

2008-2010 GENERAL CATALOG

# WELCOME TO SONOMA STATE UNIVERSITY 

## www.sonoma.edu


#### Abstract

When planning your academic career at Sonoma State University this General Catalog will serve as one of your main reference tools. Another source of information is the website - www.sonoma.edu which should be consulted in conjunction with the catalog in case there have been any changes since publication of this book. You should also check with individual academic departments and administrative offices, either by phone or in person, to make sure that you have the most current information.


## ABOUT THIS CATALOG

## Changes in Regulations and Policies Published in the Catalog

Although every effort has been made to assure the accuracy of the information in this catalog, students and others should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the State Legislature or rules and policies adopted by the Board of Trustees of the California State University, by the chancellor or designee of the California State University, or by the president or designee of the campus. It is not possible in a publication of this size to include all the rules, policies, and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office.

Nothing in this catalog shall be construed as, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the chancellor of the California State University, or the president of the campus. The trustees, the chancellor, and the president are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or the California State University. The relationship of the student to the institution is one governed by statute, rules and policy adopted by the Legislature, the Trustees, the Chancellor, the president, and their duly authorized designees.

## Table of Contents

Academic Calendar ..... 6
Admissions ..... 8
Admission Procedures and Policies ..... 8
Undergraduate Admission Requirements ..... 10
Graduate and Postbaccalaureate Admission Requirements ..... 13
Information for International Students ..... 14
Other Applicants ..... 15
General Information About Admission and Evaluation of Academic Records ..... 17
Determination of Residence for Nonresident Tuition Purposes. ..... 18
Fees, Expenses, and Financial Assistance ..... 20
Schedule of Fees, 2007-08 ..... 20
Other Fees and Charges ..... 20
Refund of Fees Including Nonresident Tuition ..... 22
Customer Services Center ..... 22
Fees and Debts Owed to the Institution ..... 23
Financial Aid and Scholarship Programs ..... 24
Availability of Institutional and Financial Assistance Information. ..... 26
Housing Services ..... 28
University Degrees ..... 29
Degree Requirements ..... 31
Baccalaureate Candidates ..... 31
Awarding of Degrees ..... 32
General Education Program ..... 33
Graduate Degrees ..... 37
The Schools ..... 40
School of Arts and Humanities ..... 40
School of Business and Economics. ..... 40
School of Education. ..... 41
School of Extended Education ..... 42
School of Science and Technology ..... 43
School of Social Sciences ..... 44
Academic Programs/University Curricula ..... 46
American Multicultural Studies ..... 47
Anthropology ..... 51
Applied Arts. ..... 56
Art and Art History ..... 58
Astronomy ..... 66
Biology ..... 67
Business Administration ..... 73
California Cultural Studies ..... 82
Career Minors ..... 85
Chemistry ..... 87
Chicano and Latino Studies ..... 91
Communication Studies ..... 95
Computer Science ..... 97
Counseling ..... 99
Creative Writing ..... 102
Criminology and Criminal Justice Studies ..... 103
Economics ..... 105
Education ..... 108
Education: Curriculum Studies and Secondary Education (CSSE) ..... 113
Education: Educational Leadership and Special Education (ELSE) ..... 118
Education: Literacy Studies and Elementary Education (LSEE). ..... 126
Engineering Science ..... 136
English ..... 142
Environmental Studies and Planning ..... 147
Film Studies ..... 150
Geography ..... 152
Geology ..... 156
Gerontology ..... 159
Global Studies ..... 161
Health Professions Advisory Program ..... 165
History ..... 167
Human Development ..... 171
Hutchins School of Liberal Studies ..... 173
Interdisciplinary Studies ..... 179
Kinesiology ..... 181
Latin American Studies ..... 190
Liberal Studies Ukiah. ..... 191
Linguistics ..... 192
Mathematics ..... 194
Modern Languages and Literatures ..... 198
Music ..... 203
Native American Studies. ..... 212
Nursing ..... 213
Philosophy ..... 220
Physical Sciences for Elementary School Teachers ..... 222
Physics ..... 223
Political Science ..... 229
Psychology ..... 234
Social Science Subject Matter Preparation Program ..... 241
Sociology ..... 243
Statistics ..... 246
Theatre Arts and Dance ..... 250
Women's and Gender Studies ..... 256
Course Descriptions ..... 260
Academic Centers, Institutes, and Projects ..... 388
University Library ..... 395
Information Technology ..... 396
Student Services ..... 397
Student Affairs and Enrollment Management ..... 397
The Arts at Sonoma State University ..... 408
Regulations and Policies ..... 410
University Support Services ..... 427
The California State University ..... 429
Map of CSU Campus Locations ..... 432
Administration ..... 434
Faculty Listing ..... 436
Student Service Professionals ..... 462
Index ..... 464


## A WORD FROM THE PRESIDENT



It is no secret that I am proud of Sonoma State University! This truly remarkable institution located in the heart of California's famous Wine Country holds so much to investigate and discover.
As you seek the best environment in which to further your frontiers of knowledge and experience, come explore SSU. Wander our beautiful campus. Hear our students and faculty discussing the day's lectures. Scan the hundreds of course offerings in the SSU Catalog. They are the foundation of our high quality educational programs designed to develop your intellect, increase your understanding of yourself and others, and prepare you for the diverse challenges ahead.

Sonoma State University's deep commitment to the teaching and learning of the liberal arts and sciences has shaped a top-notch university experience. Our enrollment is increasingly competitive because we have developed a reputation for excellence. Our selection to represent California as a member of the nationwide Council of Public Liberal Arts Colleges stands as further proof of our quality. Known as COPLAC, this group of colleges has been called the "Public lvies" and are dedicated to promoting the values of superior undergraduate education in a public college setting. We think this selection is a testament to our strengths and our mission of enlightening students and creating the foundation for lifelong learning.

Sonoma State University is an ideal place to live and learn. This campus is student-centered, and our faculty and staff have three main goals: student satisfaction, retention, and graduation. We are eager to help you choose your personal goals and design a course of study.

Like all exploration, the pursuit of knowledge is rigorous and demanding. But if you take up the challenge, you will find your life is immeasurably enriched. I invite you to join us in our common adventure and wish you the greatest success, because your success is our success.

Ruben Armiñana, Ph.D.

## Where is SSU?

Sonoma State University occupies 274 acres in the beautiful wine country of Sonoma County, in Northern California. Located at the foot of the Sonoma hills, the campus is just an hour's drive north of San Francisco and 40 minutes away from the Pacific Ocean.

## What's special about SSU?

Sonoma State University, a small campus of 7,500 students, is dedicated to the liberal arts and sciences. Our students enjoy a high quality education that features close interactions with faculty due to our size and SSU's status as one of the premier public undergraduate institutions in the state.

SSU strives to graduate students who are ready to navigate the intricacies of our modern world, and who are prepared to make informed decisions that benefit their own lives, as well as the lives of their families and communities.

## How and when do I apply?

Sonoma State University is part of the California State University System and uses admissions procedures established by the CSU. Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at www.csumentor. edu/. The CSU Mentor system allows students to browse through general information about CSU's 23 campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Applications also may be obtained online or at any California high school or community college or from the Office of Admission at any of the campuses of the California State University. The SSU Office of Admissions and Records is located on the second floor of Ruben Salazar Hall, and the phone number is (707) 664-2778.

Admission at Sonoma is competitive and students are encouraged to apply during the specified filing period. For entry in the fall semester, the filing period is October-November with the final date to file November 30. For entry in the spring semester, the filing period is August, with the final date to file August 30.

Some of the programs in the highest demand are called "impacted programs." These programs receive more applications during the filing period than can be accommodated. In such cases, you must meet supplementary admission criteria if applying to an impacted program.

Applications will be accepted after the initial filing period on a rolling basis provided space is available in the student's preferred major.

## Where will I live?

The Residential Community provides comfortable, convenient campus housing for 3,000 single students. The Community is a unique
mix of nontraditional residence hall suites and campus apartments, all located just seconds from the campus classroom buildings. All suites and apartments are fully furnished and carpeted and have their own living rooms, bathrooms, and kitchens with all appliances. The suites and apartments are wired into the University's computer network, giving residents direct access to University computing resources, the library, and the Internet. The Community has its own dining hall, swimming pools, study rooms, convenience store, post office, meeting rooms, game room, and outdoor recreation areas.

Thirty percent of our students are housed on campus. For those students who choose to live off-campus, the Housing Services Office maintains a listing of available rental accommodations in the local area. This listing, accessible online on Housing's website, includes rental houses, apartments, and rooms in private homes.

## What are my annual costs?

For the 2008-09 academic year, fees for students who are California residents enrolled in 6 units or fewer is $\$ 1,391$ per semester. For a class load of 7 units or more, the cost is $\$ 1,973$ per semester. Nonresident tuition is an additional $\$ 339$ per unit. For a complete list of fees and other charges, see the 2008-09 fee schedule under the heading "Fees and Expenses," or go online to www.sonoma.edu/ar/ registration/Fees.shtml.

With other costs, such as housing, books, meal plans, various course fees, and incidentals, an in-state student can expect to pay between \$15,000 and \$16,500 each year. Fees for international students are listed in the section of this catalog on admissions procedures for international students.

## What about financial aid and scholarships?

Nearly 45 percent of our students receive some type of financial aid, while 27 percent receive grants or scholarships. We participate in all state and federal financial aid programs. The University's merit, athletic, and talent scholarship programs total more than \$600,000 in awards.

You should apply for financial aid in January. Each year, the priority filing date for the FAFSA (Free Application for Federal Student Aid) is March 2. Some types of financial aid are available if you apply after that date.

You should apply for scholarships at the same time you apply for admission to the University. If you are applying for spring admission, you should apply for scholarships for the following fall semester. The scholarship applications are available in October of each year, and the deadline for your application and any supporting materials to be received or postmarked is January 15 of each year.

For complete information on Sonoma State University fees and our financial aid and scholarship programs, see the Fees, Expenses, and Financial Assistance section in this catalog.

## How do I register for my classes?

All registration is conducted online. For new students at Sonoma, your first experience is Summer Orientation. This optional program gives you an opportunity to register for your first classes online, make friends with fellow students, and become acquainted with the campus and the area. Faculty and staff advisors assist you before the registration process. Other orientation programs are available for transfer students.

All entering students are assigned an advisor in their academic department. One-third of new students who enroll do not have a declared major and receive academic advising from professional staff members in the Advising Center.

The Educational Mentoring Team is a highly recommended program that provides advising and orientation for all first-time freshmen. Each EMT consists of a faculty member, student services professional, and a peer advisor. The EMT program helps students begin their educational career with the appropriate coursework and career planning.

Advising for upcoming semesters for continuing students takes
place in the departments at the end of the previous term. Students register for classes on the Web. For more details on registration, see Admissions; for details on advising, see Student Academic Services. The section on Degree Requirements will help you plan your course of study.

## What about technology?

One of the first universities in California to require computer access of all its entering freshmen, Sonoma State continues to lead the curve in its use of technology. Our designation as one of the Top 100 Wireless Universities in the United States is just one example of the highly sophisticated, technological environment you will discover at Sonoma.

In addition to registration via the Web, you will receive all official communication from the University online. As you progress through your coursework, you will experience technology in a variety of settings: in an online chatroom from your room in the residence halls, in a class on how to conduct research using the Internet in the Schulz Information Center, in a wireless computer lab, and in a classroom that allows the professor to send and receive screenshots to and from students, to name a few.

## How can I personalize my education?

There are a number of ways to pursue your interests. Each year, many students take advantage of the study abroad programs, traveling to a host University or special study center in one of 20 20countries.

Through a variety of internships, students can gain practical experience or academic credit in settings that are related to their career.

Many volunteer opportunities are available, such as the JUMP program offered through Associated Students. In some situations, credit may be earned for volunteer experiences, while providing valuable service to the community.

## How can I become involved?

The more you're involved in the life of the campus, the more rewarding your college experience will be. Sonoma has more than 100 registered student clubs and organizations on campus. Whether your interests are student government, athletics, recreational sports, Greek organizations, or the arts, you will find many opportunities to develop leadership roles.
Sonoma State University is a Division II member of the NCAA and sponsors 13 intercollegiate programs: five for men - soccer, basketball, baseball, tennis, and golf - and eight for women - soccer, cross country, volleyball, basketball, softball, tennis, water polo, and track and field. SSU teams have been extremely successful at all levels capturing two national championships and 28 conference championships since 1990.
Another way for students to get involved is through the Student Ambassadors. These students represent SSU at the campus and community levels, and work with the Alumni Association to keep current students and alumni connected.
The performing arts are alive and well at SSU. More than 140 performances in drama, dance, and music are given each year. Whether you prefer to sing Bach or gospel, or play modern jazz or classical guitar, there is a place for you at SSU. A wide variety of ensembles are open to students of all majors and to members of the community.

## What fun can I find off campus?

With the coast and the mountains within easy reach, there is always plenty to do outside the classroom. Recreational Sports sponsors a variety of activities all year, including hiking, biking, skiing, river rafting, and camping.
The local area and the communities of Santa Rosa, Petaluma, and Sebastopol offer an abundance of activities - from festivals and farmers' markets to several symphonic, chamber music, and theater groups. The campus is just an hour's drive from beautiful San Francisco and the Bay Area.

## Already thinking about graduation?

On a beautiful day in May, you will join the thousands of Sonoma State University graduates who have come before you.
SSU Career Services works closely with new graduates and offers several job placement programs. Graduates have access to informational resources, such as job listings, workshops, job fairs, and other employment search services. Whether you are just beginning your major or searching for a full-time job, the center helps you define and achieve your career goals.
Today, there are more than 40,000 Sonoma State alumni. The SSU Alumni Association works to maintain a strong bond between the University and its alumni. In addition to offering the many advantages of membership in the organization, the Association sponsors student scholarships and special events for alumni throughout the year, including the Distinguished Alumni Awards.

## MISSION, HISTORY, ACCREDITATION

## Our Mission

The SSU mission is to prepare students to be learned men and women who:

- Have a foundation for lifelong learning,
- Have a broad cultural perspective,
- Have a keen appreciation of intellectual and aesthetic achievements,
- Will be leaders and active citizens,
- Are capable of pursuing fulfilling careers in a changing world, and
- Are concerned with contributing to the health and well-being of the world at large.

To achieve its mission, Sonoma State University recognizes that its first obligation is to develop and maintain excellent programs of undergraduate instruction grounded in the liberal arts and sciences. Instructional programs are designed to challenge students not only to acquire knowledge but also to develop the skills of critical analysis, careful reasoning, creativity, and self-expression. Excellence in undergraduate education requires students to participate in a well-planned program that provides both a liberal education and opportunities for specific career preparation.

The University offers a wide range of traditional disciplines, as well as interdisciplinary programs, so that students are able to explore diverse modes of inquiry, the understanding gained within the various disciplines, and a global spectrum of ideas, institutions, values, and artistic expressions.

The University offers selected professional and graduate programs leading to master's degrees, teaching credentials, and certificates in various career fields. These programs respond to regional and state needs within the academic, business, education, and professional communities.

The quality of the educational experience relies on close human and intellectual relationships among students and faculty to foster the open exchange of ideas. The University is committed to creating a learning community in which people from diverse backgrounds and cultures are valued for the breadth of their perspectives and are encouraged in their intellectual pursuits. The University's special character within California education emerges from its small size; its commitment to high standards of scholarship and ongoing professional development; and its promotion of diversity in the faculty, staff, and student populations.

The University also recognizes its obligation to serve as an educational and cultural resource for people in the surrounding communities. It offers courses, lectures, workshops, and programs that are open to the public. Special events in the arts, the sciences, and athletics contribute to the intellectual and cultural life of students and the community.

## Our History

The California State Legislature established Sonoma State College in 1960.

The college opened in temporary quarters in Rohnert Park in fall 1961 under the leadership of founding president Ambrose R. Nichols, Jr., with an enrollment of 265 upper-division students. Most of the faculty and administrators of the Santa Rosa Center of San Francisco State College, which had served the region since 1956, joined the new college. The center's elementary education, psychology, and counseling programs were the principal offerings.

The college grew steadily, developing academic programs based in the traditional liberal arts and sciences, as well as in career and professional programs, all the while emphasizing close studentfaculty interaction. The college moved to its present 274-acre site in 1966, upon completion of Stevenson and Darwin halls. Excellent new facilities have been constructed, and the grounds have been extensively landscaped, creating one of the most attractive, modern, and well-equipped campuses in the state. In 1978, University status was granted, and the name was changed to Sonoma State University.

The University now enrolls more than 7,500 students and offers 43 bachelor's degrees, 14 master's degrees, and 9 teaching, specialist, and service credentials.

