time" transitions and develops understandings of how these transitions shape the development of an individual through adulthood and later life. Cross-cultural aspects are included. Cross-listed as GERN 408. Prerequisite: junior-level standing. Breadth Area: Developmental.

PSY 409 SOCIAL AND EMOTIONAL DEVELOPMENT (4)

This course presents an overview of social-emotional development across the life span. Theory and research will be assessed based on different theoretical models and approaches, including cross-cultural perspectives. Topics included are attachment, moral and personality development, social cognition, gender roles, identity, aggression, achievement, and emotions. Prerequisite: PSY 250, PSY 302 or PSY 410. Breadth Area: Developmental.

PSY 410 CHILD DEVELOPMENT (3-4)

This course introduces students to the social-emotional, cognitive, language biological, and physical development of children and adolescents. Students learn major developmental theories and current research as applied to relevant issues in today's society. The role that parents, teachers, communities, and cultures play in the healthy growth and development of children is emphasized. Prerequisites: PSY 250 and junior-level standing, or consent of instructor. Breadth Area: Developmental.

PSY 411 BEHAVIORAL AND EMOTIONAL PROBLEMS OF CHILDREN (3-4)

Study and observation of children with problems, and examination of the environments in which those problems occur. Major diagnostic categories for behavioral and emotional problems of childhood are covered. This course includes issues relevant to underrepresented populations. Prerequisite: junior-level standing. Breadth Area: Developmental.

PSY 412 ADOLESCENT PSYCHOLOGY (3-4)

An examination of the social, cognitive, and biological theories in adolescent development, including cross-cultural variations. Material is drawn from research and personal interaction with adolescents. Prerequisite: junior-level standing. Breadth Area: Developmental.

PSY 418 THE PSYCHOLOGY OF FAMILY (3-4)

A study of the family as a social-psychological group. Considers family of origin, present families and relationships, and parenting. The role of culture is emphasized. Prerequisite: junior-level standing. Breadth Area: Developmental.

PSY 421 PSYCHOLOGY OF AGING (4)

Analysis of psychological development as a life-long process, and examination of patterns of adult learning and ways to facilitate it. Includes the exploration of the role of memory for learning and psychological functioning, as well as cross-cultural variations. Includes the study of issues in mental health in adulthood and later life. Cross-listed as GERN 421. Prerequisite: junior-level standing or instructor permission. Breadth Area: Developmental.

PSY 422 SEMINAR IN LIVING AND DYING (3-4)

This course explores personal values and attitudes about life and death and seeks to understand them in relation to our own psychology and to the larger social context. Topics of separation and loss, loss from homicide, near-death experiences, mythology, immortality, and culture will be addressed. Cross-listed as GERN 422. Breadth Area: Developmental.

PSY 423 COMMUNITY PSYCHOLOGY (3-4)

The study of community structure and processes in relation to human needs. Includes organizing community action, the role of the individual in social change theories and strategies of organizing, building alliances, and affecting legislation and policy. Issues relevant to underrepresented populations are included. Breadth Area: Social/Personality.

PSY 425 PSYCHOPATHOLOGY (4)

The study of the wide spectrum of mental disorders found in the DSM with applications for community mental health, psychotherapy, and other helping professions. The role of culture is emphasized. Prerequisites: PSY 302, admission to the Psychology major and junior-level standing, or consent of instructor. Breadth Area: Clinical/Counseling.

PSY 428 INTRODUCTION TO COUNSELING (4)

An examination of the counseling process. Various approaches are considered and methods for the development of component skills presented. The role of culture is emphasized. Prerequisites: 6 units of Psychology. Breadth Area: Clinical/Counseling.

PSY 429 GESTALT PROCESS (4)

An experiential-didactic approach to the Gestalt process as developed by Fritz Perls and his associates. Useful both for developing counseling and therapeutic skills and perspectives and for personal growth. Breadth Area: Clinical/Counseling.

PSY 430 DEPTH ORIENTED PSYCHOTHERAPIES (4)

This advanced seminar focuses on several modalities used to access the psyche in depth oriented therapies. Dora and Martin Kalf and Sandplay, Jung's Individuation and use of Mandalas, and DW Winnicott and his work with relational space will be the focus of this experiential learning forum. Breadth Area: Clinical/Counseling.

PSY 431 INTRODUCTION TO ART THERAPY (4)

An overview of the field of art therapy, its varied schools of thought, and different possibilities of application — from public school settings to mental hospitals. Information on graduate and professional training in the field. The role of culture is emphasized. Prerequisite: junior-level standing. Breadth Area: Clinical/Counseling.

PSY 438 PSYCHOLOGICAL ASPECTS OF DISABILITY (3-4)

This course is designed to give participants a better understanding of people with disabilities and an awareness of how society regards them. The disabilities addressed range from traumatic physical injuries through progressive diseases and conditions to mental retardation, alcoholism, and emotional disabilities. The role of culture is emphasized. The class is appropriate for anyone interested in disability, whether for personal or professional reasons. Cross-listed as GERN 438. Breadth Area: Social/Personality.

PSY 440 COMMUNITY-BASED RESEARCH (4)

This seminar presents an overview of fundamental concepts, issues, and methods in community-based research and applied developmental psychology. Students will design, implement, analyze data, and write the report of research projects following APA format. Research projects should meet ethical and professional standards so they can be submitted to appropriate conferences. Students will also become critical consumers of research with human participants, especially as it refers to underrepresented groups in this country. Prerequisite: MATH 165, PSY 280, or consent of instructor. Breadth Area: Social/Personality.

PSY 441 QUALITATIVE RESEARCH (4)

Introduces the principles and techniques of qualitative research that are relevant for designing and carrying out psychological research. Topics include phenomenology, action research, grounded theory, and discourse analysis. As a class, we will design and conduct a qualitative research project. Methodological issues important to underrepresented populations will be emphasized. Prerequisite: PSY 280 or permission of instructor. Upper Division Elective.

PSY 444 SOCIAL JUSTICE AND INTERGROUP RELATIONS (4)

Review of psychological research and theory about social justice and intergroup relations. Topics include the ways in which people define fairness and how these definitions shape personal and business relationships, environmental resource allocation, criminal justice practice, international relations, and cross-cultural perspectives. Prerequisite: PSY 250, PSY 280 or permission from the instructor. Breadth Area: Social/Personality.

PSY 445 ADVANCED RESEARCH DESIGN AND ANALYSIS (4)

Locate and use relevant research and theory to plan, conduct, and interpret the results of a collaboratively designed study. Topics include research ethics, experimental design, survey design, and tensions between applied and basic research. Upon completing the course, students should be able to use and evaluate the basic research designs most often employed by psychologists. Methodological issues relevant to underrepresented populations area emphasized. Prerequisite: PSY 280 or consent of the instructor. Co-requisite: PSY 445L. Upper Division Elective.

PSY 445L ADVANCED RESEARCH LABORATORY (2)

Compliments PSY 445 by introducing and reviewing the statistical techniques used by psychologists to analyze quantitative data. Students use what they learn in the class to analyze the data they collect as part of their collaborative research project for PSY 445. Prerequisite: PSY 280 or consent of the instructor. Co-requisite: PSY 445. Upper Division Elective.

PSY 446 COGNITIVE PSYCHOLOGY (4)

An introduction to theory and research in human information processing. Topics include attention, memory, mental representation, imagery, problem solving, reasoning, language higher mental processes, and cross-cultural variations. Breadth Area: Cognitive/Physiological.

PSY 447 LEARNING AND BEHAVIOR (3-4)

A study of the learning process including major theories of learning and cognition and their application to problem solving behavior. Includes types of conditioning, stimulus controls and reinforcement, social learning, and cognitive mediation of emotion and behavior. The role of culture will be emphasized. Prerequisite: PSY 250. Breadth Area: Cognitive/Physiological.

PSY 448 COGNITIVE DEVELOPMENT (4)

This course covers theories and research on cognition from infancy through adolescence. Major theorists include Piaget, Vygotsky, Sternberg, Fischer, Case, Bruner, and information-processing perspectives. Special topics include social cognition, theory of mind, concept formation, problem-solving, memory, multiple intelligences, standardized testing, language, and cultural variations. Prerequisite: PSY 410, PSY 302 or consent of instructor. Breadth Area: Developmental.

PSY 450 PHYSIOLOGICAL PSYCHOLOGY (4)

A study of the relationship between physiological processes and behavior. Particular emphasis on the anatomy and physiology of the nervous system and the effects of metabolic processes, brain lesions, and various drugs on behavior. Breadth Area: Cognitive/Physiological.

PSY 454 BIOFEEDBACK, SOMATICS, AND STRESS MANAGEMENT (4)

An introduction to biofeedback, somatic psychology, and stress management through the study of human psychophysiology and psychology. Development of familiarity with the technology related to health and wellness. Breadth Area: Cognitive/Physiological.

PSY 456 BIOFEEDBACK PRACTICUM (3)

Develops proficiency in the use of biofeedback equipment through simulated training sessions and supervised actual biofeedback training sessions. Case presentation format is used for discussion of issues that emerge in the student's practicum experience. Prerequisite: PSY 454. Breadth Area: Cognitive/Physiological.

PSY 461 PERSONALITY (3-4)

Examines individual differences in the ways people behave, think, and feel and the psychological mechanisms that drive these patterns of behavior. Course will examine personality from a variety of perspectives including psychanalytic, humanistic, trait, biological, learning, and social cognitive theories, as well as contemporary research in personality (e.g., measurement, change and judgment). Prerequisite: junior-level standing. The role of culture will be emphasized. Breadth Area: Social/Personality.

PSY 462 SEMINAR IN HUMANISTIC AND EXISTENTIAL PSYCHOLOGY (4)

Historical thinking in humanistic and existential psychology and examination of contemporary directions. Deals with the whole person in relation to his or her environment, from relationships and the family to the community, larger organizations, natural environment, and cross-cultural variations. Prerequisite: PSY 306 and 307 or consent of instructor. Breadth Area: Holistic.

PSY 466 JUNGIAN PSYCHOLOGY (4)

Exploration of Jung and contemporary Jungian thinkers. Examines individuation, dreams, image symbol, archetype, self, creativity, imagination, typology, and the transcendent function. Prerequisite: junior-level standing. Breadth Area: Holistic.

PSY 471 PSYCHOLOGY OF RELIGION (4)

Explores psychological research, theory, practice, and narratives in religion and spirituality. Topics include links between religion and: biology, development, personality, creativity, morality, prejudice, health and coping, nature and ecology, community, violence and culture. Breadth Area: Holistic.

PSY 472 TRANSPERSONAL PSYCHOLOGY (3-4)

Surveys the psychological literature on spiritual, transcendent, and extra-ordinary experiences. Reviews roots of transpersonal psychology in ancient philosophies as well as current applications. Studies dualism and relationship, symbols of transformation, and doorways into the sacred from psychological and cross-cultural perspectives. Breadth Area: Holistic.

PSY 481 RESEARCH INTERNSHIP (1-8)

Students learn applied research methods and practical research skills under the supervision of a faculty mentor. Prerequisite: consent of instructor. May be repeated for credit. A maximum of 8 units of special study and internship may be applied to the psychology major. Cr/NC only. Upper Division Elective.

PSY 482 TEACHING INTERNSHIP (1-8)

Students learn the skills of organization and communication of psychological theory and research under the supervision of a faculty mentor. Prerequisites: Consent of instructor. May be repeated for credit. A maximum of 8 units of special study and internship credit may be applied to the psychology major. Cr/NC only. Upper Division Elective.

PSY 483 ADVANCED TEACHING INTERNSHIP (1-4)

Advanced skills in teaching internship. May be repeated for credit. A maximum of 8 units of special study and internship credit may be applied to the psychology major. Prerequisites: PSY 482 and consent of instructor. Upper Division Elective.

PSY 485 ECOPSYCHOLOGY (4)

This course focuses on psychological aspects of our relationship to the earth. Issues to be addressed include the psychological impact of living in a time of ecological crisis, and the role of psychology and culture in promoting a transition to an ecologically sustainable society. Field trips to be arranged. Breadth Area: Holistic.

PSY 488 BIOFEEDBACK EXPERIENCE (1)

Participation in personal biofeedback sessions conducted by interns in the biofeedback training sequence. Interns are supervised by a qualified biofeedback practitioner. Upper Division Elective.

PSY 490 PSYCHOLOGY SEMINAR (1-4)

Each semester one or more psychological topics is selected for study in depth. Consult Schedule of Classes for topics to be studied, Breadth Area and current unit offering. May be repeated for credit.

PSY 493 NARRATIVE: THEORIES AND METHODS (4)

The course examines the role of narrative, or life storying, in human development research. Students develop a protocol, conduct research in the community using interview methodologies appropriate to the narrative perspective, analyze transcriptions for theoretical and life themes, and develop a final project based on the analysis of the data. Methodological issues relevant to underrepresented populations will be emphasized. Cross-listed as GERN 493. Upper Division Elective.

PSY 494 COUNSELING EXPERIENCE (1)

Participation in personal counseling conducted by a graduate student in the counseling M.A. program under the direct supervision of a counseling department faculty member. Students generate a written evaluation of the counseling experience. Students compile a weekly journal and write a summary essay. May be repeated once. Cr/NC only. Prerequisite: instructor consent. Upper Division Elective.

PSY 495 SPECIAL STUDIES (1-4)

The psychology department encourages independent study as preparation and practice for life-long self-directed learning. Students should formulate plans for a project and present them to a faculty member for sponsorship. Special forms for this purpose are available in the department office. Strong preference is placed on projects with cross-cultural perspectives. These should be completed and filed during the add/drop period. May be repeated for credit. Eight units of Special Study and Internship combined may be credited toward the major. Prerequisite: upper-division Psychology major or consent of instructor. Cr/NC only. Upper Division Elective.

PSY 496 PSYCHOLOGY TUTORIAL (1-4)

Directed study of a selected psychological topic under the supervision of a faculty member. A plan of study must be developed in consultation with the faculty member prior to registration. Prerequisites: upper-division Psychology major and consent of instructor. Upper Division Elective.

PSY 497 INTERDISCIPLINARY SEMINAR (2-4)

Exploration of basic social problems. Resource persons from other disciplines may participate. Themes and topics vary. Upper Division Elective.

PSY 499 INTERNSHIP (1-4)

Supervised training and experience for advanced students in community agencies throughout the University service area. Special contracts are required and are obtainable in the department office. Internship assignments may be paid. Priority is given to students who apply during the last month of the preceding semester. Students register for PSY 499 during the add/drop period by submitting a completed contract (not online). Prerequisite: consent of instructor. Cr/NC only. May be repeated for credit. A maximum of 8 units of internship credit may be applied to the Psychology major. No more than 4 units of PSY 499 may be earned in one semester. Upper Division Elective.

PSY 500 SOCIAL AND PSYCHOLOGICAL ISSUES IN AGING (3-4)

Selected issues provide exploration of relationships between psychological and social development in later life. Developmental, historical, cultural, psychological, and policy perspectives may be offered. Consult Schedule of Classes for specific topic. Cross-listed as GERN 500. Prerequisite: graduate standing or permission of instructor.

PSY 500 SOCIAL AND PSYCHOLOGICAL ISSUES IN AGING (3-4)

Selected issues provide exploration of relationships between psychological and social development in later life. Developmental, historical, cultural, psychological, and policy perspectives may be offered. Consult Schedule of Classes for specific topic. Cross-listed as GERN 500. Prerequisite: graduate standing or permission of instructor.

PSY 511A THEORIES OF DEPTH PSYCHOLOGY (2-4)

A two-semester sequence that examines Jungian, depth, and archetypal psychology. Readings include Jung, Edinger, Hillman, and post-Jungians. Limited to students in the Depth Psychology Program.

PSY 511B THEORIES OF DEPTH PSYCHOLOGY (2-4)

Continuation of PSY 511A. Limited to students in the Depth Psychology Program.

PSY 515 PSYCHOLOGICAL WRITING (1-4)

Advanced instruction in the analysis, organization, style, and content of psychological writing, including personal explorations.

PSY 541 PROFESSIONAL TRAINING (1-4)

Supervised professional training.

PSY 542A METHODS AND APPLICATIONS OF DEPTH PSYCHOLOGY (3-4)

A two-semester sequence that surveys the methods and applications used in depth psychological work. Students learn how the symbol contains, mediates, and expresses personal experience. Intensive work with different art forms, dreams, myth, meditation, active imagination, sandplay, and the body. Students learn conceptual approaches for interpreting symbolic experience. Theory and practice are integrated throughout the course. Limited to students in the Depth Psychology Program.

PSY 542B METHODS AND APPLICATIONS OF DEPTH PSYCHOLOGY (3-4)

Continuation of Psy 542A. Limited to students in the Depth Psychology Program.

PSY 543A CROSS-CULTURAL MYTHOLOGY AND SYMBOLISM (1-4)

A two-semester sequence that surveys selected mythological, religious, artistic, and cultural symbolic motifs and examines their expression in cultures throughout the world. Earth-based healing traditions and the council process are included. Readings are drawn from depth psychology, mythology, folklore, anthropology, ecopsychology, religion, and art history. Limited to students in the Depth Psychology Program.

PSY 543B CROSS-CULTURAL MYTHOLOGY AND SYMBOLISM (1-4)

Continuation of PSY 543A. Limited to students in the Depth Psychology Program.

PSY 551 DIRECTED READING (1-4)**PSY 560 PROFESSIONAL WORKSHOP (1-4)**

Each semester a particular problem or methodology will be selected for study in depth.

PSY 561 RESEARCH METHODS (1-4)**PSY 566 BIOFEEDBACK PRACTICUM (3)**

Develops proficiency in the use of biofeedback equipment through simulated training sessions and supervised actual biofeedback training sessions. Case presentation format is used for discussion of issues that emerge in the student's clinical experience. Prerequisite: PSY 454.

PSY 570 DIRECTED FIELD EXPERIENCE (1-6)

Internship arranged at an approved college school, hospital, or clinic. Regularly scheduled individual and group meetings with psychology department faculty for consultation regarding field experiences. Prerequisite: consent of instructor.

PSY 571 PRACTICUM (1-4)

Training and applied skill development.

PSY 575 RESEARCH SEMINAR (1-4)

Exploration of depth psychological and qualitative research methods. Students design an individual research study.

PSY 576 SEMINAR IN DEPTH PSYCHOLOGY (1-5)

Selected topics in the field of depth psychology. Limited to Depth Psychology students only.

PSY 578 PROJECT CONTINUATION (1-3)

Designed for students working on their thesis or master's project but who have otherwise completed all graduate coursework toward their degree. This course cannot be applied toward the minimum number of units needed for completion of the master's degree. Prerequisite: permission of the graduate coordinator. Cr/NC only.

PSY 580 SEMINAR IN TEACHING PSYCHOLOGY (1-4)

Discussion of theory, methods, and materials of teaching psychology. Customary emphasis is on undergraduate college instruction, but may vary according to the needs and interests of participants. Prerequisite: consent of instructor.

PSY 581 INTERNSHIP (1-6)**PSY 582 TEACHING COLLEGE PSYCHOLOGY (1-8)**

Practical experience of supervised teaching in a college psychology classroom. Prerequisite: consent of instructor.

PSY 583 GRADUATE RESEARCH ASSISTANT (1-4)

Students learn advanced research methods and practical research skills under the supervision of a faculty mentor. Prerequisite: consent of instructor.

PSY 584 GRADUATE TEACHING ASSISTANT (1-4)

Students learn teaching skills by serving as teaching assistants in undergraduate classes under the supervision of the classroom instructor. Prerequisites: graduate standing, consent of instructor. Cr/NC only.

PSY 595 SPECIAL STUDIES (1-4)

Students formulate plans for a project and present them to a faculty member for sponsorship. Prerequisite: graduate standing and consent of instructor. Cr/NC only.

PSY 597 CULMINATING PAPER TUTORIAL (1-4)

Provides guidance and feedback in the process of writing a publishable article in the student's field of expertise. Required for M.A. students.

PSY 599 MASTER'S THESIS (1-3)

A Master's Thesis or investigative project under the guidance of the thesis chair. Prerequisite: advancement to Candidacy.

Science (SCI)

SCI 150 INTRODUCTION TO CAREERS IN HEALTH PROFESSIONS (1)

Lecture, 1 hour. An introduction to careers and current issues in the health professions. The professions examined generally require a bachelor's degree before being accepted into a graduate-level health professions program such as medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, pharmacy, physician assistant, podiatry, chiropractic medicine, genetic counseling, hospital administration, public health, clinical laboratory scientist, nursing, physical or occupational therapy, etc. Cr/NC only.

SCI 308 KNOWLEDGE AND VALUES IN SCIENCE (3)

Sociology (SOC)

SOCI 201 INTRODUCTION TO SOCIOLOGY (3)

A general overview of the concepts, theories, research methods, and findings of sociology. The purpose is to train students to view the world through a sociological perspective. Satisfies GE Level D1 (Individual and Society).

SOCI 263 SOCIOLOGY OF RACE AND ETHNICITY (4)

This course examines race and ethnic relations in the US from a theoretical, historical, and comparative perspective. Explores the emergence of racial and ethnic minorities through such historical processes as colonialism, slavery, and immigration. Studies the current relations among racial and ethnic groups in the US. Satisfies GE Area D1 (Individual and Society), Ethnic Studies.

SOCI 300 SOCIOLOGICAL RESEARCH METHODS (4)

Consideration of the ways in which sociological questions are formulated and answered. Examination of and practice in conceptualization, theory construction, deductive and inductive reasoning, and other elements of sociological analysis, with an emphasis upon sociological research methods. Required for majors.

SOCI 301 STATISTICS FOR SOCIOLOGISTS (4)

Introduction to descriptive and inferential statistics for the social sciences. Emphasis on the integration of statistical analysis with sociological approaches to theory, research design, data collection, and presentation of quantitative research. Introduction to statistical analysis software in lab setting. Recommended for majors. Grade only.