## Accreditation

Sonoma State University is fully accredited by the Western Association of Schools and Colleges. In addition, individual program accreditations have been granted by the American Chemical Society, the Association to Advance Collegiate Schools of Business, the National Association of Schools of Music, the National League for Nursing, the National Association for Schools of Art and Design, and the Council for Accreditation of Counseling and Related Educational Programs. The School of Education is accredited by the National Council for Accreditation of Teacher Education, and its programs are approved by the California Commission on Teacher Credentialing.

The University is also a member of the prestigious Council of Public Liberal Arts and Colleges (COPLAC), an association of public colleges and universities whose primary mission is ensuring that fine undergraduate liberal arts and sciences education is available to students in the public systems of higher education. SSU is the only California member of COPLAC.

## WASC Contact Information:

Western Association of Schools and Colleges
985 Atlantic Avenue, Suite 100
Alameda, CA 94501
Tel: (510) 748-9001
Fax: (510) 748-9797
E-mail: wascsr@wascsenior.org
Website: www.wascweb.org

## ACADEMIC CALENDAR 2008-10

For the most current calendar information, see the website: www.sonoma.edu/university/calendars.shtml.

## 2008-09 Academic Year

## FALL SEMESTER 2008

Aug. 22 University Convocation
Aug. 25 Orientation and Advising
Aug. 26 Instruction begins
Sept. 15 Deadline to apply for December 2008 graduation
Dec. 4 Last day to submit master's theses and projects to Graduate Studies Office

Dec. 12 Last day of instruction
Dec. 15-19 Final examinations
Jan. 2 Semester ends

## Holidays

Sept. 1 Labor Day, campus closed
Nov. 11 Veterans Day observance, campus closed
Nov. 26-28 Thanksgiving, campus closed Thursday and Friday
Dec. 25- Holiday recess, campus closed
Jan. 1
Intersession 2009 (Special Session)**
Jan. 3-23 Intersession classes in session
Jan. 19 Martin Luther King Jr. Day, holiday observed, campus closed

## SPRING SEMESTER 2009

Jan. 22 University Convocation
Jan. 22 Faculty Development Day
Jan. 23 Orientation and Advising
Jan. 26 Instruction begins
Feb. 15 Deadline to apply for May 2009 graduation
April 1 Deadline to apply for August 2009 graduation
May 4 Last day to submit master's theses and projects to Graduate Studies Office

May 15 Last day of instruction
May 18-22 Final examinations
May 23 Commencement
June 1 Semester ends

## Holidays

Feb. 16 Presidents' Day, campus closed
March 31 Cesar Chavez's Birthday, holiday observed, campus closed

April 13-17 Spring recess, classes not in session
May 25 Memorial Day observance, campus closed

## SUMMER TERM 2009

Dates to be announced

* Brochure and course schedule are available in the School of Extended Education, Stevenson Hall 1012.


## ACADEMIC CALENDAR 2008-10

For the most current calendar information, see the website: www.sonoma.edu/university/calendars.shtml.

## *2009-10 Academic Year

## FALL SEMESTER 2009

Aug. 24 University Convocation
Aug. 25 Orientation and Advising
Aug. 26 Instruction begins
Sept. 15 Deadline to apply for December 2008 graduation
Dec. 4 Last day to submit master's theses and projects to Graduate Studies Office

Dec. 11 Last day of instruction
Dec. 14-18 Final examinations
Dec. 24 Semester ends

## Holidays

Sept. 7 Labor Day, campus closed
Nov. 11 Veterans Day observance, campus closed
Nov. 25-27 Thanksgiving, campus closed Thursday and Friday
Dec. 25- Holiday recess, campus closed
Jan. 1

## Intersession 2010 (Special Session)**

Jan. 4-22 Intersession classes in session
Jan. 19 Martin Luther King Jr. Day, holiday observed, campus closed

## SPRING SEMESTER 2010

Jan. 27 University Convocation
Jan. 28 Faculty Development Day
Jan. 29 Orientation and Advising
Feb. 1 Instruction begins
Feb. 15 Deadline to apply for May 2009 graduation
April 1 Deadline to apply for August 2009 graduation
May 7 Last day to submit master's theses and projects to Graduate Studies Office

May 21 Last day of instruction
May 24-28 Final examinations
May 29 Commencement
June 3 Semester ends

## Holidays

March 31 Cesar Chavez's Birthday, holiday observed, campus closed

April 5-9 Spring recess, classes not in session
May 31 Memorial Day observance, campus closed

## SUMMER TERM 2010

Dates to be announced

* Pending SSU Academic Senate Approval
** Brochure and course schedule are available in the School of Extended Education, Stevenson Hall 1012.


## ADMISSIONS

Welcome! Thank you for your interest in Sonoma State University. You are probably attracted to Sonoma because of our success in academic programs, the intellectual accomplishments of our students and faculty, our exciting curricula, or perhaps the location and beauty of the campus. Whatever spurred your interest, we are delighted you've taken the time to glance through our catalog. Here you will learn how to apply, what documents are needed, and the admission requirements.

## Application Filing Periods, 2008-2010

| For admission in | Priority filing | File no later than |
| :--- | :--- | :--- |
| Fall Semester 2008 | October-November 2007 | November 30, 2007 |
| Spring Semester 2009 | August 2008 | August 30, 2008 |
| Fall Semester 2009 | October-November 2008 | November 30, 2008 |
| Spring Semester 2010 | August 2009 | August 30, 2009 |
| Fall Semester 2011 | October-November 2010 | November 30, 2010 |

Applications are accepted until capacities are reached. Many CSU campuses limit undergraduate admission in an enrollment category because of overall enrollment limits. If applying after the initial filing period, consult the campus admission office for current information. Similar information is conveniently available at www.csumentor.edu/filing_status/Default.asp.

## Admission Procedures and Policies

Requirements for admission to Sonoma State University are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. If you are not sure of these requirements, you should consult a high school or community college counselor or CSU campus admission office.

Electronic versions of the CSU undergraduate and graduate applications are accessible on the World Wide Web at www.csumentor. edu/. The CSU Mentor system allows students to browse through general information about the CSUs 23 campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on fee waivers).

## Importance of Filing Complete, Accurate, and Authentic Application Documents

Sonoma State University advises prospective students that they must supply complete and accurate information on the applications for admission, residence questionnaire, and financial aid forms. Further, applicants must submit authentic and official transcripts of all previous academic work attempted. Failure to file complete, accurate, and authentic application documents may result in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301, Article 1.1, Title 5, California Code of Regulations).

## Undergraduate Application Procedures

Prospective students applying for part-time or full-time undergraduate programs of study in day or evening classes must file a complete undergraduate application. The $\$ 60$ nonrefundable application fee should be in the form of a check or money order payable to "The California State University" or by credit card if submitting the online application, and it may not be transferred or used to apply to another term. An alternate campus and major may be indicated on the application, but applicants should list as an alternate campus only a CSU campus that also offers the major. Generally, an alternate major will be considered at the first choice campus before an application is redirected to an alternate choice campus. The applications of persons denied admission to an impacted and/or closed campus may be re-routed to another campus at no cost, but only if the applicant is CSU eligible.

## Impacted Programs

The CSU designates programs as impacted when more applications from CSU regularly eligible students are received in the initial filing period (October and November for fall terms, June for winter terms, August for spring terms, February for summer terms) than can be accommodated. Some programs are impacted at every campus where they are offered; others are impacted only at some campuses. You must meet supplementary admission criteria if applying to an impacted program.

The CSU will announce during the fall filing period those programs that are impacted and the supplementary criteria campuses will use. That announcement will be published in the CSU Review, distributed to high school and college counselors, and is available online at www.calstate.edu/SAS/csureview/. Information about the supplementary criteria is also sent to program applicants. Detailed impaction information is also available at www.calstate.edu/SAS/ impactioninfo.shtml.

You must file your application for admission to an impacted program during the initial filing period. If you wish to be considered in impacted programs at more than one campus, you must file an application to each.

## Supplementary Admission Criteria

Each CSU campus with impacted programs uses supplementary admission criteria in screening applicants. Supplementary criteria may include rank ordering of freshman applicants based on the CSU eligibility index or rank-ordering of transfer applicants based on the overall transfer grade point average, completion of specified prerequisite courses, and a combination of campus-developed criteria. Applicants for freshman admission to impacted campuses or programs are required to submit scores on either the SAT or the ACT. For fall admission, you should take the test as early as possible and no later than October of the preceding year if applying for fall admission.

The supplementary admission criteria used by the individual CSU campuses to screen applicants appear periodically in the CSU Review and are sent by the campuses to all applicants seeking admission to an impacted program.

Unlike unaccommodated applicants to locally impacted programs who may be redirected to another campus in the same major, unaccommodated applicants to systemwide impacted programs may not be redirected in the same major but may choose an alternate major either at the first choice campus or another campus.
Sonoma State University is an increasingly popular campus and from year to year depending on the application pools and enrollment trends, petitions the California State University for impaction at a class or major level. If impaction status is granted, supplemental admissions criteria is utilized in the admissions process. Supplementary admission criteria for first-time freshmen include, but are not limited to, high school grade point averages, test scores (SAT I or ACT), high school course preparation, and/or a supplemental questionnaire or essay. For transfer applicants, supplemental admissions requirements may include transfer grade point average, grade point averages in specific courses, and course preparation. The specific criteria utilized depend on the number of applications received by each class level and major. To maximize your chance of admission, you are strongly urged to view the basic requirements outlined in the CSU Admission Requirements section above as just that: basic requirements. Higher grade point averages, submission of test scores, and completion of additional required course preparation increase your chances for admission. Please visit us online or call the Admissions Office for an updated list of impacted majors.

## Use of Social Security Number

Applicants are required to include their correct Social Security numbers in designated places on applications for admission pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The University uses the Social Security number to identify students and their records, including use to identify the student for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service requires the University to file information returns that include the student's Social Security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. This information is used by the IRS to help determine whether a student, or a person claiming a student as a dependent, may take a credit or deduction to reduce federal income taxes.

## Residence Determination

Whether you are a resident of California or a non-resident determines the fees you pay and the admissions requirements which apply to you. Residence classifications are determined through a review of the information you provide in the residence portion of your admissions application. For a summary statement of the principal rules and exceptions regarding the residence determination, see
"Determination of Residence for Non-resident Tuition Purposes."

## Graduate and Postbaccalaureate Application Procedures

All graduate and postbaccalaureate applicants (e.g., Ed.D. applicants, master's degree applicants, those seeking credentials, and those interested in taking courses for personal or professional growth) must file a complete graduate application as described in the graduate and postbaccalaureate admission materials at www.csumentor.edu. Applicants seeking a second bachelor's degree should submit the undergraduate application for admission unless specifically requested to do otherwise. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the $\$ 60$ nonrefundable application fee. Since applicants for postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternate campuses or later changes of campus choice will be minimal. To be assured of initial consideration by more than one campus, it will be necessary to submit separate applications (including fees) to each. Applications may be obtained from the Graduate Studies Office or the Admissions Office of any California State University campus. An electronic version of the CSU graduate application is available on the World Wide Web at www.csumentor.edu/. Applications submitted by way of www.csumentor.edu are preferable.

## Reapplication for Subsequent Semesters

If you apply and are admitted to the University for a given semester but do not register, you will forfeit your admission. Should you later wish to undertake work at the University, you must file a new application, pay a new application fee, and meet all of the current requirements for admission. Materials supporting an application for admission, such as transcripts and entrance examination scores, will be held for one year only and may be used during this time to meet the requirements for admission. After one year, these materials will be destroyed.

## Application Acknowledgment

You may expect to receive an acknowledgment from your first choice campus within two to four weeks of filing the application. The notice may also include a request that you submit additional records necessary for the campus to evaluate your qualifications. You may be assured of admission if the evaluation of your qualifications indicates that you meet CSU admission requirements and campus requirements for admission to an impacted program. Unless specific approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

## Hardship Petitions

The campus has established procedures for consideration of qualified applicants who would be faced with extreme hardship if not admitted. Petitioners should write to Admissions and Records regarding specific policies governing hardship admission.

## Undergraduate Admission Requirements

## Freshman Requirements

Generally, first-time freshman applicants will qualify for regular admission if they:

1. Have graduated from high school, have earned a Certificate of General Education Development (GED), or have passed the California High School Proficiency Examination;
2. Have a qualifiable minimum eligibility index (see section on Eligibility Index); and
3. Have completed with grades of $C$ or better each of the courses in the comprehensive pattern of college preparatory subject requirements (see "Subject Requirements").

Eligibility Index - The eligibility index is the combination of your high school grade point average and your score on either the ACT or the SAT. Your grade point average is based on grades earned in courses taken during your final three years of high school that are college preparatory "a-g" subject requirements, and bonus points for approved honors courses (excluding physical education and military science).

Up to eight semesters of honors courses taken in the last two years of high school, including up to two approved courses taken in the tenth grade, can be accepted. Each unit of $A$ in an honors course will receive a total of 5 points; $B, 4$ points; and $C, 3$ points.

You can calculate the index by multiplying your grade point average by 800 and adding your total score on the SAT I. If you took the ACT, multiply your grade point average by 200 and add ten times the ACT composite score. If you are a California high school graduate (or a resident of California for tuition purposes), you need a minimum index of 2900 using the SAT I or 694 using the ACT; the Eligibility Index Table illustrates several combinations of required test scores and averages. However, if in the next two years Sonoma State University receives a high volume of applications and applies for impaction status and impaction status is granted by the California State University, Sonoma State University may require a higher eligibility index than the minimum index and/or supplemental criteria (see page 9).

For admission to terms during the 2008-2009 college years, the University has no plans to include the writing scores from either of the admissions tests in the computation of the CSU Eligibility Index.
Non-impacted CSU campuses do not require a submission of test scores if you have a grade point average of 3.00 or above ( 3.61 for non-residents). However, all applicants for admission are urged to take the SAT or ACT and to provide the scores of such tests to each CSU to which they seek admission. Campuses use these test results for advising and placement purposes and may require them for admission to impacted majors or programs.
If you neither graduated from a California high school nor are a resident of California for tuition purposes, you need a minimum index of 3502 (SAT I) or 842 (ACT). Graduates of secondary schools

## Eligibility Index Table for California High School Graduates or Residents of California

| GPA | ACT Score SAT I Score <br> 3.00 and above qualifies with any score |  | GPA | ACT Score | SAT I Score | GPA | ACT Score | SAT I Score | GPA | ACT Score | SAT I Score | GPA | ACT Score | SAT I Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2.81 | 14 | 660 | 2.60 | 18 | 820 | 2.39 | 22 | 990 | 2.18 | 26 | 1160 |
|  |  |  | 2.80 | 14 | 660 | 2.59 | 18 | 830 | 2.38 | 22 | 1000 | 2.17 | 26 | 1170 |
|  |  |  | 2.79 | 14 | 670 | 2.58 | 18 | 840 | 2.37 | 22 | 1010 | 2.16 | 27 | 1180 |
| 2.99 | 10 | 510 | 2.78 | 14 | 680 | 2.57 | 18 | 850 | 2.36 | 23 | 1020 | 2.15 | 27 | 1180 |
| 2.98 | 10 | 520 | 2.77 | 14 | 690 | 2.56 | 19 | 860 | 2.35 | 23 | 1020 | 2.14 | 27 | 1190 |
| 2.97 | 10 | 530 | 2.76 | 15 | 700 | 2.55 | 19 | 860 | 2.34 | 23 | 1030 | 2.13 | 27 | 1200 |
| 2.96 | 11 | 540 | 2.75 | 15 | 700 | 2.54 | 19 | 870 | 2.33 | 23 | 1040 | 2.12 | 27 | 1210 |
| 2.95 | 11 | 540 | 2.74 | 15 | 710 | 2.53 | 19 | 880 | 2.32 | 23 | 1050 | 2.11 | 28 | 1220 |
| 2.94 | 11 | 550 | 2.73 | 15 | 720 | 2.52 | 19 | 890 | 2.31 | 24 | 1060 | 2.10 | 28 | 1220 |
| 2.93 | 11 | 560 | 2.72 | 15 | 730 | 2.51 | 20 | 900 | 2.30 | 24 | 1060 | 2.09 | 28 | 1230 |
| 2.92 | 11 | 570 | 2.71 | 16 | 740 | 2.50 | 20 | 900 | 2.29 | 24 | 1070 | 2.08 | 28 | 1240 |
| 2.91 | 12 | 580 | 2.70 | 16 | 740 | 2.49 | 20 | 910 | 2.28 | 24 | 1080 | 2.07 | 28 | 1250 |
| 2.90 | 12 | 580 | 2.69 | 16 | 750 | 2.48 | 20 | 920 | 2.27 | 24 | 1090 | 2.06 | 29 | 1260 |
| 2.89 | 12 | 590 | 2.68 | 16 | 760 | 2.47 | 20 | 930 | 2.26 | 25 | 1100 | 2.05 | 29 | 1260 |
| 2.88 | 12 | 600 | 2.67 | 16 | 770 | 2.46 | 21 | 940 | 2.25 | 25 | 1100 | 2.04 | 29 | 1270 |
| 2.87 | 12 | 610 | 2.66 | 17 | 780 | 2.45 | 21 | 940 | 2.24 | 25 | 1110 | 2.03 | 29 | 1280 |
| 2.86 | 13 | 620 | 2.65 | 17 | 780 | 2.44 | 21 | 950 | 2.23 | 25 | 1120 | 2.02 | 29 | 1290 |
| 2.85 | 13 | 620 | 2.64 | 17 | 790 | 2.43 | 21 | 960 | 2.22 | 25 | 1130 | 2.01 | 30 | 1300 |
| 2.84 | 13 | 630 | 2.63 | 17 | 800 | 2.42 | 21 | 970 | 2.21 | 26 | 1140 | 2.00 | 30 | 1300 |
| 2.83 | 13 | 640 | 2.62 | 17 | 810 | 2.41 | 22 | 980 | 2.20 | 26 | 1140 | Below | 2.00 does no | ot qualify |
| 2.82 | 13 | 650 | 2.61 | 18 | 820 | 2.40 | 22 | 980 | 2.19 | 26 | 1150 | for | regular adm | ission |

in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section.