SOCI 306 CAREERS IN SOCIOLOGY (4)

Explores and investigates careers related to sociology from a sociological perspective, particularly careers undergraduate students can enter. Careers explored across four areas: private/for-profit sector, nonprofit/foundations, public sector (city, county, state, and federal government), and academia (including graduate school). Professional skills and professional portfolio also developed.

SOCI 312 SOCIOLOGY OF GENDER (4)

Considers gender as a social construction and a product of social life. Analyzes how gender inequalities shape social structures, institutions, and interaction for both women and men. Challenges biological explanations for gender differences and inequalities. Focuses on analysis of gendered experiences as they relate to race/ethnicity, class, and sexualities.

SOCI 314 DEVIANT BEHAVIOR (4)

The social causes and consequences of insanity, delinquency, criminality, addiction, social unconventionality and other "deviant" behavior. Examines the conversion and commitment to deviant world views, and the social processes involved in the transformation to a deviant identity. Cross-listed as CCJS 441.

SOCI 315 SOCIALIZATION (4)

Analysis of the social processes through which human beings are inducted into social groups, in both childhood and adulthood. Particular attention is given to the socializing effects of schools, work, family, and friends.

SOCI 317 EMOTIONS AND ADULT LIFE (4)

Emphasizes the social context and social development of emotional responses throughout adulthood. Analyzes the reciprocal relations between social definitions and subjective feelings in connection with life events. Addresses both basic emotions such as fear, anger, pleasure, and excitement, and the more complex emotions such as love, jealousy, grief, sympathy, pride, shame, and despair. Cross-listed as GERN 317. Satisfies GE Area E (Integrated Person).

SOCI 319 AGING AND SOCIETY (4)

Examination of aging throughout adulthood. Analysis of theories of aging, their foundations in social science theory, and their policy implications. Exploration of the meanings and consequences of increasing longevity for society and the individual, with emphasis on the social psychological implications for women, minorities, and those who are poor. Cross-listed as GERN 319. Satisfies GE Area D1 (Individual and Society).

SOCI 326 SOCIAL PSYCHOLOGY (4)

Introduces relationships between self and society, including the formation and change of attitudes and values, interaction and interpersonal dynamics, and the cultural influences on them. Topics include symbolic interactionism; personal and social identities; motivation; prejudice; and the consequences of ethnicity, class, and gender. Satisfies GE Area D1 (Individual and Society).

SOCI 330 SOCIOLOGY OF MEDIA (4)

This course will conduct an analysis of structural censorship in the United States and the importance of a free press for the maintenance of democratic institutions in society. Students will become familiar with independent/alternative news sources and prepare summaries of news stories for public release.

SOCI 332 DEATH AND AMERICAN CULTURE (4)

Examination of the relation of cultural values to practices, attitudes, and views about death. Application of sociological and social psychological theories to topics on death and dying, such as death conceptions, terminal care, suicide, war, and grief. Emphasis on the social psychology of dying, caregiving, grieving, and being suicidal. Cross-listed as GERN 332.

SOCI 335 AMERICAN (U.S.) SOCIETY (4)

Study of the major values, institutions, and social organizations in the United States. The social sources of change and stability in U.S. society.

SOCI 336 INVESTIGATIVE SOCIOLOGY (4)

This is a service-learning course emphasizing the development of sociological research for popular press publication. Students will learn interviewing techniques, review sources of public information, and use of the freedom of information laws. Students will write and investigate social justice news stories using sociological research methods, and prepare a report for popular press publication.

SOCI 340 DRUGS AND SOCIETY (4)

Analyzes drug use, misuse, and abuse in society using sociological theories. Explores drug policies and control of drug use, current sociological drug research, and how the media shapes drug perceptions. Highlights various legal and illegal drugs and their societal consequences. Cross-listed as CCJS 350.

SOCI 345 SOCIOLOGY OF FAMILIES (4)

Analyzes family as a social institution. Examines the interconnections between families and other institutions, with a focus on family change. Considers how families are affected by structures of race/ethnicity, class, gender, and sexuality. Examines and challenges ideologies about families.

SOCI 347 AMERICAN CLASS STRUCTURE (4)

An overview of stratification in the United States. Analysis of the effects of this system on those who participate in it, through the study of theoretical, ethnographic, and community studies. Analysis of how class affects power, prestige opportunity, culture, and consciousness, as well as the interaction of ethnicity, gender, and class.

SOCI 350 CITY AND COMMUNITY LIFE (4)

Examination of the social psychology of urban and community life. Particular attention will be paid to the analysis of the culture of public life, place and place attachment, patterns of interaction in urban and neighborhood settings, and the sociological debate surrounding loss of community.

SOCI 360 SOCIOLOGY OF SEXUALITIES (4)

An overview of sexuality across institutions of society. Uses theoretical, conceptual, and empirical tools to analyze sexuality as a social fact. Explores the social construction of sexuality and how sexuality is socially created organized and constrained.

SOCI 365 HUMAN SERVICES ADMINISTRATION (4)

Preparation for sociological practice in human service agencies, both public and private nonprofit. Includes training in such skills as organization planning, grant writing, volunteer management, report writing, communication consulting, and group dynamics. Discusses the ethics and professional responsibility of sociologists.

SOCI 366 JUVENILE JUSTICE (4)

An exploration of the nature and extent of juvenile delinquency, with emphasis on serious or violent crime. The major theories of delinquency causation will be reviewed. The course will be devoted to the juvenile justice system and how it processes youths accused of crime. The nature and function of all major segments of the juvenile justice system will be discussed, including law enforcement, juvenile court, and corrections. The legal rights of juveniles will also be reviewed. Finally, the current policy issues in juvenile justice will be explored. Cross-listed as CCJS 497.

SOCI 375 SOCIOLOGICAL THEORY (4)

A critical examination of the writings of major classical and contemporary sociological theorists, including Marx, Weber, and Durkheim. This course will involve students in critical analysis of central sociological theories and offer them tools for understanding the development of sociological theory and its unique role in sociology. Satisfies upper-division GE Area D1 (Individual and Society). Required for majors.

SOCI 377 CONTEMPORARY SOCIOLOGICAL THEORY (4)

Emphasis on contemporary trends in theory, including topics such as culture, social identity, modernity, and post-modernity, and the social construction of knowledge and reality. Includes critical assessment of problems, methods, and theories characteristic of sociological inquiry in the 20th and 21st centuries. Prerequisite: SOCI 375 recommended but not required.

SOCI 380 POLITICAL SOCIOLOGY (4)

An analysis of the relation between political processes and ideologies and the larger society. Emphasis on the social consequences of power arrangements, political economy, and political structures. Comparisons between societies will be made.

SOCI 381 POPULATION AND SOCIETY (4)

Variables such as gender, race, ethnicity, age social development, politics, and environment are explored in relation to population change. The uses of population studies for consumer marketing, political campaigns, jury selection, and social planning are addressed, with an emphasis on California and Sonoma County concerns.

SOCI 382 SOCIAL MOVEMENTS AND COLLECTIVE BEHAVIOR (4)

Social movements are a significant source of social change in modern societies. This course analyses the structure and dynamics of social movements, with attention to the roles of organizations, resources, leadership, recruitment, commitment, values, ideology, political culture, and countermovements. Case studies will emphasize the civil rights, women's rights, and environmental movements in the United States.

SOCI 383 SOCIAL CHANGE (4)

Theories and methods for analyzing social change past, present, and future, such as: the relationship of the plow, steam engine, and computer to the rise of the agricultural, industrial, and information ages; and the development, dissemination, and impact of such major technologies as the printing press, the automobile, VCRs, and computers.

SOCI 384 SOCIOLOGY OF CONSUMPTION (4)

This course explores how goods, commodities, and market logic have saturated all forms of contemporary social life. Analysis of the theoretical ideas and historical factors that shape and influence modern consumerism are also considered. Explores how the dynamics of globalization and issues of identity politics influence consumer consumption.

SOCI 385 SOCIOLOGY OF CULTURE (4)

Examines the role culture plays in consensus formation, in domination, in resistance, and as a social force creating meaning in our lives. Culture refers to shared beliefs, values and norms, personal and political identities, ideologies, and the things we consume daily.

SOCI 414 METHODS SEMINAR: SOCIAL INTERACTION (4)

Examination of everyday interaction in natural settings. Emphasis will be placed on ethnographic approaches to the understanding of social encounters, situations, identities, and human relationships. Particular attention will be given to the work of Erving Goffman.

SOCI 417 SOCIOLOGY OF MENTAL ILLNESS (4)

Identifies the social sources of behavior defined as mental illness. Compares and contrasts psychological, biochemical, and sociological theories of insanity. Analyzes psychiatry and other forms of therapy, mental hospitals, the role of the mental patient, and mental health policy.

SOCI 418 METHODS SEMINAR: SOCIAL DEVELOPMENT OF THE SELF (4)

Examination of the social sources of self-concept, personal identity, and individual world views. Special attention will be given to the theories of Mead, Cooley, James, and Schutz, as well as to research techniques for the study of social identity, its development and change.

SOCI 425 METHODS SEMINAR: URBAN SOCIOLOGY (4)

Examines the social consequences of the transition from rural to urban forms of social organization. Special attention directed to the social structural, cultural, and social psychological characteristics of urban life.

SOCI 431 SOCIOLOGY OF RELIGION (4)

Study of world religions (Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism), tribal beliefs, and American sects and denominations. Theories of religious development, values, change, and effects on society. Satisfies GE Area C2 (Literature, Philosophies, Values).

SOCI 434 CINEMA AND SOCIETY (4)

An examination of film as a window to the social world and of sociology as a tool to understand it. The course uses films as data that can be analyzed to learn about such sociological topics as gender, crime, collective behavior, organizations, and the family. In addition, sociology is used to examine the structure and functions of film in contemporary society.

SOCI 435 MEDIA CENSORSHIP (4)

Seminar provides an opportunity to gain new insights into social problems through an intensive analysis of the role and impact of mass media in contemporary society. Students will analyze the levels of coverage of important news stories in the United States.

SOCI 440 SOCIOLOGY OF REPRODUCTION (4)

An exploration of sociological perspectives on human reproduction. Topics include reproduction and gender identity, the social implications of reproductive technologies, historical and contemporary perspectives on normal pregnancy and childbirth, the cultural context for breastfeeding, and the politics of reproductive rights and choices in the United States. Cross-listed as WGS 440.

SOCI 441 METHODS SEMINAR: U.S. BY THE NUMBERS (4)

An empirical examination of individuals and institutions in U.S. society, with a focus on quantitative data. Teaches students about existing data sources, such as the U.S. Census and the General Social Survey, and how to analyze them. Provides preparation for work in policy analysis, organizational consulting, survey or market research, and other social science careers.

SOCI 443 METHODS SEMINAR: WOMEN AND SOCIAL POLICY (4)

Explores the effects of social politics and their implementation on women's lives. Analyzes the ideologies shaping these policies especially how gender intersects with race/ethnicity, class, sexuality, age, and religion to affect policy outcomes. Particular attention will be paid to conducting/analyzing focus groups.

SOCI 445 SOCIOLOGY OF CHILDHOOD AND ADOLESCENCE (4)

Examines childhood and adolescence in various historical and social contexts. Topics may include gender, race, and class inequalities in childhood; the nature of preadolescence and adolescence as social problems; the changing relationship between childhood and families, schools, and economy; the prolongation of adolescence; and the significance of peer groups.

SOCI 449 SOCIOLOGY OF POWER (4)

An analysis of the origin, development, dynamics, and application of power in human interaction, social organizations, and institutions. Problems of ensuring a balance of power and fairness in the exchange of needed services, benefits, and rewards will be emphasized.

SOCI 450 PUNISHMENTS AND CORRECTIONS (4)

A consideration of the problems created by pressures to punish and control criminals, the politics of control strategies. The use and misuse of probation and parole, the concept of correction, and alternatives to incarceration. Cross-listed as CCJS 450.

SOCI 451 SOCIOLOGY OF EDUCATION (4)

A survey of issues concerning the structure of education in contemporary society, such as the social organization of the classroom, grading practices, political influences on schools, the contribution of education to the maintenance of capitalist society, teacher unionization, and student rights.

SOCI 452 METHODS SEMINAR: HEALTH CARE AND ILLNESS (4)

A dual focus on the social organization of health care and the social psychology of illness. Analyses of the structure of care, patient-practitioner relationships, and treatment ideologies. Emphasis on the patient's experience of illness, intimate relationships, and self-images.

SOCI 461 SOCIAL WORK AND SOCIAL WELFARE (4)

The history of social welfare and social services in modern society. Comparison of government social services with nonprofit or private social services. Overview of major social service issues such as mental health, senior services, and aid to families. Recommended for anyone considering social work, counseling, or human service administration.

SOCI 463 METHODS SEMINAR: BUREAUCRACIES AND INSTITUTIONS (4)

Political, economic, social, and psychological analyses of administrative structures. The role of formal and informal organization, ideology in bureaucracy, decision making, morale, and conflict.

SOCI 470 METHODS SEMINAR: CULTURE AND IDENTITY (4)

Examines culture as central to processes of meaning-making and identity. Explores identity politics as a form of resistance and domination. Focuses on the practice and analysis of ethnographic observation and in-depth interviewing.

SOCI 480 METHODS SEMINAR: SOCIOLOGY OF WORK (4)

A theoretical and empirical analysis of work in American society, examining the types of jobs open to women and men today, the rewards and dissatisfactions of these jobs, and how work has changed historically or may evolve in the future.

SOCI 482 SOCIOLOGY OF ENVIRONMENT (4)

This service-learning course focuses on relations among major social institutions and the environment, and between national and global social inequalities and environmental degradation are examined. Differences in class, race, and gender mean that some people are disproportionately burdened by consequences of environmental degradation. Socio-environmental perspectives and practical alternatives to our acknowledged ecological crises are explored, including environmental social justice movements, critical social analysis, and alternative socio-economic approaches to consumption and employment that foster ecologically sustainable societies.

SOCI 485 ORGANIZATIONS AND EVERYDAY LIFE (4)

Introduces key themes and concepts in the sociological study of organizations. Emphasis on applying theories and perspectives to organizational settings and circumstances likely to be encountered in everyday social life.

SOCI 488 SELECTED TOPICS IN SERVICE LEARNING (4)

Subject will vary by semester, but course has a required service learning component and concentrates on topics related to aspects of community based research and/or action research. May be repeated for credit with different topics.

SOCI 490 TEACHING ASSISTANT IN SOCIOLOGY (1-4)

Open only to advanced students. Intended to give students experience in assisting the instructor in a sociology course by doing research and tutoring students in the class. Cr/NC only. May be repeated for credit for up to 8 units, but only 4 units total of SOCI 490, 493, and 495 may be used toward the major or minor. Prerequisite: consent of instructor.

SOCI 493 RESEARCH ASSISTANT IN SOCIOLOGY (1-4)

Open only to advanced students. Gives students experience in assisting faculty with data collection, library research, and/or data analysis linked to sociological research and writing. Grade only. May be repeated for credit for up to 8 units, but only 4 units total of SOCI 490, 493, and 495 may be used toward the major or minor. Prerequisite: consent of instructor.

SOCI 495 SPECIAL STUDIES (1-4)

A supervised study of a particular research question or area of interest selected by the student in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations, and a term paper will be submitted. Grade only. May be repeated for credit up to 8 units, but only 4 units total of SOCI 490, 493, and 495 may be used toward the major or minor.

SOCI 496 INTERNSHIP PRACTICUM (1)

This is a concurrent course for students receiving sociology internship credit. Students will learn to view the internship experience through a sociological lens and as a means to explore workplace issues and career options. Concurrent enrollment with SOCI 499 is required when SOCI 499 is taken for the first time. May not be repeated for credit.

SOCI 497 SPECIAL TOPICS (1-4)

Exploration of basic social problems. Resource persons from other disciplines may participate. Themes and topics will vary. May be repeated for credit.

SOCI 498 SENIOR SEMINAR (4)

Capstone course for the major that requires advanced sociological research. Several different topics are offered each semester. Check department for current offerings. Required for all majors. Prerequisite: Open only to Sociology majors with senior standing who have completed SOCI 300, SOCI 375, and at least 16 additional units of sociology.

SOCI 499 INTERNSHIP (1-4)

For advanced undergraduates in approved internships in organizational settings. Facilitates application of sociological insights to internship site, while also encouraging contribution to organization's mission. Concurrent enrollment in SOCI 496 required when SOCI 499 taken for first time. May be repeated for credit for up to 8 units, but only 4 units may be used toward the major or minor. Prerequisite: consent of instructor. Cr/NC only.

SOCI 595 SPECIAL STUDIES (1-4)

Advanced research and writing. Students work under close supervision of faculty members. Subject matter can be variable. May be repeated for credit. Prerequisites: graduate status, consent of instructor, and completed special studies form.

Social Sciences (SSCI)

SSCI 299 SOPHOMORE SEMINAR: HOW TO THINK LIKE A SOCIAL SCIENTIST (1)

Sophomores and Social Sciences faculty explore: What questions do social scientists ask? What evidence and methods do they use? How does theory shape social science research? Prepares majors for upper-division coursework, prospective majors to explore the social sciences, and all students to be social-sciences savvy citizens of the world.

SSCI 300 INTRODUCTION TO PORTFOLIO DEVELOPMENT AND SPECIAL PROJECT (1)

Introduces the student to both the Liberal Studies Program and to the subject matter preparation program through a broad based, interdisciplinary approach that facilitates the student's need to understand the underlying relationship among all the courses in the program of study.

SSCI 400 PORTFOLIO EVALUATION (3)

Contents of each portfolio will reflect the courses students have taken to complete the program, and will include organized examples of their achievement in each of the core courses in history, political science, economics, and geography, and in the courses they have chosen in the breadth/perspectives part of the program.

SSCI 444 PEER FACILITATOR (2)

Provides students experience in assisting an instructor in SSCI 299 by attending lecture, doing course-related research, working with small groups of students, and assisting the instructor(s) with course administrative tasks. Prerequisite: upper-division or graduate standing and consent of the instructor. May be repeated once for credit. Cr/NC only

SSCI 495 SPECIAL STUDIES (1-4)

A supervised study of an area of interest selected and student will be in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations, and a project/paper and/or portfolio will be submitted.

SSCI 499 INTERNSHIP (1-3)

Prerequisite: Consent of Instructor.

Spanish (SPAN)

SPAN 101 BASIC SPANISH, FIRST SEMESTER (4)

Spanish for beginners. Elementary oral expression and fundamentals of grammar; cultural readings and beginning practice in composition. Must be taken concurrently with SPAN 101L. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 101L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) of weekly practice in the language laboratory. Cr/NC only. Must be taken concurrently with SPAN 101.

SPAN 102 BASIC SPANISH, SECOND SEMESTER (4)

Spanish for beginners, second level. Elementary oral expression and fundamentals of grammar; cultural readings and practice in composition. Must be taken concurrently with SPAN 102L. Prerequisite: SPAN 101 or equivalent. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 102L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) of weekly practice in the language laboratory. Cr/NC only. Must be taken concurrently with SPAN 102.

SPAN 150 ELEMENTARY CONVERSATION (2)

Directed conversation in Spanish for elementary-level students. Includes individual and class assignments in laboratory. Admission by consent of instructor.

SPAN 201 INTERMEDIATE SPANISH, 1ST SEMESTER (4)

Review of fundamentals and a study of complex structural patterns. Reading of authentic cultural materials used in Spain and Latin America. Weekly compositions. Must be taken concurrently with SPAN 201L. Prerequisite: SPAN 102 or equivalent. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 201L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) of weekly practice in the language laboratory. CR/NC only. Must be taken concurrently with SPAN 201.

SPAN 202 INTERMEDIATE SPANISH, 2ND SEMESTER (4)

Communicative grammar patterns in Spanish. Reading of current authentic cultural materials and weekly practice in composition. Must be taken concurrently with SPAN 202L. Prerequisite: SPAN 201 or equivalent. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 202L LANGUAGE LABORATORY (1)

A minimum of two academic hours (100 minutes) of weekly practice in the language laboratory. CR/NC only. Must be taken concurrently with SPAN 202.

SPAN 250 INTERMEDIATE CONVERSATION (2)

Practice in essential communicative fluency in Spanish. Prerequisite: SPAN 102 or equivalent.

SPAN 300 ADVANCED SPANISH LANGUAGE (4)

Activities in written and spoken Spanish designed to increase students' proficiency to the advanced level. Course will highlight selected points of grammar structure and form in the context of meaningful engagement with the language. Offered each semester. Prerequisite: Spanish 202. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 301 ADVANCED COMPOSITION AND CONVERSATION (4)

Compositions to achieve a mastery of the written language. Introduction to the preparation of critical essays and studies. Weekly compositions. Prerequisite: SPAN 300. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 304 INTRODUCTION TO SPANISH LINGUISTICS (4)

An introduction to the linguistics structure of Spanish. Overview of core components such as phonetics/phonology, morphology/syntax, and semantics/pragmatics.

SPAN 305 INTRODUCTION TO LITERATURE (4)

A study of short forms of literature with the objective of increasing vocabulary, reading for greater understanding, and content analysis. Introduction to concepts and principles of literary analysis (structure, character development, social context, point-of-view, discourse). Offered each Fall semester. Prerequisite: SPAN 202. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 306 CULTURES OF SPAIN (4)

A study of the development of the cultures and origins of Spain, and the formation of identities in its history, literature, film, and art. A survey course including lectures, readings, discussion, and writing. Offered each Fall semester. Prerequisite: SPAN 300. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 307 CULTURES OF LATIN AMERICA (4)

A study of the development of the cultures and origins of Latin America, and the formation of identities in its history, literature, film, and art. A survey course including lectures, readings, discussion, and writing. Offered each Spring semester. Prerequisite: SPAN 300. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 395 COMMUNITY INVOLVEMENT PROGRAM (CIP) (1-4)

CIP involves students in basic community problems, performing such tasks as tutoring, coaching, and reading for the blind. Students receive 1-4 units, depending on the specific tasks performed. A total of 6 units of CIP credit may be applied toward a degree. May be repeated once for credit.