You will qualify for regular admission when the University verifies that you have graduated from high school, have a qualifiable eligibility index, have completed the comprehensive pattern of college preparatory "a-g" subjects, and, if applying to an impacted program, have met all supplementary criteria.

## Provisional Admission

Sonoma State University may provisionally admit first-time freshman applicants based on their academic preparation through the junior year of high school and that planned for the senior year. The campus will monitor the senior year of study to ensure that those so admitted complete their senior year of studies satisfactorily, including the required college preparatory subjects, and graduate from high school. Students are required to submit an official transcript after graduation to certify that all coursework has been satisfactorily completed. A campus may rescind admission decisions for students who are found to be ineligible after the final transcript has been evaluated.
In no case may documentation of high school be received any later than the census date for a student's first term of CSU enrollment. A campus may rescind admission decisions, cancel financial aid awards, and cancel any university registration for students who are found to be ineligible after the final transcript has been evaluated.

You will qualify for regular (non-provisional) admission when the University verifies that you have graduated and received a diploma from high school, have a qualifiable minimum eligibility index, have completed the comprehensive pattern of college preparatory "a-g" subjects, and, if applying to an impacted program, have met all supplementary criteria.

## Subject Requirements

The California State University requires that first-time freshman applicants complete, with grades of C or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

- 2 years of social science, including 1 year of U.S. history, or U.S. history and government;
- 4 years of English;
- 3 years of math (algebra, geometry, and intermediate algebra);
- 2 years of laboratory science (I biological and 1 physical, both with labs);
- 2 years in the same language foreign language (subject to waiver for applicants demonstrating equivalent competence);
- 1 year of visual and performing arts (art, dance, drama/ theater, or music, in the same area of study); and
- 1 year of electives: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, and visual and performing arts.


## High School Students

Students still enrolled in high school will be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a given program and does not constitute the right to continued enrollment.

## Transfer Requirements

Students who have completed fewer than 60 transferable semester college units (fewer than 90 quarter units) are considered lowerdivision transfer students. Student who have completed 60 or more transferable semester college units (90 or more quarter units) are considered upper-division transfer students. Students who complete college units during high school or through the summer immediately following high school graduation are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for baccalaureate credit by the college or university offering the courses.

## Lower-Division Transfer Requirements

Visit the SSU Admissions website to find out if Sonoma State is taking applications from lower-division transfer students:
www.sonoma.edu/ar/.
Generally, applicants will qualify for admission as a lower-division transfer student if they have a grade point average of at least 2.0 (C or better) in all transferable units attempted, are in good standing at the last college or university attended, and meet any of the following standards:

1. Will meet the freshman admission requirements (grade point average and subject requirements) in effect for the term to which they are applying (see "Freshman Requirements" section); or
2. Were eligible as a freshman at the time of high school graduation except for the subject requirements, and have been in continuous attendance in an accredited college since high school graduation, and have made up the missing subjects.

Sonoma State also requires lower division transfer students to complete all remediation courses in English and Mathematics.
Applicants who graduated from high school prior to 1988 should contact the Admissions Office to inquire about alternative admission programs.

## Making Up Missing College Preparatory Subject Requirements

Lower division applicants who did not complete subject requirements while in high school may make up missing subjects in any of the following ways:

1. Complete appropriate courses with a C or better in adult school or high school summer sessions;
2. Complete appropriate college courses with a C or better. One college course of at least three semester or four quarter units will be considered equivalent to one year of high school study; or
3. Earn acceptable scores on specified examinations.

Please consult with any CSU Admissions Office for further information about alternative ways to satisfy the subject requirements.

## Upper-Division Transfer Requirements

Generally, applicants will qualify for admission as an upper-division transfer student if:

1. They have a grade point average of at least 2.0 ( C or better) in all transferable units attempted; and
2. They are in good standing at the last college or university attended; and they have completed at least 60 semester units of college coursework with a grade of C or better in each course to be selected from courses in English, arts and humanities, social science, science, and mathematics at a level at least equivalent to courses that meet general education requirements. The 60 units must include all of the general education requirements in communication in the English language (both oral and written) and critical thinking and the requirement in mathematics/quantitative reasoning (usually 3 semester units) OR the Intersegmental General Education Transfer Curriculum (IGETC) requirements in English communication and mathematical concepts and quantitative reasoning.

## Provisional Admission

Sonoma State University may provisionally admit transfer applicants based on their academic preparation and courses planned for completion. The campus will monitor the final terms to ensure that those admitted complete all required courses satisfactorily. All accepted applicants are required to submit an official transcript of all college level work completed. Campuses will rescind admission for all students who are found not to be eligible after the final transcript has been evaluated. In no case may such documents be received and validated by the University any later than a student's registration for their second term of CSU enrollment.

## Test Requirements

Freshman and transfer applicants who have fewer that 60 semester ( 90 quarter) units of transferable college credit must submit scores, unless exempt (see "Eligibility Index") from either the ACT or the

SAT I of the College Board. If you are applying to an impacted program on campus and are required to submit test scores, you should take the test no later than October or November. Test scores also are used for advising and placement purposes. Registration forms and dates for the SAT I or ACT are available from school or college counselors or from a CSU campus testing office. Or students may write to or call:

The College Board (SAT I)
Registration Unit, Box 6200
Princeton, New Jersey
08541-6200
(609) 771-7588
www.collegeboard.org
ACT Registration Unit
P.O. Box 414

Iowa City, Iowa
52240
(319) 337-1270
www.act.org

## TOEFL Requirement

All undergraduate applicants whose native language is not English and who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction, must present a score of 173 or higher on the computerized Test of English as a Foreign Language ( 500 on the paper form or 61 on the Internet form). Some majors may require a higher score.

## Systemwide Placement Test Requirements

The California State University requires each entering undergraduate, except those who qualify for an exemption, to take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. These placement tests are not a condition for admission to the CSU, but they are a condition of enrollment. These examinations are designed to identify entering students who may need additional support in acquiring basic English and mathematics skills necessary to succeed in CSU baccalaureate-level courses. Undergraduate students who do not demonstrate college-level skills both in English and in mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Failure to complete remediation by the end of the first year may result in denial of enrollment for future terms.
Students register for the EPT and/or ELM at their local CSU campus. Questions about test dates and registration materials may be addressed to Testing Services, (707) 664-2947, Ruben Salazar Hall 1070.

## English Placement Test

The CSU English Placement Test is designed to assess the level of reading and writing skills of entering undergraduate students so that they can be placed in appropriate baccalaureate-level courses. The CSU EPT must be completed by all entering undergraduates, with the exception of those who present proof of one of the following:

- A score of "Exempt" on the augmented English CST (i.e. the CSU Early Assessment Program) taken in grade 11;
- A score of 550 or above on the verbal section of the College Board SAT I Reasoning Test taken April 1995 or later;
- A score of 24 or above on the enhanced ACT English Test taken October 1989 or later;
- A score of 680 or above on the recentered and adjusted College Board SAT II: Writing Test taken May 1998 or later;
- A score of 3,4 , or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Scholastic Advanced Placement program; or
- Completion and transfer of a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum written communication requirement, provided such course was completed with a grade of C or better.


## Entry Level Mathematics Placement Examination

The Entry Level Mathematics Placement Examination is designed to assess the skill levels of entering CSU students in the areas of mathematics typically covered in three years of rigorous college preparatory mathematics courses in high school (Algebra I, Algebra II, and Geometry). The CSU ELM must be completed by all entering undergraduates, with the exception of those who present proof of one of the following:

- A score of "Exempt" on the augmented mathematics CST taken in grade 11;
- A score of "conditionally exempt" on the augmented CST (i.e. the CSU Early Assessment Program), plus successful completion of a Senior-Year Mathematics Experience;
- A score of 550 or above on the mathematics section of the College Board SAT I Reasoning Test or on the College Board SAT II Mathematics Tests Level I, IC (Calculator), II, or IIC (Calculator);
- A score of 23 or above on the American College Testing Mathematics Test;
- A score of 3 or above on the College Board Advanced Placement Mathematics examination (AB or BC) or Statistics examination; or
- Completion and transfer of a course that satisfies the General Education-Breadth or Intersegmental General Education Transfer Curriculum quantitative reasoning requirement, provided such course was completed with a grade of C or better.


## Nonbaccalaureate Courses in English and Math (courses with numbers lower than 100)

The University offers courses in English and mathematics for students who need to improve their proficiency in these areas. These classes carry units of credit that apply to students' unit load for a given semester but do not apply toward graduation.

CSU system wide and SSU policy require that all entering students needing remediation take and complete all remedial courses within their first year of enrollment. Failure to do so results in administrative academic disqualification from the University.

Enrollment in nonbaccalaureate classes, as appropriate, is thus required during the first semester of enrollment. Students who fail any of these courses must repeat them in the next semester of enrollment. Failure to pass after the second attempt will result in administrative academic disqualification. Students who pass these courses must take the next appropriate course in their next semester of enrollment.

Students who fail to complete remediation within the first year of enrollment will be placed on administrative academic disqualification and will be required to complete remediation at a community college or other university before they will be allowed to return to SSU.

## Graduation Requirement in Writing Proficiency

All students must demonstrate competency in writing skills as a requirement for graduation. Information on currently available ways to meet this graduation requirement may be obtained from the SSU Writing Center, (707) 664-2058, or at Sonoma State University on the Web at www.sonoma.edu/programs/writingcenter/. See also the section under Degree Requirements titled "Completion of the Written English Proficiency Requirement."

## Graduate and Postbaccalaureate Admission Requirements

## Admission Requirements

Graduate and postbaccalaureate applicants may apply for a degree objective, a credential or certificate objective, or may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

- General Requirements - The minimum requirements for admission to graduate and postbaccalaureate studies at a California State University campus are in accordance with University regulations as well as Title 5, Chapter 1, Subchapter 3 of the California Code of Regulations. Specifically, a student shall: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate campus authorities; (2) be in good academic standing at the last college or university attended;
(3) have attained a grade point average of at least 2.5 ( $\mathrm{A}=4.0$ ) in the last 60 semester ( 90 quarter) units attempted; and (4) satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.
If you meet the minimum requirements for graduate and postbaccalaureate studies, you will be considered for admission in one of the four following categories:
- Postbaccalaureate Unclassified - To enroll in graduate courses for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the general requirements, you are eligible for admission as a postbaccalaureate unclassified student. Some departments may restrict enrollment of unclassified students because of heavy enrollment pressure. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program;
- Postbaccalaureate Classified - If you wish to enroll in a credential or certificate program, you will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus;
- Graduate Conditionally Classified - You may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, you can remedy deficiencies by additional preparation; or
- Graduate Classified - To pursue a graduate degree, you will be required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus.

These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website www.calstate.edu and the CSU admissions portal www.csumentor.edu are good sources of the most up-to-date information.

## Graduate-Postbaccalaureate TOEFL Requirement

All graduate and postbaccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 213 or higher on the computerized Test of English as a Foreign Language, ( 550 on the paper form or 79 on the Internet form). Some programs may require a higher score.

## Returning Students

If you were previously enrolled at Sonoma State University but have not registered for two or more semesters, you must file an application for readmission online at www.csumentor.edu and submit the application to Sonoma State University. If you missed only one semester, you need not reapply. If coursework was attempted at another college or university, one official transcript reflecting this work must be filed with the Office of Admissions and Records. Previously enrolled students who are reapplying are subject to the same application dates and fees as new applicants. If you attended Sonoma State as a visitor, concurrent enrollee, or exchange student, and you wish to continue your enrollment at Sonoma, you must file a new application for admission at www.csumentor.edu and submit the application to Sonoma State University.

## Information for International Students

Students now entering or enrolled in higher education will be the leaders of industry, commerce, government, education, and the arts in the 21st Century. The global marketplace, affordable air travel, extraordinary levels of human migration, and the rise of transnational communications systems dictate that the valuable university graduates will be those who are prepared to live and work in an international setting in a rapidly changing world. Sonoma State University recognizes its responsibility to be an active part of this new, international reality and to ensure that its graduates are prepared to meet the challenges of a new century.

International students are central to Sonoma State University's outreach to the world. They bring to our campus and to its surrounding communities new perspectives and invaluable experiences to share with California students. At the same time, they take home with them, at the end of their studies, a deep understanding of America and its people. Sonoma State University has welcomed students from more than 50 countries, representing virtually every continent and island area in the world. These students come here to experience a traditional American liberal arts education, but in an untraditional academic setting, where teachers are guides to learning. They want to live in a beautiful and safe environment, and they also want a challenging, intellectually stimulating academic program taught by a distinguished faculty.

## International (Foreign) Student Admission Requirements

The CSU must assess the academic preparation of foreign students. For this purpose, "foreign students" include those who hold US visas as students, exchange visitors, or in other nonimmigrant classifications.

Priority in admission is given to residents of California. There is little likelihood of nonresident applicants, including international students, being admitted either to impacted majors or to those majors or programs with limited openings.

The CSU uses separate requirements and application filing dates in the admission of foreign students. Verification of English profi-
ciency (see the section on TOEFL Requirements for Undergraduate Applicants), financial resources, and academic performance are all important considerations for admission. Academic records from foreign institutions must be on file by the close of the application period for the semester for which entry is desired and, if not in English, must be accompanied by certified English translations.

Sonoma State University welcomes applications from qualified international students. The application and admissions process for international students is distinct from the process for domestic students. Please read the following information carefully.

Sonoma State University International Student Application forms and University information are available on the Internet at www. sonoma.edu/sas/is The application for university admission can be found at www.csumentor.edu A printable application is available upon request.

If you are unable to access this information, please contact us:

- By e-mail at international.inquiry@sonoma.edu;

OR

- By mail at:

Sonoma State University
International Admissions
Salazar Hall 1010A
1801 East Cotati Avenue
Rohnert Park, California 94928
United States of America
SSU admits international students twice a year for entry into either the fall or spring semesters. Application periods are as follows:

## For fall semester entry

October 1 through May 31

## For spring semester entry

August 1 through October 30

## Academic Qualification

Undergraduate applicants must provide evidence of graduation from an appropriate secondary educational institution or successful study at a recognized institution of higher education with a minimum cumulative grade point average of at least 2.50 on a 4.00 scale or the equivalent. Admissions to some fields of study may be competitive.

Graduate applicants must meet the standards applicable to the University and to each SSU graduate program as indicated elsewhere in this catalog.

## Housing

International students who file complete applications (including transcripts and financial affidavits) prior to the end dates of the respective application periods should be able to obtain on-campus housing. It should be noted, however, that housing can fill up fast, and applicants who file toward the end of the application period may have more difficulty obtaining on-campus housing.

## International Services and Activities at SSU

The Office of International Services provides essential support for international students to ensure that they make a quick and successful adaptation to university studies and to the student community at SSU. International Services provides administrative support, cultural adjustment support, academic advising, personal counseling, and assistance with all issues relating to university life. In addition, International Services is the home base for the SSU International Student Association, one of the largest and most active student clubs on the campus, which offers on-campus and offcampus activities, trips, and community volunteer programs. With a relatively small international student group, Sonoma State University puts the emphasis on the quality of the student's experience first.

## International Student Fees and Expenses (Academic Year)

Sonoma State University offers international students an outstanding education at a very attractive price; however, it does not, in general, offer them financial assistance. For this reason, applicants must describe their plans for financing their studies in some detail. Instructions on financial certifications are in the application packet. There are limited opportunities to apply for small scholarship awards. Part-time employment on campus is permitted, but work opportunities are very limited. Off-campus employment is generally not permitted under U.S. immigration statutes. Having a good financial plan is, therefore, extremely important. Fees and tuition amounts are subject to change.

## Budget estimate of average annual cost for an academic year*

Undergraduate (12 units) Graduate (9 units)
Registration Fees
Non-Resident Tuition
(based on \$339)
3946.00**
8136.00
4588.00**
6102.00

Food and Housing
$9730.00 \quad 9730.00$
Books and Supplies
1386.00
847.00
3500.00 - 35.00

Personal Expenses $\quad 3500.00 \quad 3500.00$
TOTAL:
27545.00
26153.00

* Estimate based on standard student budgets for 2007-2008
**Fees are subject to change by the California Legislature


## Other Applicants

## Educational Opportunity Program

To be eligible for EOP admission, you must be an undergraduate and a California resident.
EOP provides assistance for students who are first generation, historically low-income students. Students who are lacking the subject requirements, grades, or test scores normally required for college attendance, may be admitted through EOP if they have demonstrated the potential for academic success.
Students who are academically eligible for regular admission to the University may also apply to EOP.

To apply for admission through EOP, you must submit an EOP application, Forms 1 and 2, apply/submit the online CSU application found at www.csumentor.edu, and check "yes to question number 13 on the CSU application. In addition, all EOP applicants must file the Free Application for Federal Student Aid (FAFSA).

For additional information about the Educational Opportunity Program, please contact our EOP Office at (707) 664-2427 or visit their website at www.sonoma.edu/sas/eop/.

## Veterans

If you are a veteran of the United States military service and a California resident, you may possibly be granted admission even if you do not meet the University's regular admissions requirements. If you wish to request consideration under this provision, follow regular application procedures, and send a letter of appeal to the Office of Admissions.

## Applicants Not Regularly Eligible

Applicants not admissible under one of the above provisions may enroll in extension courses, at a community college, or at another appropriate institution to meet eligibility requirements. Denied applicants may choose to petition for special admission consideration. Only under the most unusual circumstances and only by special action will such applicants be admitted to Sonoma State University.

## Adult Students

As an alternative to regular admission criteria, an applicant who is 25 years of age or older may be considered for admission as an adult student if he or she meets all of the following conditions:

1. Possesses a high school diploma (or has established equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination);
2. Has not been enrolled in college as a full-time student for more than one term during the past five years; and
3. If there has been any college attendance in the last five years, has earned a C average or better in all college work attempted.

Consideration will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer student and will include an assessment of basic skills in the English language and mathematical computation.

You must send a formal letter of appeal and all transcripts from high school and colleges. An admissions committee will review each appeal for adult admission. Admission is determined on a case-bycase basis. Recent course work in math and English to demonstrate college-level proficiency is essential for admission.

## Intrasystem and Intersystem Enrollment Programs

Students enrolled at any CSU campus will have access to courses at other CSU campuses on a space available basis unless those campuses or programs are impacted. This access is offered without students being required to be admitted formally to the host campus and sometimes without paying additional fees. Although courses
taken on any CSU campus will transfer to the student's home CSU campus as at least elective credits, students should consult their home campus academic advisors to determine how such courses may apply to their degree programs before enrolling at the host campus.

There are two programs for enrollment within the CSU and one for enrollment between CSU and the University of California or California Community Colleges. Additional information about these programs is available from the Office of Admissions and Records, (707) 664-2778, Ruben Salazar Hall 2030, and in the "Regulations and Policies" section of this catalog.

CSU Concurrent Enrollment - Matriculated students in good standing may enroll at both their home CSU campus and a host CSU campus during the same term. Credit earned at the host campus is automatically reported to the home campus to be included on the student's transcript at the home campus.

CSU Visitor Enrollment - Matriculated students in good standing enrolled at one CSU campus may enroll at another CSU campus for one term. Credit earned at the host campus is reported automatically to the home campus to be included on the student's transcript at the home campus.

Intersystem Cross Enrollment - Matriculated CSU, UC, or community college students may enroll for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus.

## Immunization Requirements - Pre-enrollment

While prospective CSU students may be admitted to SSU before they have met the following immunization requirements, these requirements are to be completed prior to the start of the student's first day of classes at SSU and are considered conditions of enrollment. Entering students are therefore required to present proof of the following immunizations to the Admissions and Records Office of the CSU campus they will be attending before the beginning of their first term of enrollment. Proof must be photocopies of official immunization records or photocopies of blood tests showing that the student is immune to these diseases. Entering students who fail to comply with immunization requirements in a timely fashion will have a Hold placed on their academic records early in their first semester which will be prohibit registration for future classes at SSU.
Measles and Rubella: All new and readmitted students born on or after January 1, 1957, must provide proof of full immunization against measles and rubella, given as two separate doses of MMR vaccine.

Hepatitis B: All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis B before enrolling. This requirement persists until satisfied, regardless of subsequent age. Full immunization against Hepatitis $B$ consists of three spaced doses of vaccine over a minimum 4 to 6-month period.

If you need further details about these requirements and how to satisfy them, please consult http://www.sonoma.edu/shc/immuniz.shtml. If
you need further assistance or have special circumstances, you may contact SSU Records and Registration or the SSU Student Health Center. These and other vaccines are available to SSU students at the Student Health Center for a nominal fee (as well as to entering students during the weeks prior to the start of their first semester at SSU).

Meningococcal disease information form: Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent one from contracting the disease and indicating whether or not he or she has chosen to receive the vaccination. Meningococcal vaccine is highly recommended, but at this time, the CSU does not require proof of having received the vaccine, only proof that freshmen who will live on-campus have read and returned the form.

## Reservation

The University reserves the right to select its students and to deny admission to the University or to any of its programs as the University, in its sole discretion, determines appropriate, based on an applicant's suitability and on the best interests of the University.

## General Information About Admission and Evaluation of Academic Records

## Advanced Placement

Sonoma State University grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. Students who present scores of three or better will be granted up to six semester units (nine quarter units) of college credit.

## Credit by Examination

Students may challenge courses by taking examinations developed at Sonoma State University. Credit shall be awarded to those who pass them successfully.

## Credit by Challenge Examinations

You may earn unit credit for an SSU course that you successfully challenge by examination. The University, in the interest of accelerating the academic progress of capable students with special interests and experience, encourages the earning of such credit. The following regulations govern the challenging of courses:

1. Students may challenge only those courses that are listed in the SSU catalog and for which the challenger has not otherwise received credit. A course may be challenged only during the semester in which it is regularly offered;
2. Only students in resident study may challenge a course;
3. Examinations are set and administered by the instructor of the course challenged or by a faculty designee of the appropriate department chair. Completed examinations are filed in the department offices;
4. Application for Unit Credit by Challenge Examination must be approved by the appropriate department chair;
5. For summer sessions only, challenge examinations must be taken within the first two weeks of the Six Week Summer Session; and
6. When students pass the examination for credit, a CR will be recorded on their permanent record but will not be posted to students' records until 30 units have been earned in residence. No resident credit is earned, and units graded CR do not affect the grade point average. Forms for Application for Unit Credit by Challenge Examination are available in department offices.

## Credit for Noncollegiate Instruction

Sonoma State University grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate degree, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs.

## Faculty Evaluated Prior Learning (FEPL) Program

Rachel Carson Hall 38, (707) 664-2273

## Coordinator

Barbara Lesch McCaffry
Sonoma State University grants up to 30 units of undergraduate credit for learning, knowledge, or skills-based experience that has been documented and evaluated according to campus policy. Students should be aware, however, that policies for earning credit for prior learning vary from campus to campus in the CSU.

Sonoma State University subscribes to the principles recognized by the California State University and by the Western Association of Schools and Colleges and offers its Faculty-Evaluated Prior Learning (FEPL) Program in order to serve highly motivated students with substantial prior learning experience. For the student who decides to apply for FEPL, the Portfolio Workshop (UNIV 310), offered through the School of Extended Education, is the gateway into the program. It is a three-unit upper division interdisciplinary course which is open both to registered SSU students and also to non-SSU students considering completing their undergraduate degrees at SSU. Both the course, and subsequent stages of the actual assessment, will be educational in themselves. The portfolio submitted for review prior to granting University credits will, in addition, be useful in future educational and career planning.

In defining creditable prior learning, it is perhaps easier to begin with what it is not. It is not giving credit for living. Everyone has lived and has had experience, but not everyone's life and experience produce learning equivalent to portions of a prescribed college curriculum. The credit is not awarded for raw experience, but rather for significant learning experiences that result in a blend of practical
and theoretical understanding applicable to other situations. The learning must be demonstrable and demonstrated, according to the policies and procedures outlined below (and in more detail in the brochure available from the FEPL coordinator).

## FEPL Policies and Procedures

To apply for FEPL by submitting documentation for evaluation the student must:

1. Have successfully completed the Portfolio Workshop (UNIV 310), offered through the School of Extended Education, although this course can be taken prior to applying or to being admitted to SSU;
2. Have applied and been admitted to an undergraduate degree program in Sonoma State University (FEPL credit is not available at the graduate level). The Portfolio Workshop (UNIV 310) can be taken prior to applying or being admitted to SSU;
3. Be enrolled in coursework at SSU in the semester in which the actual evaluation of prior learning takes place;
4. Be applying for college-level credit in areas where Sonoma State University has degree programs and faculty expertise;
5. Be applying for credit applicable to an approved degree program; and
6. Follow the established program procedures.

## Orientation and Advising

This step is accomplished by enrolling in UNIV 310: Portfolio Workshop. In this seminar, the seminar instructor will help the student assess the appropriateness of the prior learning experience as a basis for attempting to earn credit through the College Level Examination Program (CLEP), challenge exams, or Faculty Evaluation of Prior Learning. As a part of the seminar, the student will begin to develop a portfolio that is used as a source of information in the evaluation program.

## Payment of User Fee

If the student, the seminar instructor, and the FEPL coordinator agree that the portfolio warrants formal application for award of credit, the next step is payment of a one-time non-refundable fee, based partly upon the complexity of the portfolio (please see FEPL brochure for details). The fee is assessed to cover the cost of faculty evaluation of the portfolio and does not guarantee the award of credit.

## Faculty Evaluation

The FEPL coordinator forwards the completed portfolio to appropriate faculty evaluators who consider whether the learning demonstrated in the portfolio meets the criteria for college-level learning in their disciplines, whether it is upper- or lower-division level, and whether it is appropriate for credit in general education (GE), electives, or the major. Recommendations for award of credit for GE are reviewed according to standard university procedures. The evaluators also recommend the exact titling of the credit to be awarded
and the number of units to be awarded in each category. The evaluators' recommendations and the portfolio are then returned to the FEPL coordinator. The time line for this process is one semester.

## Posting of FEPL Credit

The final recommendations, including units to be awarded and specific descriptive titles, are forwarded by the FEPL coordinator to Admissions and Records for transcription. Units earned through FEPL are graded $\mathrm{CR} / \mathrm{NC}$ and are clearly identified on the transcript as based on Faculty Evaluation of Prior Learning.
Transfer of FEPL units, even after official transcription, is up to the recipient institution and cannot be guaranteed by Sonoma State University. However, the FEPL coordinator will, at the request of any institution or agency, furnish full documentation showing how such learning was evaluated and the basis upon which units were awarded.

## Limitation on Units Possible Through FEPL

In accordance with WASC guidelines and University policy, no more than 30 baccalaureate units may be earned through FEPLP.

## Determination of Residence for Nonresident Tuition Purposes

University requirements for establishing residency are independent from those of other types of residency, such as for tax purposes, or other state or institutional residency. A resident for tuition purposes is someone who meets the requirements set forth in the Uniform Student Residence Requirements. These laws governing residence for tuition purposes at the California State University are California Education Code sections 68000-68090, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41916. This material can be viewed on the Internet by accessing the California State University's website at www.calstate.edu/GC/resources.shtml. These regulations were promulgated not to determine whether a student is a resident or nonresident of California, but rather to determine whether a student should pay University fees on an in-state or out-of-state basis.
Each campus's Admissions Office is responsible for determining the residence status of all new and returning students based on the Application for Admission, Residency Questionnaire, Reclassification Request Form, and, as necessary, other evidence furnished by the student. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.
Generally, establishing California residence for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least one full year prior to the residence determination date for the term in which enrollment is contemplated, can demonstrate both physical presence in the state combined with evidence of intent to remain in California indefinitely may establish California residence for tuition purposes. Minors normally derive residence from the parent(s) they reside with or most recently resided with.

Evidence demonstrating intent may vary from case to case but will include, and is not limited to, the absence of residential ties to any other state, California voter registration and voting in California elections, maintaining California registration and driver's license, maintaining active California bank accounts, filing California income tax returns, listing a California address on federal tax returns, owning residential property or occupying or renting an apartment where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining a permanent military address and home of record in California.

Adult noncitizens establish residence in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. Unmarried minor noncitizens derive their residence in the same manner as unmarried minor citizens except that both parents and minor must have an immigration status consistent with establishing domicile in the United States.

Exceptions to the general residence requirements are contained in California Education Code sections 68070-68084 and Title 5 of the California Code of Regulations, sections 41900-41916, and include, but are not limited to, members of the military and their dependents, certain credentialed employees of school districts, and most students who have attended high school in California and graduated or attained the equivalent. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, applicants are strongly urged to review the material for themselves and to consult with a legal advisor.

Nonresident students seeking reclassification are required to complete a supplemental questionnaire including questions concerning their financial dependence on parents who cannot satisfy University requirements for classification as residents for tuition purposes, which will be considered along with physical presence and intent in determining reclassification.

Residence determination dates are set each term. They are:

| Fall | September 20 |
| :--- | :--- |
| Spring | January 25 |
| Summer | June 1 |

The residence determination dates for the four stages of CalStateTEACH are as follows:

| Stage 1 | September 20 |
| :--- | :--- |
| Stage 2 | January 5 |
| Stage 3 | June 1 |
| Stage 4 | September 20 |

Students classified as nonresidents may appeal a final campus decision within 120 days of notification by the campus. A campus residence classification appeal must be in writing and submitted to:

The California State University<br>Office of General Counsel<br>401 Golden Shore, 4th Floor<br>Long Beach, California 90802-4210

The Office of General Counsel can either decide the appeal or send the matter back to the campus for further review.
Students incorrectly classified as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations.
Resident students who become nonresidents or who no longer meet the criteria for an exception must immediately notify the Admissions Office.
Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residence for tuition purposes in California between the time this information is published and the relevant residence determination date. Students are urged to review the statutes and regulations stated above.

## FEES, EXPENSES, AND FINANCIAL ASSISTANCE

Customer Services Center
Salazar Hall
(707) 664-2308

Financial Aid Office
Salazar Hall
(707) 664-2389

Scholarship Office
Salazar Hall
(707) 664-2261

## Fall 2008-09 Schedule of Fees*

Fees required of all students for one semester:

| Resident Undergraduate |  |  |
| :--- | ---: | ---: |
| Units per semester | $\mathbf{1 - 6}$ | $\mathbf{7 +}$ |
| Associated Students Fee | $\$ 87$ | $\$ 87$ |
| Consolidated Service Fee | $\$ 13$ | $\$ 13$ |
| Facilities Fee | $\$ 13$ | $\$ 13$ |
| Instructionally Related Activities Fee | $\$ 197$ | $\$ 197$ |
| State University Fee | $\$ 885^{*}$ | $\$ 1,524^{*}$ |
| Student Health Fee | $\$ 116$ | $\$ 116$ |
| Student Union Fee | $\$ 186$ | $\$ 186$ |
| Total Resident Undergraduate | $\mathbf{\$ 1 , 4 9 7}$ | $\mathbf{\$ 2 , 1 3 6}$ |

Resident Graduate

| Units per semester | $\mathbf{1 - 6}$ | $\mathbf{7 +}$ |
| :--- | ---: | ---: |
| State University Fee | $\$ 1,089^{\star}$ | $\$ 1,878^{*}$ |
| Campus-based Fees | $\$ 612$ | $\$ 612$ |
| Total Resident Graduate | $\mathbf{\$ 1 , 7 0 1}$ | $\mathbf{\$ 2 , 4 9 0}$ |


| Resident Credential Student** |  |  |
| :--- | ---: | ---: |
| Units per semester | $\mathbf{1 - 6}$ | $\mathbf{7 +}$ |
| State University Fee | $\$ 1,026^{*}$ | $\$ 1,770^{*}$ |
| Campus-based Fees | $\$ 612$ | $\$ 612$ |
| Total Resident Credential Student | $\mathbf{\$ 1 , 6 3 8}$ | $\mathbf{\$ 2 , 3 8 2}$ |

[^0]** Students seeking an Initial Multiple Subject, Single Subject, or Special Education teaching credential (preliminary, clear, Level I, or Level II) admitted to a credential program with classified or conditionally classified status.