SPAN 400 SPECIAL TOPICS IN LINGUISTICS (4)

Topics in Spanish linguistics, which may include sociolinguistics, discourse analysis, historical linguistics, and applied linguistics. Prerequisite: SPAN 304, or permission of instructor. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). May be repeated for credit.

SPAN 401 PENINSULAR LITERATURE (4)

A detailed study of representative authors, genres, periods, or regions. Requires discussion in class and a term paper. Offered each Fall semester. Prerequisites: all 300-level classes or permission of instructor. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). May be repeated for credit.

SPAN 402 LATIN AMERICAN LITERATURE (4)

A detailed study of representative authors, genres, periods, or regions. Requires discussion in class and a term paper. Offered each Fall semester. Prerequisites: all 300-level classes or permission of instructor. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). May be repeated for credit.

SPAN 410 SPANISH TRANSLATION, THEORY, AND PRACTICE (4)

Introduction to Translation Theory; service-learning translation project. Survey of principal translation resources, critical evaluation of representative translations, and examination of translation techniques. Collaboration on a translation project with authentic texts provided by agreement with public service agencies representing a wide range of fields. Offered every other Spring semester. Prerequisites: all 300-level classes or permission of instructor. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages).

SPAN 427 SPANISH TEACHING METHODOLOGIES (3)

Practical application of linguistic principles to the teaching of Spanish. Topics include discussion and practice of methods and materials for teaching Spanish, technological resources for the Spanish teacher and learner, and techniques for learner testing and evaluation. Prerequisite: SPAN 304 or consent of instructor.

SPAN 428 SPANISH CINEMA (4)

A study of Spanish language and culture through cinema. Prerequisites: junior-level standing or higher and SPAN 306, or consent of the instructor.

SPAN 490 SEMINAR IN LINGUISTICS (4)

Capstone seminar focusing on a representative theme in the field of linguistics. Requires completion and presentation of a final project (extensive portfolio or research paper), presented in a public setting or a scheduled class presentation, and serving as an exit assessment for graduation. Offered each Fall semester. Prerequisites: completion of all 300-level classes and one class at the 400-level. May be repeated for credit.

SPAN 491 SEMINAR IN LITERATURE (4)

Capstone seminar focusing on a representative theme in the field of literature. Requires student discussion and participation. Requires completion and presentation of a final project (extensive portfolio or research paper), presented in a public setting or a scheduled class presentation, and serving as an exit assessment for graduation. Offered each Spring semester. Prerequisites: completion of all 300-level classes and one class at the 400-level. Satisfies GE Area C3 (Comparative Perspectives and Foreign Languages). May be repeated for credit.

SPAN 495 SPECIAL STUDIES (1-2)

Directed, individual study on subjects of special interest. Students must prepare a proposal that is subject to the approval of the Spanish program. May be repeated once for credit.

SPAN 499 INTERNSHIP (1-4)

An internship in Spanish must combine: 1) service in a school or an agency in which Spanish is the operational language; 2) the selection of a topic for observation and study; 3) preparation of a bibliography and a reading list related to the internship activity; and 4) a term paper that reflects both the internship work experience and appropriate research. For proposals and placement, please see the program coordinator. May be repeated once for credit.

SPAN 595 SPECIAL STUDIES (1-4)

Directed, individual study on a particular topic. Course may require completion of an upper-division undergraduate course in Spanish or in a related discipline relevant to the student's program of study and will include additional readings, assignments, or projects as determined by the instructor. May be repeated once for credit when topics vary.

Theatre Arts and Dance (THAR)

THAR 101 MAKING THEATRE (3)

This course is an overview of the art and practice of making theatre. Designed for non-majors, the class examines the various elements involved in creating, developing, performing, and presenting a theatrical event. Through lecture, guest speakers, hands-on projects, video, and demonstrations, students gain an appreciation of the artistry of live theatre performance. Satisfies GE Area C1 (Applied Arts Combining Studio and Theory).

THAR 105 TECHNICAL THEATRE WORKSHOP (1)

A production class in which students receive credit for backstage and technical work in plays and dance concerts directed by faculty members and guest artists. May be repeated 6 times for credit.

THAR 110 DANCE FUNDAMENTALS (1)

An introduction to the fundamentals of modern dance designed to develop body awareness, movement skills, and aesthetic sensibilities. Includes improvisation, rhythm, motion and space exploration, and fundamentals of alignment. May be taken 5 times for credit.

THAR 115 DANCE STYLES (1)

Class may focus on a particular dance style, e.g., contact improvisation, jazz or tap, or on dances of a particular era, e.g., social dance from 1935 to 1960. The emphasis will be on American dance styles. Some styles of dancing require more generalized dance background than others. May be taken five times for credit. Prerequisite: consent of instructor.

THAR 116 ACTING STYLES: COMEDY IMPROVISATION (1)

Class will focus on a particular acting style, e.g. comedy, commedia del arte, farce, or improvisation. May be taken 4 times for credit.

THAR 120A ACTING FUNDAMENTALS (1)

Exploration of acting includes group and individual improvisation, physical and vocal exercises, and scene work, leading toward relaxation, physical action, and believability. Class work is designed to stimulate the imagination, build self-confidence and trust, and teach basic concepts for acting. May be taken 3 times for credit.

THAR 120B ACTING FUNDAMENTALS FOR ACTING CONCENTRATION MAJORS (2)

Exploration of acting includes group and individual improvisation, physical and vocal exercises, and scene work, leading toward relaxation, physical activity, and believability. Special emphasis is placed on scene study to teach basic acting concepts and stage presence. Open to non-majors and Theatre minors. Recommended for singers. First of a seven-course sequence for Acting Concentration majors. May be taken 3 times for credit.

THAR 143A STAGECRAFT (2)

Work in both theory and practice covers scenery construction techniques and drawings for the theatre. Use of tools and materials for scenery, costumes, props, and lighting will be fundamental to the course.

THAR 143B COSTUMES (2)

An introduction to the fundamentals of costume design and construction. Basic makeup for the stage will be examined and practiced. Prerequisite: THAR 143A or concurrent enrollment in THAR 143A.

THAR 144A SCENERY (2)

Design principles are applied to scenery and properties for the stage. Includes advanced drafting and rendering techniques used to realize and execute designs for production. Prerequisite: THAR 143A.

THAR 144B LIGHTING (2)

Basic lighting design, including the drawing of lighting plots, rigging techniques, and the operation of light boards and systems. Work in class affords direct experience in lighting of departmental productions. Prerequisite: THAR 143A.

THAR 145A VOICE FOR THE ACTOR (1)

Fundamentals of voice to free the natural voice and build towards its full use. Exercises in breathing, relaxation and movement, resonance, and power will help the actor discover a direct, spontaneous connection between breath and the impulse to speak; develop greater vocal range; and explore the intricacies, implications, layers, and joys of the spoken text. May be repeated for credit.

THAR 145B SPEECH FOR THE ACTOR (1)

Articulate speech and textual clarity are primary skills for the actor. This course will concentrate on the fundamentals of speech, anatomy of good sound production, standard pronunciation techniques through the International Phonetic Alphabet (IPA), and methods for clearly speaking, articulation, vocal muscularity, and phrasing. Prerequisite: THAR 145A. May be repeated once for credit.

THAR 160A HUMANITIES LEARNING COMMUNITY (4)

THAR 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

THAR 160B HUMANITIES LEARNING COMMUNITY (4)

THAR 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

THAR 161 BALLET I (1-2)

This course is designed to give the modern dancer a foundation for movement in classical tradition. The vocabulary of classical ballet is presented, with emphasis on alignment and placement, with relevance to more contemporary dance forms. Exercises will be given to strengthen and stretch the body. Special attention will be given to turns and fast footwork, again to support work in modern dance. This course may be repeated for credit.

THAR 199 STUDENT-INSTRUCTED COURSE (1-3)

May be repeated for credit.

THAR 200 SEEING THEATRE TODAY (4)

Experience great performances created by modern and contemporary theatre artists. Students are engaged as audiences through videotaped productions of renowned and important performers, directors, and choreographers, and Department of Theater Arts and Dance productions. Post-viewing, small-group discussions and online chats ask students to further engage by reflecting upon their shared experience. Students may opt to pay an activity fee, due at registration, to see a major production in the San Francisco Bay Area. Satisfies GE Area C3.

THAR 202 INTRODUCTION TO THE HISTORY OF DRAMA AND DANCE: ORIGINS TO 1800 (4)

First of a two part course, this course examines Western theatre traditions of ritual, drama, and dance at their origins, while dramatic tragedy and comedy are traced from the Golden Age of Greece through the Age of Enlightenment, roughly 1800. Added emphasis is placed on traditional Asian theatre forms. The course relates the theatre's past to how theatre is practiced today. Satisfies GE Area C1 (History of the Fine Arts).

THAR 203 INTRODUCTION TO THE HISTORY OF DRAMA AND DANCE: 1800 TO PRESENT (4)

Part two examines theatre, drama, and dance from the 19th century to the present, including the rise of Realism and other theatre and dance forms in the 20th century. Also considered are the American musical, and recent trends in diversity and multiculturalism, and the theatre's relationship to electronic media. Satisfies GE Area C1 (History of the Fine Arts).

THAR 210 CONTEMPORARY DANCE I (2)

Introduces specific contemporary techniques, with the emphasis on expanding movement range and facility. Alignment, strength, flexibility, and expressiveness are concerns of this course, which is intended for students with some experience in movement fundamentals. May be repeated twice for credit.

THAR 211 CONTEMPORARY DANCE II (2)

Continuation of THAR 210. Prerequisite: THAR 210. May be repeated twice for credit.

THAR 212 CONTEMPORARY DANCE LEVEL III (2)

Continuation of THAR 211. Prerequisite THAR 210. May be repeated twice for credit.

THAR 213 CONTEMPORARY DANCE LEVEL IV (2)

Continuation of THAR 212. Prerequisite: THAR 210. May be repeated twice for credit.

THAR 220A ACTING: TEXT AND SCENE STUDY (2)

Text analysis and scoring, rehearsals, and in-class presentation of scenes drawn from realistic dramatic literature. Work with emotional memory and characterization. Core course for Acting Concentration majors. May be taken two times for credit. Prerequisites: THAR 120B or equivalent and consent of instructor.

THAR 220B ACTING: CHARACTERIZATION (2)

The focus of this course is on aiding the actor in developing a process for creating believable dramatic characters, and bringing them truthfully to life in theatrical context. Study of life models support presentations of rehearsed scenes, which are then critiqued and developed in class. Scenes are normally drawn from realistic dramatic literature. This course is the third in the Acting Concentration sequence, and is a core course for acting majors. May be taken two times for credit. Prerequisites: THAR 120B and 220A or equivalent and consent of instructor.