## Nonresident Students (U.S. and Foreign)

Tuition is not charged to legal residents of California; however, nonresidents and foreign visa students are required to pay tuition in addition to fees charged to all students.

Tuition for nonresident students in addition to registration fees:

- Charge Per Unit \$339

The total nonresident tuition paid per term will be determined by the number of units taken. The maximum nonresident tuition per academic year (as of 2009-09) is $\$ 10,170$.

Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code (see section on fee waivers).
Nonresident students are eligible for an installment payment plan. There is a $15 \%$ service fee on the plan. Contact the Customer Services Office for details.

Other Fees and Charges
ACT- Residual Test \$30
Alcohol and Other Drug Intervention Level I Alcohol and Drug Intervention \$65
Seawolf Substance Intervention Program \$180
Alumni Placement - Career Planning/Job Search \$25
Application Fee \$55
(This fee is payable upon application for admission or readmission by all new students or students returning after an absence of two or more semesters.)
Arts and Humanities Single Subject Evaluation \$60
Bilingual Education Program Test for
Spanish and Culture \$35
Bio Feedback Training $\quad \$ 15$ / \$75
Chemistry Eyeglasses \$4
Counseling Transcript Evaluation \$25-50
Credential Processing and Evaluation \$25
Credential Processing Non-SSU Applicants \$40
Credential Out of State Verification \$15
Credential Subject Matter Authorization Eval. \$15
Dishonored Check or Credit Card Fee (returned for any cause) \$20
Failure to meet administratively required
appointment or time limit $\$ 20$
FEPL \$250
Health Center/Pharmacy/Lab Service cost
Items lost or broken, or damage to
University property cost
Late Registration \$25
Lost Keys \$25-\$250
Major/Minor Finder Test \$5
Meyers-Briggs Test \$10-16
Modern Language Lab Fee \$10
Modern Language Proficiency Exam \$50
Sonoma State University 2008-2010 Catalog


## Parking Fees

Auto, reserved, per semester \$262
Auto, non-reserved, per semester \$94
Motorcycle, per semester \$22
Daily permit \$2.50

## Miscellaneous Fees

For other fees and charges, consult the current Schedule of Classes. Deposits for locker keys and breakage are required in some laboratory courses. These deposits are refundable in whole or in part. If deposits are not required, charges may still be made for undue breakage or failure to clear lockers and/or return keys. In addition, fees are required for miscellaneous expenses in some courses, as indicated in catalog course descriptions, and for field trips.

A fee of $\$ 25$ per semester is charged for use of music department instruments and equipment. In addition, a deposit of $\$ 20$ is required for each instrument checked out for each semester. The deposit will be refunded with the return of the instrument.

## Credit Cards

VISA, MasterCard, American Express, and Discover cards may be used for payment of student fees.

## Refund of Fees Including Nonresident Tuition

Regulations governing the refund of mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, California Code of Regulations. For purposes of the refund policy, mandatory fees are defined as those systemwide fees and campus fees that are required to be paid in order to enroll in state-supported academic programs at the California State University. Refunds of fees and tuition charges for self-support programs at the California State University (courses offered through extended education) are governed by a separate policy established by the University.

In order to receive a full refund of mandatory fees, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available from Admissions and Records, Ruben Salazar Hall 2030, and in the Schedule of Classes.

For state-supported semesters, quarters, and non-standard terms, or courses of four (4) weeks or more, a student who withdraws during the term in accordance with the University's established procedures will receive a refund of mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

For state-supported semesters, quarters, and non-standard terms, or courses of less than four (4) weeks, no refunds of mandatory fees
and nonresident tuition will be made unless a student cancels registration or drops all classes prior to the first day in accordance with the University's established procedures and deadlines.
Students will also receive a refund of mandatory fees, including nonresident tuition, under the following circumstances:

- The tuition and mandatory fees were assessed or collected in error;
- The course for which the tuition and mandatory fees were assessed or collected was cancelled by the University;
- The University makes a delayed decision that the student was not eligible to enroll in the term for which mandatory fees were assessed and collected, and the delayed decision was not due to incomplete or inaccurate information provided by the student; or
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the University for a refund demonstrating exceptional circumstances, and the chief financial officer of the University, or designee, may authorize a refund, if he or she determines that the fees and tuition were not earned by the University.
Information concerning any aspect of the refund of fees may be obtained from the Senior Director for University Business Services.

## Customer Services Center

## Salazar Hall <br> (707) 664-2308

The following student-related functions are found in the Customer Services Center:

- Enrollment and Housing Deposits
- Registration fee payments
- Miscellaneous course fee payments
- WEPT and other test fees
- Equipment fees
- Requests for refund of fees
- Sale of parking decals
- Parking citation payments
- Housing room and board payments
- Issuance of campus keys
- Lost and found
- Paycheck pick-up
- Financial aid check disbursement
- Clearance of financial holds
- Routine maintenance requests for dorm students
- I.D. Card issuance and validation
- University-related notary services
- Travel reimbursement for students appointed to system-wide committees

The Customer Services Center is open extended hours, including evenings, when classes are in session. Refer to the current Schedule of Classes for hours of operation.

## Fees and Debts Owed to the Institution

Should a student or former student fail to pay a fee or a debt owed to the institution, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food, or merchandise, or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).

Prospective students who register for courses offered by the University are obligated to pay fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student fees including any tuition for the reservation of space in the course.

The institution may withhold permission to register or receive official transcripts of grades or other services offered by the institution from anyone owing fees or another debt to the institution. If a person believes he or she does not owe all or part of an asserted unpaid obligation, that person may contact the business office. The business office, or another office on campus to which the business office may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

## Fee Waivers

The California Education Code includes provisions for the waiver of certain mandatory system-wide fees as follows:

Section 66025.3-Qualifying children, spouses, or unmarried surviving spouses of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; qualifying dependents of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled, or died of a disability as a result of an event while in active service of the state; and undergraduate students who are the recipient of, or the child of, a recipient of a Congressional Medal of Honor and meet certain age and income restrictions;

Section 68120 - Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of active law enforcement or fire suppres-
sion duties (referred to as Alan Pattee Scholarships); and
Section 68121-Student enrolled in an undergraduate program who are the surviving dependent of any individual killed in the September 11, 2001 terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks must have been a resident of California on September 11, 2001.

Students who may qualify for these benefits should contact the Admissions and Records Office for further information and/or an eligibility determination.

## Procedure for the Establishment or Abolishment of a Student Body Fee

The law governing the California State University provides that fees defined as mandatory, such as a student body association fee and a student body center fee, may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (Education Code, Section 89300). A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (Education Code, Section 89304). The student body fee was established at Sonoma State University by student referendum on May 2, 1980. The campus President may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose (Education Code, Section 89300). The required fee shall be subject to referendum at any time upon the presentation of a petition to the campus President containing the signatures of 10 percent of the regularly enrolled students at the University. Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947, including, but not limited to, Education Code, sections 90012, 90027, and 90068. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and sometimes a student referendum. The campus President may use alternate consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the campus President. The President may adjust campus-based mandatory fees, but must request the Chancellor establish a new mandatory fee.

For more information or questions, please contact Colleen Nickles, Senior Director of Financing and Treasury in the CSU ChancelIor's Office, (562) 981-4579 or cnickles@calstate.edu.

## Average Support Cost Per Full-time Equivalent Student and Sources of Funds

The total support cost per full-time equivalent student includes the expenditures for current operations, including payments made to students in the form of financial aid, and all fully reimbursed programs contained in state appropriations. The average support cost is determined by dividing the total cost by the number of full-time equivalent students (FTES). The total CSU 2007/08 final budget amounts were $\$ 2,985,874,000$ from State General Fund appropriations (not including capital outlay funding), \$1,130,641,000 from State University Fee Revenue, \$369,741,000 from other fee revenues, and reimbursements for a total of $\$ 4,486,256,000$. The number of projected 2007/08 full-time equivalent students (FTES) is 356,296 . The number of full-time equivalent students is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load).

The 2007/08 average support cost per full-time equivalent student based on General Fund appropriation and State University Fee revenue only is $\$ 11,553$ and, when including all sources as indicated below, is $\$ 12,567$. Of this amount, the average student fee support per FTE is $\$ 3,864$, which includes all fee revenue in the state higher education fund (e.g. State University Fee, nonresident tuition, application fees, and other miscellaneous course fees).

## Average Cost

| 2005/06 | Amount | per FTE Student | Percentage |
| :--- | ---: | :---: | :---: |
| Total Support Cost | $\$ 4,486,256,000$ | $\$ 12,591$ | $100 \%$ |
| - State Appropriation | $2,985,874,000$ | 8,380 | $66 \%$ |
| - Student Fee Support ${ }^{1}$ | $1,130,641,000$ | 3,173 | $24 \%$ |
| - Other Income \& |  |  |  |
| Reimbursements $^{2}$ | $369,741,000$ | 1,038 | $10 \%$ |

${ }^{1}$ Student fee support represents campus 2007/08 final budget submitted State University Fee revenue. ${ }^{2}$ The other income and reimbursements represent campus other fee 2007/08 final budget revenues submitted, as well as reimbursements in the CSU Operating Fund. The average CSU 2007/08 academic year, resident, undergraduate student fees required to apply to, enroll in, or attend the university is $\$ 3,521$. However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident.

## Selective Service

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within thirty days of their eighteenth birthdays. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959, may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public postsecondary institution.

Selective Service registration forms are available at any U.S. Post Office, and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants
for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at www.sss.gov.

## Financial Aid and Scholarship Programs

## Financial Aid Office

Salazar Hall
707 664-2389
Fax 707 664-4242
finaid@sonoma.edu
www.sonoma.edu/FinAid
By contacting the Financial Aid Office staff and accessing the office's website, students and their families can find out about federal and state financial aid programs and, if eligible, be awarded monetary assistance to meet the costs of attending Sonoma State University.

The staff is committed to providing each applicant with timely and efficient customer service, as well as ensuring that students have access to current and accurate information about the steps and deadlines for completing the financial aid application process.

## Financial Aid Programs

Financial aid can be in the form of grants, loans, employment, and scholarships. Students may receive assistance from the following programs:

## Federal Aid

- Federal Pell Grants
- Federal Academic Competitiveness Grants
- Federal SMART Grants
- Federal TEACH Grants
- Federal Supplemental Educational Opportunity Grants
- Bureau of Indian Affairs Grants
- Federal Work Study (FWS)
- Federal Perkins Loans
- Federal Direct Student Loans
- Federal Direct Parent Loans for Undergraduate Students


## State Aid

- Cal Grants A, B, and T
- Child Development Teacher Grants
- Alan Pattee Scholarships
- Assumption Program of Loans for Education
- Graduate Assumption Program of Loans for Education
- Robert C. Byrd Honors Scholarships
- Educational Opportunity Program Grants
- Graduate Equity Fellowships
- State University Grant

The Financial Aid Office has developed an informative and supportive website where students can find descriptions and specific eligibility requirements for the programs listed above. Students are encouraged to visit links provided on the website, to apply online, and to review the information about the California Student Aid Commission's programs on its website at www.csac.ca.gov and information about federal financial aid at studentaid.ed.gov.

## Additional Work Opportunities

Employment is generally available in Sonoma County and the surrounding University service area to students with ability and initiative. The Career Services Center in Salazar Hall can be helpful in referring interested students to part-time job opportunities.

## Application Procedures

All new and continuing financial aid applicants are required to complete and submit the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov. By submitting this single application, applicants will be considered for most of the federal and state financial aid programs that are listed above (excluding BIA and non-FWS employment). New applicants for Cal Grants must also file a California Student Aid Commission GPA Verification Form by March 2. The FAFSA asks for confidential information about family income, assets, household size, etc., which is used by the Financial Aid Office to establish financial need and determine what aid, if any, the student is eligible to receive.

To help avoid errors and to speed up processing of your FAFSA, apply online at www.fafsa.ed.gov. FAFSA on the Web worksheets will be available from the site by December. You (and your parent, if you will be required to report your parents' information) should also apply for a federal PIN at www.pin.ed.gov in December so you can sign your FAFSA electronically.
Apply as early after January 1 as possible. Those who apply in January will have first priority to the available funding. To be considered for priority filing and to apply for a new Cal Grant, you must file your application by March 2.

The Financial Aid Office expects the student and the student's family to make every effort possible to finance the student's education. Students who do not meet the federal definition of financial independence from their parents must provide parental financial data. This information, in addition to the student's own resources, will be taken into consideration when determining a student's eligibility for the various aid programs administered by the University. The student's financial need is determined by subtracting those resources available for education from a standard student budget.

It is toward meeting this need - the difference between costs and resources - that financial aid is directed. Generally, the need is met by a "package" - Ioan, scholarship, employment, and/or grant. Notification of aid for the following year is sent to each applicant once the FAFSA has been received. This process usually begins in late March.

Questions regarding a student's eligibility or types of financial aid offered should be directed to the Financial Aid Office. Contact hours, phone numbers, and e-mail addresses are available on the financial aid website at www.sonoma.edu/FinAid/.

## Scholarship Office

Salazar Hall 1010
(707) 664-2261

Fax 707 664-4410
www.sonoma.edu/Scholarship/

## University Scholarship Program

The University Scholarship Program at Sonoma State is made possible through the generous support of individuals, businesses, and organizations who recognize the outstanding contributions made by the University and its graduates.
Any incoming freshman, undergraduate, or graduate student planning to attend Sonoma State University full-time beginning in the fall semester, whether entering or continuing, is eligible. However, official notification of admission is not required. Application to, acceptance by, or enrollment in the University is required.
Most University scholarships are awarded on the basis of an applicant's academic record and overall achievements without special consideration of financial need. A minimum cumulative GPA of 3.00 on a 4.00 point scale is required. Students with a GPA of 3.5 or higher are most competitive in our program.
Applications of candidates are reviewed by the University Scholarship Committee. The committee asks each applicant to submit a personal narrative and two letters of recommendation, in addition to the basic scholarship application form.
Scholarship applications are available beginning September 15 each year. Applications and required materials must be received or postmarked by January 15. Students interested in applying for any of the awards offered through the University Scholarship Program may obtain an application form by:

1. Downloading the application from the Scholarship Office website: www.sonoma.edu/scholarship;
2. E-mailing the Scholarship Office at scholarships@sonoma.edu;
3. Contacting the Scholarship Coordinator in Salazar Hall 1010;
4. Calling (707) 664-2261; or
5. Faxing a request to (707) 664-4410.

## Presidential Scholar Program

In addition to the University Scholarship Program, Sonoma State also guarantees a $\$ 1,000$ President's Scholar Scholarship for incoming first-time freshmen who have a weighted cumulative 4.00 GPA for their sophomore and junior years and for the first semester of their senior years. The GPA calculation does not include P.E. courses, but does allow for "weighting" of honors, advanced placement and/or international baccalaureate courses, according to the high school's policy. Please contact the Scholarship Office by phone, e-mail, or fax for more information.

## Alan Pattee Scholarships

Children and spouses of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire prevention or suppression duties are not charged mandatory system-wide fees (state university fee and application fee) at any California State University campus, according to the Alan Pattee Scholarship Act, Education Code, Section 68120. Students qualifying for these benefits are known as Alan Pattee scholars. For more information, contact the Office of Admissions for an eligibility determination.

## Departmental and Athletic Scholarships

Many departments at SSU offer scholarships to students within their majors. Athletic scholarships are also given. Contact your department or respective coach for more information.

## External Scholarships

Community, social and service groups, employers, churches, and other organizations often provide scholarships. Applicants should check with their high school counselors or local foundations and community groups for more information.

Note: Receipt of any scholarship may affect eligibility for certain financial aid. Recipients should check with the Financial Aid Office to determine their options.

## Appeals

Students have the right to appeal their financial aid award or any other financial aid decision that they feel affects them adversely and that falls outside of the jurisdiction of federal, state, or chancellor's office regulations. This right includes answers to questions, explanations of financial aid policies and procedures, and a request for reconsideration. The initial appeal is made in writing, with any supporting documents, to the student's financial aid representative. If denied, the student may appeal directly to the Director of Financial Aid, whose decision is final. The Director has the option, based on the circumstances of the appeal, to refer the appeal to the Financial Aid Office Exception Processing Review Board for a decision and/ or to request advice and direction from the Financial Aid Advisory Committee.

## Availability of Institutional and Financial Assistance Information

The following information concerning student financial assistance may be obtained from Director of Financial Aid, Salazar 1000, (707) 664-2389:

1. A description of the federal, state, institutional, local, and private student financial assistance programs available to students who enroll at Sonoma State University;
2. For each aid program, a description of procedures and forms by which students apply for assistance, student eligibility
requirements, criteria for selecting recipients from the group of eligible applicants, and criteria for determining the amount of a student's award;
3. A description of the rights and responsibilities of students receiving financial assistance, including federal Title IV student assistance programs, and the criteria for continued student eligibility under each program;
4. The satisfactory academic progress standards that students must maintain for the purpose of receiving financial assistance and criteria by which the student who has failed to maintain satisfactory progress may reestablish eligibility for financial assistance;
5. The method by which financial assistance disbursements will be made to students and the frequency of those disbursements;
6. The terms of any loan received as part of the student's financial aid package, a sample loan repayment schedule, and the necessity for repaying loans;
7. The general conditions and terms applicable to any employment provided as part of the student's financial aid package;
8. The responsibility of Sonoma State University for providing and collecting exit counseling information for all student borrowers under the federal student loan programs; and
9. The terms and conditions for deferral of loan payments for qualifying service under the Peace Corps Act, the Domestic Volunteer Service Act of 1973, or comparable volunteer community service.

Information concerning the cost of attending Sonoma State University is available from Senior Director for University Business Services, Salazar 1000, (707) 664-2308, and includes fees and tuition (where applicable); the estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs.
Information concerning the refund policies of Sonoma State University for the return of unearned tuition and fees or other refundable portions of institutional charges is available from Senior Director for University Business Services, Salazar 1000, (707) 664-2308.

Information concerning policies regarding the return of federal Title IV student assistance funds as required by regulation is available from Director of Financial Aid, Salazar 1000, (707) 664-2389.
Information regarding special facilities and services available to students with disabilities may be obtained from Director, Disability Services for Students, Salazar 1049, (707) 664-2677.
Information concerning Sonoma State University policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus may be obtained from Senior Director, Police Services, Sonoma Bldg., (707) 664-2143.
Information concerning Sonoma State University Annual Campus Security Report may be obtained from Senior Director, Police Services, Sonoma Bldg., (707) 664-2143.

Information concerning the prevention of drug and alcohol abuse and rehabilitation programs may be obtained from Vice President for Student Affairs and Enrollment Management, Salazar 1018, (707) 664-2838. Information regarding student retention and graduation rates at Sonoma State University and, if available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest in may be obtained from Director, Institutional Research, Stevenson 1041, (707) 664-2790.

Information concerning athletic opportunities available to male and female students and the financial resources and personnel that Sonoma State University dedicates to its men's and women's teams
may be obtained from Director of Athletics, P.E. 21, (707) 664-2521. Information concerning teacher preparation programs at Sonoma State University, including the pass rate on teacher certification examinations, may be obtained from Dean, School of Education, Stevenson 1078, (707) 664-3115.

Information concerning grievance procedures for students who feel aggrieved in their relationships with the University, its policies, practices, procedures, or its faculty and staff, may be obtained from Vice President for Student Affairs and Enrollment Management, Salazar 1018, (707) 664-2838.

## HOUSING SERVICES

Zinfandel Hall
(707) 664-2541

Fax: (707) 664-4158
e-mail: ssu.housing@sonoma.edu
www.sonoma.edu/housing

## On-Campus Housing

The Residential Community provides comfortable, convenient campus housing for 3,000 single students. The Community is a unique mix of nontraditional resident hall suites and campus apartments, all located just seconds from the main campus classroom buildings. All suites and apartments are fully furnished and carpeted and have their own living rooms and bathrooms. The apartments also contain their own kitchens with all appliances. All suites and apartments are wired into the University's computer network, giving residents direct access to University computing resources, the library, and the Internet. The Community has its own dining hall, swimming pools, study rooms, convenience store, post office, meeting rooms, and outdoor recreation areas.

The Community's Residential Life Program includes live-in professional and peer staff, hundreds of social and educational activities, and thematic and special-interest living areas. The Educational Mentoring Program is specifically designed to help first-time freshmen transition successfully into their college academic programs. Incoming freshmen who meet the admissions and housing contracting deadlines are given priority for campus housing.

## Off-Campus Housing

The Housing Services Office maintains a listing of available rental accommodations in the local area. This listing, accessible online on Housing's website, includes rental houses, apartments, and rooms in private homes. An off-campus rental guide containing the names and phone numbers of local apartment complexes is also available.

## Summer Session and Conferences

During the summer, the Residential Community provides housing and food services for Summer Session students and for participants in numerous conferences hosted on the campus.

## UNIVERSITY DEGREES

## Bachelor's Degree Programs

## Bachelor of Arts (B.A.)

- American Multicultural Studies
- Anthropology
- Applied Statistics
- Art, with concentrations in:
- Art Studio
- Art History
- Film History Emphasis
- Biology, with concentrations in:
- Botany
- Marine Biology
- Microbiology
- Zoology
- Chemistry
- Chicano and Latino Studies
- Communication Studies
- Criminology and Criminal Justice Studies
- Economics, with concentrations in:
- Managerial Economics
- Labor and Public Economics
- International Economics
- English, with concentrations in:
- Creative Writing
- Literature
- Secondary Teaching Preparation
- Environmental Studies, with concentrations in:
- Environmental Conservation and Restoration
- Environmental Education
- Environmental Technology
- Environmental Planning
- French
- Geography, with concentrations in:
- Environment and Society
- Biophysical Environment
- Geospatial Techniques
- Globalization and Cultural Identity
- Geology
- Global Studies, with concentrations in:
- Asia
- Global Environmental Policy
- Europe
- Latin America
- International Economic Development
- History
- Human Development
- Hutchins School of Liberal Studies
- Interdisciplinary Studies Plan
- Teaching Credential Preparation Plan
- Liberal Studies (Ukiah)
- Mathematics
- Music, with concentrations in:
- Liberal Arts
- Music Education
- Performance
- Jazz Studies
- World Music
- Philosophy
- Physics
- Political Science
- Psychology
- Sociology
- Spanish
- Special Majors:
- Interdisciplinary
- California Cultural Studies
- Theatre Arts, with concentrations in:
- Acting
- Dance
- Technical Theatre
- Women's and Gender Studies


## Bachelor of Fine Arts (B.F.A.)

- Art Studio, with areas of emphasis in:
- Painting
- Photography
- Printmaking
- Sculpture


## Bachelor of Science (B.S.)

- Biochemistry
- Biology, with concentrations in:
- Aquatic Biology
- Molecular and Cell Biology
- Ecology and Evolutionary Biology
- Physiology
- Business Administration, with concentrations in:
- Accounting
- Finance
- Financial Management
- Marketing
- Wine Business Strategies
- Chemistry
- Computer Science
- Engineering Science
- Environmental Studies, with a concentration in:
- Environmental Technology
- Geology
- Kinesiology, with concentrations in:
- Adapted Physical Education
- Physical Education
- Exercise Science
- Lifetime Fitness
- Mathematics, with concentrations in:
- Applied Mathematics
- Computer Science
- Nursing
- Basic BSN
- RN-BSN
- LVN-BSN
- Physics, with a concentration in:
- Applied Physics
- Special Major (Interdisciplinary)
- Statistics


## Master's Degree Programs

## Master of Arts (M.A.)

- Counseling, with concentrations in:
- Community Counselors: Marriage and Family Therapy (M.F.T.)
- School Counseling (P.P.S.)
- Cultural Resource Management (Anthropology)
- Education, with concentrations in:
- Educational Administration
- Curriculum, Teaching, and Learning
- Early Childhood Education
- Reading and Language
- Special Education
- English
- History
- Interdisciplinary Studies (ITDS)
- Kinesiology
- Psychology, through Special Sessions
- Art Therapy
- Organization Development
- Depth Psychology
- Spanish, through Special Sessions

Master of Business Administration (M.B.A.),
with concentration in Wine Business
Master of Public Administration (M.P.A.)

## Master of Science (M.S.)

- Biology
- Computer and Engineering Science, through Special Sessions
- Nursing, with concentrations in:
- Family Nurse Practitioner
- Leadership/Case Management
- Interdisciplinary Studies (ITDS)


## Doctoral Degree Program

## Doctorate of Education (Ed.D.)

- Educational Leadership (jointly with University of California, Davis)


## Minor Programs

- American Multicultural Studies
- Anthropology
- Applied Arts
- Applied Statistics
- Art Studio
- Art History
- Arts Management (Career Minor)
- Astronomy
- Biology
- Business Administration
- Chemistry
- Chicano and Latino Studies
- Communication Studies
- Computer Science
- Criminology and Criminal Justice Studies
- Economics
- English
- Environmental Studies and Planning
- Film Studies
- French
- Geography
- Geology
- German
- Gerontology
- Global Studies
- Health Systems Organizations (Career Minor)
- History
- Human Development
- Integrative Studies
- Interdisciplinary Studies
- Kinesiology
- Latin American Studies
- Linguistics
- Mathematics
- Mathematics for Teachers
- Music
- Native American Studies
- Paleontology
- Philosophy
- Physical Sciences
- Physics
- Political Science
- Psychology
- Sociology
- Spanish
- Theatre Arts
- Women's Health (Career Minor)
- Women's and Gender Studies


## DEGREE REQUIREMENTS

## Baccalaureate Candidates

The University grants baccalaureates for the successful completion of a coherent course of study at the University and the maintenance of appropriate levels of scholarship. The requirements that follow specify certain course work, unit distributions, and levels of scholarship that the California State University and the faculty of Sonoma State University have determined provide an appropriate educational framework for all students pursuing a baccalaureate. These requirements, however, provide only a framework. It is critical that each student consult regularly with an academic advisor. Students who have declared a major are assigned an academic advisor in the department of their major. Students who have not yet declared a major are assigned advisors in conjunction with their Educational Mentoring Teams or through the Advising, Career, and EOP Services, Salazar 1070, (707) 664-2427.

Students are eligible for graduation when they are in good standing and have fulfilled the following requirements:

## 1. Faculty Approval

The determination that students have achieved appropriate proficiency in any and all parts of the curriculum to warrant the granting of a degree is the responsibility of the faculty. A favorable vote of the faculty acting through the academic senate is required for the granting of any degree.

## 2. Completion of a General Education Program

The effectiveness of an education in the liberal arts and sciences is critically dependent upon the broad foundation of studies called general education. Through a program of general education, students learn a variety of basic skills and modes of disciplinary inquiry. General education courses are not simply the preliminary and introductory studies of the various disciplines; rather, they provide the necessary context for the more specific study in the major and for the selection of appropriate electives. Completion of one of Sonoma State University's general education programs also ensures completion of graduation requirements in U.S. History, Constitution, and American Ideals (American Institution requirements).

## 3. Completion of a Major

Through a concentration of studies in a particular major, students focus in depth upon a particular set of disciplines or subject areas. Because major programs vary considerably in their requirements, students should consult with faculty advisors early in their academic programs. Students may declare a major at any time, but are required to do so by the time they have earned 65 units or have completed their first semester at Sonoma State University, whichever is later. Descriptions of the majors are found with the department listing in the University Curricula section of this catalog.

## 4. Completion of the Written English Proficiency Requirement (WEPT)

All students of the California State University must demonstrate competency in writing as a requirement for graduation. At Sonoma State University, students complete this requirement by passing the Written English Proficiency Test. All students are required to take the WEPT in the junior year and cannot take it earlier. To sign up for the WEPT, students must pay the exam fee at the Customer Services Center and then register at the Writing Center. Exam dates are posted at the Writing Center and on the center's website at www. sonoma.edu/programs/writingcenter/. Students who have difficulty passing the WEPT are advised to seek assistance through the WEPT workshops provided by the Writing Center. The center offers two workshop series per term. Students who have failed the WEPT and who feel they would benefit from additional formal instruction in writing may elect to enroll in ENGL 275, a course specifically designed to help students develop skills necessary to pass the WEPT. Students who have questions about the WEPT should contact the WEPT coordinator, (707) 664-2058.

## 5. Maintenance of Scholarship

A grade point average of $\mathrm{C}(2.00)$ or better is required in work undertaken in residence at Sonoma State University, as well as in the student's total undergraduate work and in the major field. The C average for the major includes all classes listed on the Major Requirements form, except that supporting courses, while required for some majors, are not included in the major grade point average.

## 6. Unit Requirements and Limitations

The following requirements and limitations governing course credit units must be observed:
a. Total Units: A minimum of 120 semester units is required for graduation. (Some majors require up to 132 semester units for graduation.);
b. Upper-Division Units: Forty units must be upper-division work (300-499 courses), including a minimum of 12 units in the major for the B.A. degree or 18 units in the major for the B.S. degree;
c. Residence Units: Thirty units must be completed in residence at Sonoma State University, including 24 upper-division units, 12 units in the major, and 9 units in general education. The B.F.A. in Art requires 24 upper-division units in Art in residence. Note: Units earned in Extension, Open University, Visitor status at Sonoma, nonbaccalaureate-level courses, and through credit by examination may not be applied to residence requirements; and
d. Credit/No Credit Grades. A maximum of 24 units of courses with nontraditional grades may be elected. Students completing the Hutchins School interdisciplinary general education lower-division program may exceed this minimum by 24 units. Courses fulfiling major and minor requirements must be graded A-F, except for courses not available in the A-F mode.

Other maximum limits of semester units to be applied toward degree requirements are:

Correspondence and Extension Studies 24 units
Community Involvement Project 295/395 6 units
Special Studies 495
Student-Instructed Courses 199/399
Community College transfer credit
Credit by Examination
Faculty-Evaluated Prior Learning

## Minor Programs

A minor is not required for graduation. Many departments, however, offer programs leading to a minor, and students are encouraged to consider pursuing a minor that complements their major. Minor programs ordinarily consist of approximately 16-20 units, 6 of which must be upper division, and require maintenance of a C (2.00) average in minor coursework. Faculty advisors in the department offering the minor will assist students in selecting appropriate courses. Coursework in the minor must be completed by the degree date. The minor appears on the student's official transcripts but not on the diploma.

## Electives

To complete the minimum of 120 semester units required for graduation after fulfillment of general education, statutory, and major requirements, students may choose from a broad spectrum of courses to broaden their education, deepen understanding of their specialties, pursue work in related fields, and satisfy their curiosity and enthusiasm regarding particular areas of interest.

## Double Majors

It is sometimes possible for a student to complete the requirements for more than one major within 120 units. If you complete requirements for two bachelor degrees, both will appear on your diploma and transcripts. Students who wish to complete requirements for a second major should consult with a faculty advisor early in their academic program.

## Second Bachelor's Degree

To earn a second baccalaureate at Sonoma State University, students must fulfill the requirements of the major, demonstrate competence in English composition by passing the Written English Proficiency Test, and satisfy the general education-breadth requirements specified by Title 5, Section 40405 of the California Administrative Code. Second
baccalaureate candidates must complete 30 units of residence credit at Sonoma State University and should consult with their faculty advisors regarding the portion of those 30 units that must be earned in upper-division courses (minimum 24 for residency). Note: Units earned in Extension, Open University, and Visitor status, and through credit-by-examination may not be applied to residence requirements.

## Awarding of Degrees

Degrees are awarded three times a year: in December, May, and August, with diplomas mailed within six weeks after the date of award of degree. Candidates for graduation should file an "Application for Award of Degree" form at the Admissions and Records Office two semesters before the anticipated semester of graduation. This will enable the graduation evaluators to determine remaining requirements to be completed. Please see the academic calendar for filing dates and the actual dates of graduation. You must meet all degree requirements by the date of graduation or reapply for graduation by filing another "Application for Award of Degree" form.

## Honors at Graduation

The University awards two types of honors to students at graduation: degree honors and department honors.

## 1. Degree Honors

Criteria used to determine honors at graduation are those in effect as of the date of graduation. Students graduating with the baccalaureate earn degree honors by meeting the following criteria:
a. Completion at Sonoma State University of a minimum of 45 letter-graded semester units in residence; and
b. Attainment of cumulative grade point averages as indicated below:

## Degree Honor Designation

Summa Cum Laude - is awarded to those students achieving a cumulative grade point average in all university and college work and a cumulative grade point average in all work undertaken at SSU of not less than 3.90.