THAR 230 STAGE MANAGEMENT (2)

The functions of the stage manager from audition to final performance are examined. Students are trained to organize rehearsals, record actors' movements, create prompt books, and to manage a performance. Students serve as stage managers for Performing Arts productions. Prerequisites: THAR 144A and B.

THAR 231 STAGE MANAGEMENT (1)

Stage Management Practicum. Students serve as stage managers for Performing Arts productions. Prerequisite: THAR 230 (or co-requisite) or consent of instructor.

THAR 240 CHOREOGRAPHY I (2)

Fundamentals of choreography through a problem-solving approach. Studies deal with aspects of time, space, dynamics and movement, with an emphasis on perceptions of meaning, that is, on "seeing" dancing as well as "making" dancing. May be taken two times for credit. Prerequisite: THAR 210 or consent of instructor.

THAR 244 SCENE PAINTING (2)

Study and practice of the basics of layout and painting of scenery, from rendering to full scale. Students assist in painting scenery used in Theatre and Dance productions. Includes instruction on handling toxic materials safely and on protecting the environment. Prerequisites: THAR 143A and B, 144A and B.

THAR 261 BALLET II (1-2)

Continuation of study of classical ballet. Traditional barre with allegro and adagio center work. Western classical dance skills emphasizing strength, alignment, flexibility, and musicality as a support for contemporary dance styles. May be taken 4 times for credit. Prerequisite: THAR 161 or consent of instructor.

THAR 275 CONTEMPORARY PLAYS AND PLAYWRIGHTS (3)

This class is an exciting and dynamic way to explore contemporary American play writing and its impact of on the current American theatre scene. It offers some of the finest writing that is occurring in this country today. Students will discover theatrical trends of our own era, and how these trends relate to contemporary politics. May be repeated for credit.

THAR 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Credit for participation in internships arranged through individual contact with a Theatre Arts or Dance faculty member.

THAR 300 THEATRE IN ACTION (3)

Required of all Theatre Arts majors. An investigation of technique, form, and content in drama and dance performances. Attendance at oral discussion and written critiques of 7-8 departmental, local, and/or Bay Area productions will develop articulate understanding of contemporary performance and its relation to theatre history, the arts, society, and culture. Activities fee payable at time of registration. Satisfies upper division GE Area C1 (History of the Fine Arts). For juniors and seniors only. (Also available as periodic trips to New York.) May be taken 2 times for credit.

THAR 301 DANCE ENSEMBLE (1-3)

A process-and-product class in which students receive credit for major participation in areas of dance, choreography, or technical work (costumes, light, decor) for presentation in public performance. Dances may be choreographed and directed by faculty, guest artists, or students. May be repeated 6 times for credit. Prerequisite: THAR 240 or consent of instructor.

THAR 302 DRAMA ENSEMBLE WORKSHOP (1-3)

A production class in which students receive credit for major participation as a partner in plays directed by faculty members and guest artists. Play titles, performance venues, styles, and production approaches vary from semester to semester. May be repeated 6 times for credit. By audition or consent of instructor.

THAR 303 TECHNICAL THEATRE WORKSHOP (1-3)

A production class in which students receive credit for design, backstage and technical work in plays directed by faculty members and guest artists. May be repeated 6 times for credit. By audition or consent of instructor.

THAR 304 PRODUCTION DRAMATURGY (1-3)

This course teaches practical, hands-on rehearsal dramaturgy as practiced in the professional theatre. Students are assigned to work closely on a production in the department season, and implement story analysis, in-depth research, and information design to help shape the production. Key elements of dramaturgical work include concept work with the director, research for cast, program notes, outreach talks, study guides, and other possible outcomes based on the production's needs. May be repeated for credit.

THAR 310A INTERMEDIATE DANCE BLOCK (2-5)

The Dance Block integrates the study of contemporary dance technique with the study of improvisation and anatomy for dancers. The safe and intelligent use of the body, the development of technical and improvisational skills, and artistry are emphasized. Prerequisites: THAR 210A and B, and consent of instructor. May be repeated for credit.

THAR 310B INTERMEDIATE DANCE BLOCK (2-5)

Continuation of THAR 310A. Prerequisites: THAR 310A and consent of instructor. May be repeated for credit.

THAR 313 LECTURE SERIES: (1-3)

THAR 320A INTERMEDIATE ACTING BLOCK (5)

First in a four-course sequence intended for Acting Concentration majors. In-depth actor training, integrating fundamental movement and vocal acting skills, text analysis, scene-study, and character work. The four-semester sequence includes 1) physical theatre, 2) verse drama, 3) 20th century non-realistic drama, and 4) exploration of contemporary theatre and an on-camera component. Prerequisites: THAR 120B, 220A, 220B, 145A, 145B, ENGL 339, and consent of instructor. May be repeated once for credit.

THAR 320B INTERMEDIATE ACTING BLOCK (5)

Continuation of THAR 320A. See description above. Prerequisites: THAR 320A or equivalent and consent of instructor. May be repeated once for credit.

THAR 321A INTERMEDIATE TECHNICAL BLOCK/FOUNDATIONS (2)

Technical concentration students participate in the foundations and script analysis portion of the 320A acting block. Prerequisites: THAR 143A and B, THAR 144A and B, THAR 244, and consent of instructor.

THAR 321B INTERMEDIATE TECHNICAL BLOCK (2)

Technical concentration students participate in the foundations and script analysis portion of the 320B acting block. Prerequisites: THAR 143A and B, THAR 144A and B, THAR 244, THAR 321A, and consent of instructor. May be repeated once for credit.

THAR 322A ADVANCED SCENE STUDY (2)

Text analysis and scoring, rehearsals, and in-class preparation of scenes drawn from realistic dramatic literature. Work with emotional memory and characterization. Core course for Acting Concentration majors. May be taken twice for credit. Prerequisites: THAR 120B or equivalent and consent of instructor.

THAR 322B ADVANCED SCENE STUDY (2)

Text analysis and scoring, rehearsals, and in-class preparation of scenes drawn from realistic dramatic literature. Work with emotional memory and characterization. Core course for Acting Concentration majors. May be taken twice for credit. Prerequisites: THAR 120B, THAR 220A or 322A or equivalent, and consent of instructor.

THAR 325 AUDITION FOR THE THEATRE (2)

This course is designed to cover the practical aspects of auditioning for the theatre, including 1) selecting appropriate material, e.g., classic/modern, dramatic/comic, musical/revue; 2) preparing audition pieces; 3) giving a winning audition; 4) evaluating performance for future guidance; and 5) resume and headshot needs. Prerequisite: THAR 120A or THAR 120B, or consent of instructor.

THAR 330 MUSICAL THEATRE PRODUCTION (1-3)

A course devoted to the study and performance of musical theatre literature. Designed for singers, actors, and others interested in musical theatre.

THAR 340 CHOREOGRAPHY II (2)

Further development of choreographic skills and artistry. Includes problems in group choreography and relationship to fundamentals of rhythm. Prerequisite: THAR 240.

THAR 343 ADVANCED SCENE PAINTING (2)

The basics of layout techniques and painting of full-scale scenery will be realized by the class with hands-on painting of the SSU productions for that semester. This course includes sections on being safe with toxic materials, and how to keep the environment green. Prerequisites: THAR 143A, 144A and B.

THAR 344A DESIGN FOR THE STAGE (3)

An advanced course examining design and rendering techniques for the stage. Students learn advanced drafting techniques. Class works as a team, with students assuming various design responsibilities for selected plays. Prerequisites: THAR 144A and B, and consent of instructor.

THAR 344B DESIGN FOR THE STAGE (3)

Continuation of THAR 344A. Prerequisites: THAR 144A and B, THAR 344A, and consent of instructor.

THAR 345 CHOREOGRAPHY III (2)

Further development of choreographic skills and artistry, including more extensive group choreography and relationship of movement to sound and music. Prerequisite: THAR 340.

THAR 350 DIRECTING WORKSHOP (2)

A workshop in directing scenes and compositions. Rehearsal and techniques, composition, blocking, characterization, rhythm, style, and script analysis are explored. Approaches of significant directors are examined. May be taken 3 times for credit. Prerequisites: all lower-division Theatre major/minor requirements, or consent of instructor.

THAR 355 ADVANCED DIRECTING WORKSHOP (2)

An advanced workshop in composition, technique, and directed scenes and one-act plays that are rehearsed, presented, and critiqued as a means of reaching a final public performance. The course builds upon basic directing concepts and terms necessary for communication with actors and designers, while utilizing skills of research, text analysis, and staging principles. Prerequisite: THAR 350 or consent of instructor.

THAR 370A EARLY PLAYS: EVOLUTION AND INNOVATION (3)

An examination of Western theatre from the Greeks to the Enlightenment. Plays are used as a basis for understanding how theatre reinvents itself to reflect social and historical currents. Emphasis on how dramatic literature and history can be interpreted and re-examined to resonate with today's theatre. The theatre artist is viewed as a voice for humanity as well as a force for social change. Prerequisite: THAR 202 or consent of instructor.

THAR 370B MODERN PLAYS: EVOLUTION AND INNOVATION (3)

Seminar on dramatic literature from the late 19th century to our own time. Continuation of THAR 370A. Prerequisite: THAR 203 or consent of instructor. May be taken out of sequence.

THAR 371A HISTORY OF DANCE A (3)

Survey of the history of Western theatrical dance from ritual roots to 19th century Romantic and Classical ballet. Prerequisite: THAR 202 or consent of instructor.

THAR 371B HISTORY OF DANCE B (3)

Survey of the history of theatrical dance in the 20th century, including global influences on the most recent dance forms. Prerequisite: THAR 371A or consent of instructor.

THAR 373 DANCES OF THE WORLD (4)

Examination of dance as cultural expression in diverse global dance forms. This course focuses on ways in which social, ritual, and theater dance styles create and reflect cultural identity, define tradition and embrace innovation, and intersect in a global world. Satisfies upper-division GE Area C3.

THAR 374 THEATRE OF THE WORLD (4)

This course is an exploration of theatre traditions from around the world. Theatre is examined as the expression of specific cultures. Students learn how theatre practice influences theatre-making in both Western and Eastern Cultures. This course is required for General Theatre Degree majors and also satisfies upper-division GE Area C3.

THAR 376 PLAYWRITING I (3)

An introduction to the art and craft of writing for the stage for writers of diverse levels of experience. Focuses in particular on the development of character, and explores the virtues of both imaginative freedom (the first draft) and structure (the rewrite). Includes in-class writing and performance improvisations, as well as study of plays by contemporary writers. Students create original short plays (ten-minute or one-act) and have selections of their work performed for an audience at the end of the term.

THAR 377 PLAYWRITING II (3)

Stage writing for more experienced playwrights. Students will experiment with lengthier forms and new methods for first drafts. Work is performed in an end-of-term festival. Prerequisite: THAR 376 or permission or instructor.