Magna Cum Laude - is awarded to those students achieving a cumulative grade point average in all university and college work and a cumulative grade point average in all work undertaken at SSU of not less than 3.75.

Cum Laude - is awarded to those students achieving a cumulative grade point average in all university and college work and a cumulative grade point average in all work undertaken at SSU of not less than 3.50 .

Degree honors are noted on the student's transcript and on the diploma.

## 2. Department Honors

Students graduating with the baccalaureate who are judged by their departments to have made outstanding contributions to their disciplines graduate "with distinction." Check with your major department to learn if they offer departmental honors.

Departmental honors are noted on the student's transcript and on the diploma.

## General Education Program

## Mission

General Education at Sonoma State University investigates the complexity of human experience in a diverse natural and social world, and promotes informed and ethical participation as citizens of the world.

## Teaching Goals

To achieve this mission, in concert with the specific needs of various GE Areas of Study, the GE program asserts the following fundamental goals for all GE approved classes:
I. Teach students to think independently, ethically, critically, and creatively;
II. Teach students to communicate clearly to many audiences;
III. Teach students to gain an understanding of connections between the past and the present, and to look to the future;
IV. Teach students to appreciate intellectual, scientific, and artistic accomplishment; and
V. Teach and/or build upon reading, writing, research, and critical thinking skills.

## Learning Objectives

1. Acquire a foundation of intellectual skills and capacities
a. Develop intellectual curiosity (Supports Goals I, II, III, IV, and $V$;
b. Develop research skills (I, III, IV, V);
c. Write and speak effectively to various audiences (I, II, V);
d. Evaluate everyday experiences critically (I, III, IV, V);
e. Develop capacity to reason quantitatively (I, IV, V);
f. Work collaboratively to achieve defined goals and objectives (I, II, V);
g. Develop skill in the use of information technology (I, II, V);
h. Imagine, design, and execute scholarly and creative projects (I, II, IV, V); and
i. Translate problems into common language (I, II, V).
2. Develop social and global knowledge
a. Understand and appreciate human diversity and multicultural perspectives (I, II, III, IV, V);
b. Prepare for active engagement in the community (I, II, III, V);
c. Understand and be sensitive to the global environment (I, II, III, IV, V);
d. Understand social justice issues (I, III, IV, V); and
e. Engage with challenging moral and ethical human dilemmas (I, II, III, IV, V).

## 3. Understand and use multiple methods of inquiry and ap-

 proaches to knowledgea. Understand and appreciate mathematics and science (I, II, III, IV, V);
b. Understand and appreciate fine and performing arts (I, II, III, IV, V);
c. Understand and appreciate historical and social phenomena (I, II, III, IV, V); and
d. Recognize and use perspectives of diverse disciplines (I, II, III, IV, V).
4. Develop capacities for integration and lifelong learning
a. Evaluate alternative career choices (I, III, IV, V);
b. Recognize the importance of lifelong learning (I, II, III, IV, V);
c. Integrate general education experiences (I, II, III, IV, V);
d. Cultivate ways to empower the learning of others (I, II, III, IV, V); and
e. Engage in responsible citizenship (I, II, III, IV, V).

There are two options for completing general education at Sonoma State University: the University-Wide Option and the Hutchins School Interdisciplinary Option.

## The University-Wide Option

Each baccalaureate candidate will complete a University-approved general education program, with courses distributed among the following categories:

Communication and Critical Thinking
Natural Sciences and Mathematics
Arts and Humanities
Social Sciences
Integrated Person
Within these categories, one course in ethnic studies is required. At least 9 general education units must be earned in residence at Sonoma State University. In addition, at least 9 units of general education must be in upper-division (300 and 400) courses and shall be taken no sooner than the term in which upper-division standing (completion of 60 semester units) is attained. The 9 upper-division units may be completed by enrollment in one of the upper-division thematic blocks or by choosing upper-division courses in two of the four areas ( $\mathrm{B}-\mathrm{E}$ ).

The following general education program was designed for implementation in the Fall 1990 semester. Students who entered Sonoma State University with a catalog year prior to 1990-92 should consult the appropriate catalog to determine general education requirements.

## Ethnic Studies Requirement

One course in ethnic studies is required. Courses that fulfill this requirement are marked with an asterisk (*).

## Foundation Courses

These courses are designed to provide students with the level of writing, analytical, and speaking proficiency appropriate for a university
education. Freshmen are expected to complete these courses as soon as possible after enrolling at SSU, certainly during their first two years. The foundation course categories are Fundamentals of Communication (A2), Critical Thinking (A3), Written and Oral Analysis (A1), and Mathematical Concepts and Quantitative Reasoning (B4).

## A. Communication and Critical Thinking (9 units)

Complete one course from each of the following three groups:

## 1. Written and Oral Analysis

Prerequisites: Areas A2 and A3.
AMCS 200 Written and Oral Analysis (3)
ENGL 200 California Cultural Analysis (3)
ENGL 201 Written and Oral Discourse Studies (3)
GLBL 200 Written and Oral Analysis: Global Studies (3)
HUM 200 Written and Oral Analysis (3)
ITDS 200 California Cultural Analysis (3)
PHIL 200 Philosophical Issues (3)

## 2. Fundamentals of Communication

ENGL 101 Expository Writing and Analytical Reading (3)

## 3. Critical Thinking

PHIL 101 Critical Thinking (3)
PHIL 102 Introduction to Logic (3)
UNIV 150AB (A1 and A3) Freshman Year Experience: Identity and Global Challenges ( $5 / 4$ )

## B. Natural Sciences and Mathematics (12 units)

Courses in natural science and mathematics examine the important theories of the natural sciences and of the methods and models by which scientific investigation proceeds. They also seek to increase scientific understanding and to imbue students with the same sense of curiosity and wonder about the natural world that inspires scientists and mathematicians in their work.

Complete 12 units ( 9 in science and 3 in mathematics), including a laboratory activity (' $\#$ ' denotes laboratory course).

Complete 3 units from group 1 and BIOL 110 or 115 from group 2.

## 1. Physical Sciences

Physical science courses seek to awaken in students an appreciation of the power of the intellectual approach of science through the study of some of the fundamental questions pursued by astronomers, chemists, geologists, and physicists.
ASTR 100 Descriptive Astronomy (3)
ASTR 231 Introductory Observational Astronomy (2)\#
CHEM 102 Chemistry and Society (3)\#
CHEM 105 Elements of General, Organic, and Biochemistry (5)\#
CHEM 115AB General Chemistry (5)\#
CHEM 125AB Honors Analytical General Chemistry (5)\#
GEOL 102 Our Dynamic Earth (3)\#
GEOL 105 The Age of Dinosaurs (3)
PHYS 100 Descriptive Physics (3)
PHYS 102 Descriptive Physics Lab (1)\#
PHYS 114 Introduction to Physics I (4)
PHYS 116 Introductory Laboratory Experience (1)\#
PHYS 209A General Physics Laboratory (1)\#
PHYS 210A General Physics (3)

## 2. Biological Sciences

Life science courses develop students' understanding and appreciation of the fundamental principles that govern all living things and the nature of their interdependence.
BIOL 110 Biological Inquiry (4)\#
BIOL 115 Introduction to Biology (3)
To complete a minimum of 9 units in science, select additional units from group 1 or 2 above or from group 3 following:

## 3. Specific Emphasis

Specific emphasis courses provide students an opportunity to explore a particular area of interest in the natural sciences.
ANTH 201 Biological Anthropology (3)
ASTR 303 Extraterrestrial Intelligence and Interstellar Travel (3)
ASTR 305 Frontiers in Astronomy (3)
ASTR 350 Cosmology (3)
BIOL 121 Diversity, Structure, and Function (4)\#+
BIOL 122 Genetics, Evolution, and Ecology (4)\#+
BIOL 123 Molecular and Cell Biology (4)\#+
BIOL 220 Human Anatomy (4)\#
BIOL 224 Human Physiology (4)\#
BIOL 308 Environmental Toxicology (3)
BIOL 309 Biology of Cancer (3)
BIOL 311 Sexually Transmitted Diseases (3)
BIOL 312 Biological Oceanography (3)
BIOL 314 Field Biology (3)\#
BIOL 315 Plants and Civilization (3)
BIOL 385 Contemporary Issues in Biology (3)
CS 101 Introduction to Computers and Computing (3)
CS 115 Programming I (4)
GEOG 204 Global Environmental Systems (4)
GEOL 110 Natural Disasters (3)
GEOL 120 Regional Field Geology (3)\#
GEOL 301 Natural History of the Hawaiian Islands (3)
GEOL 303 Advanced Principles of Geology (4)\#
PHYS 300 Physics of Music (3)
PHYS 342 Light and Color (3)
Complete one course from the following group:

## 4. Mathematical Concepts and Quantitative Reasoning

Mathematics courses develop students appreciation of one of the chief tools of the natural and social sciences, a philosophy of the abstract concepts of pure form and numbers, and an approach to reasoning and logical argument.
MATH 103 Ethnomathematics (3)
MATH 104 Introduction to Modern Mathematics (3)
MATH 105 Mathematics and Politics (3)
MATH 107 Precalculus Mathematics (4)
MATH 111 Symmetry in the Sciences and Arts (3)
MATH 131 Introduction to Finite Mathematics (3)
MATH 141 Studies in Modern Mathematics (3)
MATH 150 Modern Geometry (3)
MATH 161 Differential and Integral Calculus I (4)
MATH 165 Elementary Applied Statistics (4)

## C. The Arts and Humanities (12 units)

The arts and humanities serve to cultivate and develop imagination, sensibility, sensitivity, and interpretive skills. They also develop
understanding of the interrelationships among the creative arts, the humanities, and the self.

Complete one course from each of the following four groups:

## 1. History of the Fine Arts, Theatre, Dance, and Music

Courses in the history of the fine arts, theatre, dance, and music study human cultural endeavors and may develop skills through hands-on experience in the fine and performing arts. An understanding of, and appreciation for, the arts helps form in a student an appreciation for manifestations of human awareness and values.

AMCS 392 Ethnic Images in Film and Media (3)*
ARTH 210 Introduction to Art History (3-4)
ARTH 211 Introduction to Art History (3-4)
ARTH 212AB Introduction to World Film History (3)
ARTH 270AB Survey of Asian Art (3-4)
ARTH 454 Nineteenth Century Art (3-4)
ARTH 460 History of American Art (3-4)
ARTH 464 History of Modern Art - $20^{\text {th }}$ Century (3-4)
ARTH 465 Modern Art from 1945 to 1979 (3-4)
CALS 368 Chicano/Latino Music (3)*
CALS 393 Chicano/Latino Cinema (3)*
CALS 479 Chicano/Latino Art History (3-4)*
MUS 105 Music Theory for Non Majors (3)
MUS 150 Survey of U. S. Music (3)
MUS 250 Survey of European Music (3)
MUS 301 Music and Technology: Then and Now (3)
MUS 343 Studies in Musical Genres (3)
MUS 344 Studies in Specific Composers (3)
NAMS 205 Introduction to Native American Arts (3)*
NAMS 338 Native Americans and the Cinema (3)*
THAR 101 Making Theatre (3)
THAR 202 Introduction to History of Drama and Dance: Origins to 1800 (3)
THAR 203 Introduction to History of Drama and Dance: 1800 to present (3)
THAR 300 Theatre in Action (3)

## 2. World Literature

World literature introduces students to great works from a variety of cultural traditions in order to develop aesthetic awareness and to expand appreciation of similarities and varieties in human experience.
AMCS 360 Ethnic Literature (3)*
CALS 374 Chicano/Latino Literature (3-4)*
ENGL 214 Literature of the World (3)
ENGL 215 Introduction to California Literature (3)
ENGL 314 Modern World Literature in English (3)
ENGL 315 California Ethnic Literature (3)*
ENGL 345 Women Writers (3)
FL 214 World Literatures in English (3)
FL 314 World Literatures in English Translation (3)
FR 314 French Literatures in English Translation (4)
GER 314 Literature and Culture from the German-Speaking World
NAMS 354 Native American Literatures (3)*

## 3. Philosophy and Values

Philosophy and values introduce students to the critical study of enduring philosophical questions about the nature of knowledge, of morality and politics, of
the self and interpersonal relations, of religion and the search for wisdom, and of the perception of reality.
AMCS 350 Ethics, Values, and Multiculturalism (3)*
CALS 352 Chicano/Latino Philosophy (3-4)*
HUM 301 War and Peace Lecture Series (3)
NAMS 346 Philosophic Systems and Sacred Movements in Native North America (3)*
PHIL 120 Introduction to Philosophy (3)
PHIL 302 Ethics and Value Theory (3)
SOCI 431 Sociology of Religion (4)

## 4. Comparative Perspectives and Foreign Languages

Comparative perspectives and the study of a foreign language introduce students to cultural traditions other than those derived from Anglo-American society in order to provide opportunities for a deeper understanding of diverse cultures and corresponding value systems.
AMCS 255 Ethnicity in the Humanities (3)*
AMCS 355 Language and Ethnicity (3-4)*
ARTH 363 Other Cinemas (3)
CALS 220 Chicano/Latino Arts and Literature (3)*
CALS 225 Spanish for Bilinguals (3-4)
CALS 451 Chicano/Latino Humanities (3-4)*
ENGL 280 Introduction to California Cultural Studies (3)
FR 101 First-Semester French (4, see note, below)
FR 102 Second-Semester French (4, see note, below)
FR 201 Third-Semester French (4)
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)
GER 101 First Semester: The Personal World (4, see note, below)
GER 102 Second Semester: Contemporary Germany (4, see note, below)
GER 200 Intermediate German: The German-Speaking World Today (4)
GER 210 Intermediate German through Film (4)
GER 300 Advanced German Studies (4)
ITDS 280 Introduction to California Cultural Studies (3)
MUS 101 Introduction to Music (3)
MUS 201 Music in Action (3)
MUS 350 Survey of World Music (3)
MUS 370 Music and Dance in the World's Religions (3)
SPAN 101 Basic Spanish, First Semester (4, see note, below)
SPAN 102 Basic Spanish, Second Semester (4, see note, below)
SPAN 201 Intermediate Spanish, First Semester (4)
SPAN 202 Intermediate Spanish, Second Semester (4)
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)
SPAN 400 Special Topics in Linguistics (4)

SPAN 401 Peninsular Literature (4)
SPAN 402 Latin American Literature (4)
SPAN 410 Spanish Translation: Theory and Practice (4)
SPAN 426 Seminar in Modern Varieties of Spanish (3)
SPAN 490 Seminar in Linguistics (4)
SPAN 491 Seminar in Literature (4)
THAR 200 Seeing Theatre Today (3)
THAR 373 Dances of the World (3)
THAR 374 Theatre of the World (3)
*Courses that fulfill the Ethnic Studies requirement are indicated with an asterisk.
Note: A first-year language course may only be selected if the student has met the high school subject requirement (two years) in another second language or if the student has completed one year of another second language at the college level.

## D. Social Sciences (15 units)

The social sciences concentrate on the description and explanation of organization, variation, and change in social practices and institutions.