THAR 378 DRAMATURGY AND STORY ANALYSIS (3)

This course explores how theater artists use text analysis to shape real-world production and performance work, and in so doing model the discipline and professional of dramaturgy for future theater professionals, teachers, and literary critics. Using methods drawn from the ancient Greeks (Aristotle) to contemporary cinematic story theory, students learn to determine the fundamental elements of dramatic storytelling, otherwise known as the dramaturgical essence of the play. Students read theoretical texts and read plays as case studies, and practice their own analysis through formal papers.

THAR 379 RESEARCH PRACTICE FOR THEATRE AND DANCE (3)

This course teaches professional research methodology as a means to artistry in the creation of dance and theatre, with applications to performance, design, criticism, history, and dramaturgy. Research avenues include creative and biographical material on key artists, historical and cultural context, locating imagery (print, digital, multimedia), sound/music sourcing, and materials specific to unique production needs. The course addresses best practices in information competence and focuses on research as an art as much as a pragmatic skill. May be taken twice for credit.

THAR 380 RESEARCH (3)

Development of research skills. May be used in practical application to programs for theatre arts productions. Students are encouraged to investigate topics of personal interest. The final research project may consist of an exploration of a particular era or phenomenon, or may be groundwork for a major creative project. Prerequisites: THAR 202 or 203, THAR 300, and THAR 370; or by contract with an instructor, specifying course expectations, work to be completed, regular schedule of contract hours, and assessment criteria. May be taken 3 times for credit.

THAR 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

Please see appropriate concentration advisor.

THAR 400 THEATRE OF TODAY (1)

A career preparation course in topics vital to the emerging artist such as career preparation guidance, resume writing, graduate school application, professional internships, and community theatre options. Professional guest speakers augment the regular faculty.

THAR 401 SENIOR PROJECT ENSEMBLE WORKSHOP (3)

An upper-division Theatre Arts student may petition the Theatre Arts faculty for permission to do a Senior Project. Such a project is the culmination of the student's work, and may be an original work, a performance project, a research paper, a teaching project, or take some other form which represents and reflects the student's interests and accomplishments. The privilege of doing a Senior Project is awarded only to a student deemed exceptional by the department faculty. Students who participate in another student's Senior Project may enroll in Dance or Drama Ensemble to receive credit. Prerequisites: senior-level standing and consent of department faculty.

THAR 410A ADVANCED DANCE BLOCK (2-5)

A continuation of the work begun in 310A and B, with the focus on increasing technical and improvisational skill, and more refined perception of the structure and meaning of movement. Prerequisites: THAR 310A and 310B and consent of instructor. May be repeated for credit.

THAR 410B ADVANCED DANCE BLOCK (1-5)

A continuation of 410A. Prerequisites: THAR 410A and consent of instructor.

THAR 420A ADVANCED ACTING BLOCK (2-5)

Continuation of THAR 320A and B. See description above. Further development and integration of acting skills, including a wider scope of theatrical styles and scripts from the world's dramatic literature. Emphasis is placed on strengthening connections between performer and ensemble and between performer and director. Note: Acting Concentration students enroll for 5 units. Technical Theatre Concentration students enroll for 2 units. Prerequisites: THAR 320A and B or equivalent, and consent of instructor. THAR 320 and THAR 420 are taught concurrently. May be repeated once for credit.

THAR 420B ADVANCED ACTING BLOCK (2-5)

Continuation of THAR 420A. Prerequisites: THAR 320A, 320B, and 420A, or equivalent, and consent of instructor. May be repeated once for credit.

THAR 421A ADVANCED TECHNICAL BLOCK/FOUNDATIONS (2)

Technical concentration students participate in the foundations and script analysis portion of the 420A acting block. Prerequisites: THAR 143A and B, THAR 144A and B, THAR 244, THAR 321A, THAR 321B, and consent of instructor.

THAR 421B ADVANCED TECHNICAL BLOCK/FOUNDATIONS (2)

Technical concentration students participate in the foundations and script analysis portion of the 420B acting block. Prerequisites: THAR 143A and B, THAR 144A and B, THAR 244, THAR 321A, THAR 321B, THAR 421A, and consent of instructor.

THAR 430 SPECIAL TOPICS (1-3)

Special topics in theatre arts selected to introduce students to recent theory, research, and practice in the discipline. Consult Schedule of Classes for topic to be studied and current unit offering.

THAR 444 HISTORY OF ORNAMENT (2)

Form and function of props, furniture, and architectural structures produced by humankind through the ages. Examination of ways in which decorations, style, and uses of these objects have evolved under political, cultural, and socioeconomic influences. May include research and construction of properties for Performing Arts productions. Prerequisites: THAR 143A and 143B, THAR 144A and 144B.

THAR 460 DRAMA FOR CHILDREN (2)

Developing skills and resources for working with children, including creative drama, mime, storytelling, and scripted drama. Practical experience in working with children will be gained through master teacher observation and student teaching.

THAR 463 THEATRE MANAGEMENT (3)

The study of scheduling, promotion, ticketing, house and stage management, book- ing, budgeting, technical theatre in terms of budgeting, and marketing theatrical productions. Practical application is gained by participation in the evening perfor- mances of the Theatre and Dance productions.

THAR 470 DANCE FOR CHILDREN (2)

Developing resources and skills for working with children in creative movement. Class includes participation in rhythmic activities and movement exploration, with observation and student teaching of children's dance classes. May be taken 3 times for credit.

THAR 480 COORDINATED PROJECTS (1-3)

Involvement in on- and off-campus dance or drama projects with student direc- tors, actors, designers, and/or technicians, and under faculty supervision. May be repeated 6 times for Cr/NC only. Prerequisite: consent of faculty supervisor.

THAR 485 TEACHING ASSISTANT IN THEATRE ARTS (1-4)

Teaching assistantship in Theatre Arts. Open only to upper-division students with knowledge of theatre with special interest in teaching and pedagogy. Intended to give students classroom experience by assisting an instructor in a Theatre Arts and Dance department course, or under the supervision of a faculty member, experience in tutoring students. Prior arrangements with faculty required. Graded only.

THAR 490 THEATRE PRACTICUM (1-3)

The use and development of a theatre skill such as acting, dancing, design, lighting, or set or costume construction, in a commercial environment where the evalua- tion of the work is under professional rather than faculty supervision. Prerequisite: consent of faculty advisor.

THAR 495 SPECIAL STUDIES (1-4)

Individualized studies in topics beyond the scope of the regular curriculum. Contract with an instructor, specifying course expectations, work to be completed, regular schedule of contact hours, and assessment criteria. Prerequisite: consent of faculty advisor. May be repeated for credit.

THAR 499 INTERNSHIP: THEATRE MANAGEMENT (1-4)

The student will gain practical experience in various management areas of theatre. Individual internships may include public relations, publicity, programming, schedul- ing, box office management, funding, sales, and budgeting. The unit value will be determined by each internship. May be repeated for credit.

University Courses (UNIV)

UNIV 50 WRITING SKILLS (0)

This course focuses on developmental and learning skills in writing, including lan- guage mechanics, sentence patterns, paragraph patterns, spelling, and vocabulary and developmental skills in reading, in preparation for ENGL 99. UNIV 50 is taught by Learning Skills Services staff and features an intensive learning environment. Placement in this course is based on the score on the English Placement Test (EPT). Cr/NC only. Not applicable toward graduation.

UNIV 102 FIRST YEAR EXPERIENCE (1-3)

Designed to foster a supportive learning community, provide mentoring, and enhance academic skills, personal skills (self-awareness, responsibility, relation- ships with others), and knowledge about campus resources to facilitate successful transition from high school to college. Other aspects covered are choosing a major, career exploration, health and social issues (sexual assault/harassment, alcohol/ drug abuse), information competencies, code of conduct, and diversity/multicultur- alism. This course is strongly recommended for first-semester students.

UNIV 103A LEARNING STRATEGIES: MATH THINKING (1)

An academic success course that explores mathematical thinking, problem solving, and personal and cultural approaches to mathematics. Suitable for all students who have not yet passed a GE math course. This course can be retaken for credit up to two times.

UNIV 103B LEARNING STRATEGIES: STUDY SKILLS (1)

An academic success course that provides in-depth study skills information and practice, including effective time management, test taking, textbook reading, stress management, and memory techniques. This course can be retaken for credit up to two times. Cr/NC only.

UNIV 103C LEARNING STRATEGIES: WRITING (1)

An academic success course that reviews strategies, skills, and habits that lead to improved academic writing. This course can be retaken for credit up to two times.

UNIV 103D LEARNING STRATEGIES: ACADEMIC READING (1)

An academic success course that introduces strategies to aid comprehension and retention of academic reading skills required across the University disciplines. This course can be retaken for credit up to two times.

UNIV 103S LEARNING STRATEGIES: SUPPLEMENTAL INSTRUCTION (1)

Discipline-specific study skills taught in the context of a designated GE course. Consent of instructor required. May be taken three times. Cr/NC only. Co-requisite: enrollment in designated GE course.

UNIV 150A FRESHMAN YEAR EXPERIENCE: IDENTITY AND GLOBAL CHALLENGES (5)

Designed specifically for first-year students at Sonoma State University, provides an interdisciplinary examination of social, political, scientific, and personal aspects of identity (fall semester) and our global connections and responsibilities (spring semester). Through writing, research, and creative assignments, students develop analysis, research, and communication skills vital to success in college. To satisfy GE Areas A3 and C3, students must take UNIV 150B the following semester.

UNIV 150B FRESHMAN YEAR EXPERIENCE: IDENTITY AND GLOBAL CHALLENGES (4)

Designed specifically for first-year students at Sonoma State University, provides an interdisciplinary examination of social, political, scientific, and personal aspects of identity (fall semester) and our global connections and responsibilities (spring semester). Through writing, research, and creative assignments, students develop analysis, research, and communication skills vital to success in college. Satisfies GE Areas A3 and C3 when taken immediately after UNIV 150A.

UNIV 199 STUDENT-TO-STUDENT LECTURE SERIES (1)

May be repeated once for credit.

UNIV 237 CAREER-LIFE PLANNING (1-2)

Offers students an opportunity to clarify their interests, values, skills, and lifestyle preferences to provide a foundation for effective career planning. Students use assessment inventories, interactive exercises, and occupational research to expand their understanding of options and plan their education and career paths, and learn job search strategies. Most appropriate for sophomores, juniors, and seniors.

UNIV 238 FOUNDATIONS OF LEADERSHIP (3)

This course takes students through an exploration of leadership and students' roles and responsibilities as active citizens. It achieves this goal through an extensive examination of self, working with and understanding others, and ultimately, creating positive change in one's community. The course provides the critical elements of analytical and intellectual thought, and careful examination and reflection of core issues in the practice of leadership. These objectives will be achieved through open discussion, self-assessment, experimental exercises, and analytical observation of real-life leadership practice. Course satisfies GE Area E (The Integrated Person).

UNIV 239 ADVISING PEER MENTOR SEMINAR (1)**UNIV 292 LIBRARY AND INFORMATION RESEARCH (1-3)**

Designed to teach information research skills: how to assess the need for information, how to construct effective search strategies, how to retrieve information, and how to evaluate sources critically. Includes online research practice. Separate sections may focus on specific disciplines: social sciences, humanities, sciences, and business, and may be cross-listed when appropriate.

UNIV 295 COMMUNITY INVOLVEMENT PROGRAM (1-4)

CIP provides undeclared students the opportunity to explore career possibilities while providing much needed community service. Students may earn credit for volunteer service in a variety of organizational settings that may help them clarify their career goals and declare a major appropriate for them. Requirements are 30 hours of community service per unit, a minimum of 2 meetings with advisor or faculty sponsor, and a final paper. A maximum of 6 units of CIP may be used toward graduation. Cr/NC only.

UNIV 296 INSTRUCTOR INITIATED PROJECT (1-4)

This course is designed to provide students with the opportunity to participate in faculty-sponsored projects. It permits students to pursue an area of interest that they would like to develop in close consultation with a faculty member. May be repeated for credit. Prerequisite: Permission of instructor. Cr/NC only

UNIV 310 PORTFOLIO WORKSHOP (3)

A mentoring seminar for students re-entering higher education. This orientation course has as its primary goal the connecting of past experiences with present academic opportunities through an academic plan for graduation. Course activities include discussion of learning theory, completion of learning styles inventories, introduction to educational uses of information resources and technology, and the compiling of a portfolio, including an expanded resume, an intellectual autobiography, two learning essays, and an individual academic plan. On instructor recommendation, portfolios may be evaluated for degree credit for prior learning through the Faculty Evaluated Prior Learning Program. Prerequisites: completion of GE Areas A2 and A3.

UNIV 375 STUDY ABROAD (12)

Academic programs in institutions outside the country. Enrollment is by permission of the Office of International Programs. Cr/NC only.

Women's and Gender Studies (WGS)**WGS 255 INTRODUCTION TO QUEER STUDIES (3-4)**

This interdisciplinary course offers an introduction to the field of Queer Studies by analyzing the role of race, gender, sexuality, and nationalism in the social construction of modern gay, lesbian, bisexual, transgender, and queer (GLBTQ) identities. Students also learn of queer theoretical approaches to politics, culture, and society. Satisfies GE Area D1.

WGS 280 WOMEN'S BODIES: HEALTH AND IMAGE (4)

This course examines research and theory about the health and body image concerns of women across race, ethnicity, sexuality, and class throughout the life cycle. This includes health advocacy, gendered representations, women's health movements, the gender politics of medical research, and sexual and reproductive health. Satisfies GE Area E.

WGS 285 MEN AND MASCULINITY (4)

This course examines construction of masculinity across axes of race, sexuality, class, nation, and ability. Utilizing a multidisciplinary perspective, this course addresses various theories of masculinity and masculinity's impact on peoples lives in areas such as relationships, media representation, work, culture, development, and health. Satisfies GE Area E.

WGS 301 GENDER STUDIES LECTURE SERIES (1-4)

A weekly lecture series (or occasional workshops) offering presentations and discussions of current issues from feminist and/or queer perspectives. There is usually a semester-long focus on a particular topic. The lectures are open to the community. May be repeated for credit.

WGS 311 SPECIAL TOPICS IN WOMEN AND GENDER STUDIES (1-4)

A variable-topics seminar focusing upon intensive study of issues related to WGS in society. May be repeated for credit with different topic.

WGS 325 YOUTH: GENDER PERSPECTIVES (3-4)

This course examines youth, focusing on the complex interconnections of gender, race/ethnicity, social class, sexuality, and other factors in understanding the experiences and social conditions of youth in the U.S., as well as the methodological issues that arise in conducting research on youth. This course requires community service learning.

WGS 330 PSYCHOLOGY OF WOMEN (3-4)

An exploration of the psychology of women, with attention to issues of power and conflict, intimacy and dependence, special concerns in therapy for women, and the impact of race, class, ethnicity, and sexual preference on women's psychological development.

WGS 350 GENDER, SEXUALITY, AND FAMILY (3-4)

An exploration of changing ideals and practices of gender, sexuality and family life in the United States, drawing especially on recent feminist scholarship. Topics for reading and discussion will focus on both women and men. Fulfills upper-division GE Area E (The Integrated Person).

WGS 365 WOMEN'S HISTORY AND WOMEN'S ACTIVISM (3-4)

This course will take an activist-historical perspective on the history of American women. We will study historical figures, events, and movements central to the history of feminist activism for equality and social justice. The class will address the politics of writing women into history and documenting the diversity of women's activism. Cross-listed as HIST 345.

WGS 370 GENDER IN ASIAN AMERICA (3-4)

This interdisciplinary course examines gender, race, class, and sexuality in Asian America. We consider how Asian American women and men fit into debates about sexism and racism in the United States - historically and contemporarily. Topics include Asian American participation in women's/civil right movements as well as popular culture representations. Cross-listed as AMCS 370.

WGS 375 GENDER, RACE, AND CLASS (3)

An exploration of the intersection of gender, race, and class in the lives of U.S. women and men through a historical approach to the formations of social and political movements, the construction and policing of identity categories, and demands for equality and justice. Satisfies GE Area D1 (Individual and Society) Meets Ethnic Studies requirement.

WGS 380 GENDER AND SOCIAL MOVEMENTS (3)

Social movements organized around gender issues and identities are significant sources of social change in modern societies. This course analyzes the structure and dynamics of social movements based on gender, with attention to the roles of organizations, resources, leadership, recruitment, commitment, values, ideology, political culture, and countermovements. Case studies will emphasize the women's suffrage movement, the women's peace movement, the feminist movement that began in the 1960s as well as its offshoots and countermovements, the gay and lesbian rights movement, and recent men's movements.

WGS 385 GENDER AND GLOBALIZATION (3-4)

This class will use an interdisciplinary approach to explore how gender, race, class, sexuality, nation, and colonialism intersect locally and globally and to understand how gender shapes the lived realities of women world-wide. We will frame our analyses within an understanding of the processes of globalization and global communities.

WGS 390 GENDER AND WORK (4)

This course explores intersections of gender, race, class, immigration, and nation within the U.S. labor market. We examine situations facing workers across economic sectors ranging from professionals to service sector labor. Topics may include: juggling work and family, discrimination/harassment, welfare reform, globalization, and activism/resistance to workplace challenges. Prerequisite: WGS 255, 280, 285, 350, 375 or instructor consent.

WGS 395 COMMUNITY INVOLVEMENT PROGRAM (1-4)

The purpose of CIP is to encourage student involvement in the community. Units may be earned for work related to WGS. Cr/NC only. May be repeated for credit.

WGS 399 STUDENT-INSTRUCTED COURSE (1-4)

An introductory or advanced course designed by a senior or graduate student and taught under the supervision of faculty sponsor(s). Cr/NC only.

WGS 405 PSYCHOLOGY OF GENDER (4)

Explores gender through a social psychological perspective. Topics include gender socialization, the structural function of gender stereotypes, masculinity, and gender discrimination. Course originates in the Psychology Department and is cross-listed as PSY 405.

WGS 425 FEMINIST RESEARCH METHODS (3-4)

A feminist critique of traditional methods of constructing knowledge and research practices and a discussion of gender-inclusive research strategies. Students will be given instruction in library and electronic information retrieval. Prerequisite: WGS 280, WGS 285, WGS 350, or WGS 375.

WGS 440 SOCIOLOGY OF REPRODUCTION (4)

An exploration of sociological perspectives on human reproduction. Topics include reproduction and gender identity, the social implications of reproductive technologies, historical and contemporary perspectives on normal pregnancy and childbirth, the cultural context for breastfeeding, and the politics of reproductive rights and choices in the United States. Cross-listed as SOCI 440.

WGS 449 GENDER AND SEXUALITY IN LATIN AMERICA (4)

This course examines changing definitions, institutions, and behaviors related to gender, sexuality, and the family in Latin America from indigenous civilizations to contemporary societies. Topics include the transition from European colonies to nation-states, and the social, economic, and political changes in Latin America. Course cross-listed as HIST 449.

WGS 451 FEMINIST PERSPECTIVES IN LITERATURE (4)

Feminist Perspectives is an advanced course in reading, writing, and research that will engage feminist perspectives in literature. This course is interdisciplinary in approach and is conducted in a seminar format. May be repeatable once for credit. This course is a cross-list with ENGL 451.

WGS 455 QUEER THEORY, QUEER LIVES (4)

This interdisciplinary course offers advanced work in queer studies by looking at the production of theories about same-sex sexualities in history, culture, and politics. The course presents queer theory in conjunction with critical race theory, feminist theory, and post-colonial studies. Cross-listed as HIST 447.

WGS 475 CONTEMPORARY FEMINIST THEORY (4)

This course examines both historical and contemporary trends in feminist theory. Students examine how feminist theory might address the complex relationship between race, ethnicity, gender, sexuality, class, and nation as they relate to the production of knowledge the implementation of theory and practice, and social change/activism. Prerequisite: WGS 255, WGS 280, WGS 285, WGS 350, or WGS 375.

WGS 485 SENIOR SEMINAR (4)

This course provides WGS students an opportunity for advanced study on a special topic each semester (determined by instructor). The seminar format allows students an intensive experience and heightened responsibility for course content. The course should be taken during the student's senior year. Prerequisite: WGS 475.

WGS 492 SYLLABUS DESIGN (1)

Students work on an individual basis with a faculty member to develop reading materials, lecture and discussion topics, and assignments appropriate to the teaching of a specific student-taught course in women's and gender studies. Student-taught courses must be approved by the coordinator and students must follow established procedural guidelines for teaching in the women's and gender studies program. Most student teachers are required to take WGS 492 before teaching, and WGS 493 while teaching. May be repeated for credit.

WGS 493 TEACHING SUPERVISION (1)

Students acting as teaching assistants or student-teachers enroll in this to gain professional skills development with a faculty member.

WGS 495 SPECIAL STUDIES (1-4)

Upper-division students may elect to do an independent research or action project under the direction of a women's and gender studies faculty member. May be repeated for credit.

WGS 499 INTERNSHIP (1-4)

Supervised training and experience for advanced students in community agencies concerned with women's and men's issues and gender change. Student teaching of a student-taught university course is another form of internship. At present we offer credit (and not a grade) for student teaching and off-campus projects. Internships may be paid.

WGS 500 SEMINAR IN FEMINIST THEORY AND RESEARCH IN SOCIAL SCIENCES (3)

A survey of feminist critiques of social science theory and research in various disciplines (depending on student interest): anthropology, history, political science, psychology, and sociology. A survey of feminist attempts to reformulate and transform social science theory and methods, including debates and disagreements among feminist scholars. Requirements will include an individual research project and analysis. Prerequisite: at least one course in a social science and at least one course that focuses on women or gender (course may be at graduate or undergraduate level).