Complete one course in each of the following five groups:

## 1. Individual and Society

Individual and society focuses on the personal and social development of the individual and on the person's relation to social institutions. It includes theoretical explanations of the individual's social relationships in groups, in societies, and across nations.
AMCS 210 Ethnic Groups in America (4)*
AMCS 339 Ethnic Groups and American Social Policy (3)*
ANTH 203 Introduction to Cultural Anthropology (3)
CALS 219 Chicano/Latino Identity and Heritage (3)*
CALS 339 Chicanos/Latinos in U.S. Society (3-4)*
CCJS 201 Criminal Justice and Public Policy (4)
EDUC 417 School and Society (3)
GERN 319 Aging and Society (4)
NAMS 200 Introduction to Native Americans (3)*
PSY 250 Introduction to Psychology (3)
PSY 303 The Person in Society (3)
PSY 326 Social Psychology (4)
SOCI 201 Introduction to Sociology (3)
SOCI 319 Aging and Society (4)
SOCI 326 Social Psychology (4)
SOCI 375 Classical Sociological Theory (4)
WGS 375 Gender, Race and Class (3)*

## 2. World History and Civilization

World history and civilization examines the development of human societies from their earlier forms into major civilizations. It studies the political, social, economic, and cultural developments within these communities and their impact on, or relations with, other cultures.
ANTH 341 Emergence of Civilizations (3)
GEOG 203 Cultural Geography (3)
HIST 201 Foundations of World Civilization (3)
HIST 202 Development of the Modern World (3)
HIST 380 20th Century World (3)

## 3. United States History

United States history seeks to provide a basic understanding of the continuity of the American experience and its derivation from other cultures, including political and economic dimensions, social movements, and human-environment relationships. Satisfies state code requirement in this subject area.
HIST 241 History of the Americas to Independence (3)
HIST 242 History of the Americas since Independence (3)
HIST 251 History of the United States to 1877 (3)
HIST 252 History of the United States since 1865 (3)

## 4. US Constitution and California State and Local Government

U. S. Constitution and California state and local government acquaint students with the political philosophies upon which the U.S. Constitution is based and the rights and obligations of citizens under that Constitution. It also addresses the evolution of federal-state relations and the political processes in contemporary California state and local governments. Satisfies state code requirement in this subject area.
POLS 200 The American Political System (3)
POLS 202 Issues in Modern American Politics (4)

## 5. Contemporary International Perspectives

Contemporary international perspectives studies major economic and political dimensions of human activity, including consideration of differential access to natural resources, wealth, and power within and among the world's nations.
ECON 204 Introduction to Macroeconomics (4)
ECON 426 Seminar in the History of Economic Thought (4)
ENSP 200 Global Environmental Issues (3)
GEOG 302 World Regional Geography (4)
LING 200 Introduction to Linguistics Studies (3)
POLS 201 Ideas and Institutions (4)
POLS 315 Democracy, Capitalism, and Socialism (3-4)
SOCI 305 Perspectives on the Holocaust and Genocide (4)

## E. The Integrated Person (3 units)

Integrated person courses are designed to study both processes affecting the individual, such as psychological, sexual, or physiological changes throughout the human life cycle, and the interactions between the individual and society. Focus is on the integration of disciplinary knowledge and personal experience with an appreciation of the duties and rights of a citizen with a rich public and personal life.
ANTH 318 Human Development: Sex and the Life Cycle (3)
ANTH 340 Living in a Pluralistic World (3)
BIOL 318 The Biology of Aging (3)
CALS 403 Chicano/Latino Youth and Adolescents (3-4)*
EDMS 420 Child Development: Family, School, and Community (3)
GEOG 338 Social Geography (3)
GERN 300 The Journey of Adulthood (3)
GERN 317 Emotions and Adult Life (4)
KIN 217 Personal Fitness and Wellness (3)
KIN 316 Women in Sport: Issues, Images, and Identities (3)
NURS 480 Health, Sexuality, and Society (3)
PSY 302 Development of the Person (3)
SOCI 317 Emotions and Adult Life (4)
WGS 280 Women's Bodies: Health and Image (3)

WGS 285 Men and Masculinity (3)
WGS 350 Gender, Sexuality, and Family (3-4)
\# Indicates laboratory course.

+ Meets Areas B2 or B3 for biology majors, minors, or other majors needing courses for upper-division Biology.
* Meets ethnic studies requirement.

Total minimum units in general education: 51 , to include the following:

- Nine units in residence at SSU;
- Nine upper-division units, taken either by enrollment in an upper-division thematic block or by choosing upper-division courses in at least two of the four areas (B-E). Thematic blocks are a total of 9 units of integrated coursework clustered around a theme. These courses must be taken as a group to meet the upper-division requirement. Consult the GE section of the Schedule of Classes for a description of the thematic blocks that are offered each semester;
- An approved science laboratory; and
- One course in ethnic studies. Ethnic studies courses are indicated with an asterisk.*


## Linked Courses: Visions of California

This linked course program of three courses provides an historical, geographical, literary, and cinematic view of the relationship of California ethnic groups to the land and cityscape, to formative regional experiences (i.e., the Watts Rebellion, the Japanese-American Internment, the Gold Rush), and to the production of a culture that is uniquely Californian. A thematic focus course must be taken in the first semester of participation in the linked courses program.

Further information is available from the program coordinator, Robert Coleman-Senghor, English Department, (707) 664-2903.

## The Hutchins School Interdisciplinary Option

The lower-division general education requirements can be met by taking the four Hutchins School interdisciplinary seminars of 12 units each and 3 units of mathematics. The seminars are: LIBS 101 The Human Enigma; LIBS 102 In Search of Self; LIBS 201 Exploring the Unknown; and LIBS 202 Challenge and Response in the Modern World. These 48 units are taken Cr/NC. Any additional $\mathrm{Cr} / \mathrm{NC}$ courses will not count toward the 120 units required for the degree. In addition, 9 units of upper-division general education courses must be completed. The subject matter preparation options (Tracks II and III) in the Hutchins major lead to automatic completion of these 9 units. For students in the interdisciplinary studies option (Track I) in the Hutchins major, 3 of the 9 units will be met with a course from the Core D category. The remaining 6 units must be selected from upper-division courses in areas B-E of the University-wide general education program.

## Graduate Degrees

Graduate education at Sonoma State University provides opportunities for students to develop the ability to conduct independent study and research and to enhance their professional competence in their field of interest. In order to accommodate students who are unable to pursue graduate work on a full-time basis, many master's programs at the University are scheduled to allow completion of degree requirements on a part-time basis over several semesters.
Descriptions of the following graduate programs are contained in academic department listings:

## Residence Master's Degree Programs

## Biology

## Business Administration

Counseling

- Marriage, Family, and Child Counseling (M.F.C.C.)
- School Counseling (P.P.S.)

Cultural Resources Management (Anthropology)
Education (five options)

- Curriculum, Teaching, and Learning
- Early Childhood Education
- Educational Administration
- Reading and Language
- Special Education


## English

History
Interdisciplinary Studies
Kinesiology
Nursing

- Family Nurse Practitioner
- Nursing Leadership and Management

Public Administration

## Special Sessions Master's Degree Program

Computer and Engineering Science
Interdisciplinary Studies

- Action for a Viable Future

Psychology

- Depth
- Organization Development
- Special Interest Area

Spanish

## Graduate Admission Requirements

Admission requirements and procedures for graduate students are described in the Admissions section in this catalog. Admission to the University with unclassified post-baccalaureate standing does not in any way constitute admission to, or assurance of consideration for admission to, a graduate degree or credential program. Two admissions procedures are involved in pursuing graduate work at the University: 1) admission to the University; and 2) admission to the department offering the degree or credential program in which the
student is interested. Students should, therefore, contact both the relevant department and the Admissions Office, (707) 664-2778.

## Change in Graduate Standing

Many students are admitted to the University in conditionally classified standing with contingencies to remove prior to becoming a classified student. This admission does not guarantee a space in the graduate program. Such a guarantee is obtained by a change in graduate standing to classified status verified by the program in question. Each department has its own procedures for evaluating the appropriateness of granting the student a place in their program. At the time this status is confirmed, a form is filed with the Admissions and Records Office and the Graduate Studies Office confirming the department's approval of this change in status.

## Advancement to Candidacy

Master's degree students are advanced to candidacy when the department has assessed the academic and professional capacities of the student and is convinced that the student has the competence to complete all requirements for the degree, including the culminating project. Advancement to candidacy is done by filing the Advancement to Candidacy form (GSO1), which describes the culminating project, is approved by all of the members of the student's thesis committee, and is reviewed by the Vice Provost for Academic Affairs. Culminating projects, including theses, investigative projects, creative projects, and curriculum projects, are approved by the department and reviewed by the Graduate Studies Office prior to clearance for the degree. These projects are then published by the Sonoma State Library and become part of its permanent collection.

## Completion of the Written English Proficiency Requirement

In order to ensure that graduate students possess the ability to communicate effectively in written English, advancement to candidacy will be contingent upon fulfillment of either the Written English Proficiency Test or departmentally administered review procedures that have been approved by the graduate studies subcommittee and placed on file with the Graduate Studies Office.

## General Requirements for the Master's Degree

Master's programs require a minimum of 30 semester units of approved coherent coursework. 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.

## Other University-wide criteria:

1. A classified student must demonstrate, throughout enrollment in the graduate program, the level of competence required to be successful in the completion of the requirements. This evaluation of competence is primarily the responsibility of faculty actively teaching in the program.
2. Advancement to candidacy is required and should be done when the student enters the final phase of the program. Departments vary in the way they evaluate student competency and in what is required to advance the student to candidacy for the degree.
3. No fewer than one-half of the total units required shall be in graduate ( $500-$ level) coursework.
4. At least 21 semester units shall be completed in residence.
5. No more than 6 semester units shall be allowed for a thesis or project.
6. No more than 30 percent of coursework shall be allowed in transfer, including work done through Extended Education.
7. No credit toward a master's degree will be given for student teaching in a credential program.
8. At the discretion of the department, up to one-third of the total program units may be in a nontraditional grading mode (credit/no credit).
9. No classes completed as an undergraduate may be used except those granted provisional graduate credit prior to award of the baccalaureate degree.
10. The candidate must complete a thesis, project, or comprehensive exam as required by the department. Culminating projects that are published by the library require review by the Graduate Studies Office, as well as final approval by the student's faculty committee.
11. A public defense of the thesis or project is required.
12. The student has four semesters to complete the thesis/ project, including the first semester of enrollment for thesis units. The SP (satisfactory progress) grade will remain until the student submits the culminating project. Projects taking more than four semesters to complete will require an approval for extension by the Associate Vice President for Academic Programs or may require reapplication to the program and re-enrollment in the units.

## Continuous Enrollment Policy

Graduate students who have completed their coursework or who have begun to work on their thesis or other final project must be enrolled each additional semester through one of the following mechanisms:

1. Those students who wish to maintain eligibility for financial aid and use the full resources of the University should maintain regular half-time enrollment and pay half-time fees. Graduate programs create enrollment opportunities for these students by providing mechanisms such as sections of 535 (Directed Writing) or 599 (Research and Thesis) in the regular class schedule, or by allowing students to enroll in 595 (Special Studies) through the regular registration procedure.
2. Those students who do not seek the full services of the University may maintain enrollment through Extended Education and pay a continuation fee of $\$ 250$ per semester. The fee maintains their place in their academic program and provides library privileges.
3. With the support of their graduate advisors, those students who, due to extraordinary circumstances, cannot continue work on their programs may seek special consideration by petitioning the Graduate Studies Office for a leave of absence for a defined period of time not to exceed two years. This petition process would not extend the seven-year limitation on coursework applied to the degree.

Students who allow their enrollment to lapse without taking a leave of absence will be considered to have withdrawn from the University and from their degree program. Should such students decide to return, they will be required to apply for readmission and, as a condition of readmission, shall be assessed a continuing enrollment fee of $\$ 250$ for every regular semester of the period during which they were absent from the University.

## Provisional Unclassified Graduate Status for Senior Students

Students who plan to complete upper-division or graduate-level courses in their final semester may petition for provisional unclassified graduate credit for such courses. Courses required for the baccalaureate will not be granted this provisional status. The petition must be filed at the same time as the application for award of the degree. Teaching credential candidates should consult the Department of Education about the advisability of such a petition. Provisional unclassified postbaccalaureate credit can be granted only for upper-division and graduate-level courses and will be recorded in the student's academic record as earned prior to the award of the baccalaureate. Such credit is applicable to graduate objectives at the discretion of the relevant academic department. Should requirements for the baccalaureate not be completed by the date specified on the application, the petition for postbaccalaureate credit becomes null and void.

## Courses that may be included in a Master's Program

300-499 Upper-division courses may be acceptable for graduate credit. See Provisional Unclassified Graduate Status for Senior Students, above.
500-599 Graduate courses.

## School of Arts and Humanities

## DEAN

William Babula
SCHOOL OFFICE
Nichols Hall 380
(707) 664-2146

## DEPARTMENTS

American Multicultural Studies
Art and Art History
Chicano and Latino Studies
Communication Studies
English
Modern Languages and Literatures
Hutchins School of Liberal Studies
Music
Philosophy
Theatre and Dance
PROGRAMS
California Cultural Studies
Film Studies
Native American Studies
This diverse school strives to combine education in the arts and humanities with student career goals. In the arts, instructional programs include applied arts, studio art, creative writing, music, dance, technical theatre, and theatre arts. Programs in the humanities include American multicultural studies, art history, California cultural studies, English, French, German, Spanish, communication studies, Chicano and Latino studies, Native American studies, and philosophy. The School of Arts and Humanities also houses the Hutchins School of Liberal Studies and a variety of pre-law programs and provides numerous opportunities for service-learning experiences and internships, as well as study abroad.

The Hutchins School, American Multicultural Studies, and the Department of Chicano and Latino Studies offer subject matter preparation programs for students who intend to enter teaching credential programs and to teach in elementary schools. Several departments and programs, including art, English, Spanish, Chicano and Latino Studies, and music, offer subject matter preparation programs that lead to secondary, or single subject, teaching credential programs. Several of these departments offer either blended or integrated programs that allow incoming first-year students to achieve both a bachelor's degree and a teaching credential in four to four-and-ahalf years. The English Department offers M.A. work in literature, creative writing, and the teaching of writing.

The school also oversees the Center for Performing Arts, which features music and theatre arts departmental productions as well as guest artists in the state-of-the-art Person Theatre; the University Art Gallery, with nationally recognized shows and exhibits; the Sonoma Film

Institute; the Writers Lecture Series, which has brought individuals such as Tom Wolfe and Edward Albee to campus; the Arts and Humanities Forum and various lecture series; KSUN, the campus radio station; the Sonoma State Star, the student weekly newspaper; Detour Sonoma, the SSU video magazine; DDU-TV, the campus cable network; Zaum, the campus literary journal; Volt, a nationally distributed literary journal; the Hutchins Center for Interdisciplinary Teaching and Learning; and an annual Language Festival. The world-class Green Music Center with a symphony hall and recital hall is currently under construction.

The school faculty is committed to excellence in teaching and a strong academic advising program. Special emphasis is given to programs that combine traditional arts and humanities majors with career-oriented minors; such programs include art with business, modern languages with global studies, music with computer theory, American multicultural studies with criminal justice administration and business, philosophy and computer science, among others. Supporting career goals while building upon the arts and humanities, the school provides an education that allows students to develop their ability to think critically and communicate clearly, the best preparation for a challenging technological future in a constantly changing world.

## School of Business and Economics

DEAN
William Silver
SCHOOL OFFICE
Stevenson Hall 2034
(707) 664-2220

DEPARTMENTS
Business Administration
Economics
The School of Business and Economics offers coursework and degree programs that prepare students for professional careers in business and economics. Students are exposed to alternative viewpoints concerning the analysis of organizational, social, and economic problems, including both quantitative and qualitative approaches. Emphasis is placed upon the role and responsibilities of decision makers within a complex and ever-changing environment including consideration of ethical and globalization issues.

The School of Business and Economics includes the departments of business administration, whose programs are accredited by AACSB, and economics. Business administration majors benefit from the General Education requirements of the University and then are provided with a broad program of study that involves an integrative set of required core courses, a field of concentration for focus in a subdiscipline, with a choice of electives. Economics majors receive a firm foundation of undergraduate study in a liberal arts tradition that serves as a sound preparation for graduate school as well as professional careers in economics.

The undergraduate programs of the School of Business and Economics are intended, principally, for those seeking entry into the professional fields in business and economics. The M.B.A. program is designed for those individuals interested in professional advancement through the intensive study of business at the post-baccalaureate level.

The North Bay Economic Outlook Conference is a partnership of representatives from organizations in both the public and private sectors. Each year, the school organizes and conducts a regional conference that examines and analyzes contemporary, critical issues.
Within the School of Business and Economics, several organizations exist to serve special needs. The Wine Business Program provides world-class, cutting-edge business solutions for the wine industry. It is a globally respected resource for knowledge, education, and research within the wine industry. It supports the wine industry by providing world-class, cutting-edge research, continuing education courses, an undergraduate program, and an MBA program. The Center of Regional Economic Analysis provides high quality research, data, and analysis for local industry and governments. The center produces and disseminates new information in the general area of economic research and specific areas of business and economics, local and regional economic development, and fiscal policy.

## School of Education

DEAN
Mary Gendernalik-Cooper
SCHOOL OFFICE
Stevenson Hall 1078
(707) 664-3115/2132

CREDENTIALS OFFICE
Stevenson Hall 1078
(707) 664-2832

DEPARTMENTS
Curriculum Studies and Secondary Education
Stevenson Hall 1078
(707) 664-4203

Educational Leadership and Special Education
Stevenson Hall 1078
(707) 664-4203

Literacy Studies and Elementary Education
Stevenson Hall 1078
(707) 664-3238

The mission of the School of Education at Sonoma State University is to advance excellence in the education profession through the professional preparation of teachers and educational leaders. Central to this mission is the offering of exemplary professional education programs based on sound theory and practice, current research, sensitivity to the needs of P-12 education, appreciation for diversity,
and respect for all learners. It also includes the School's active role in the social and educational growth of the communities we serve through various partnerships, projects, and initiatives.
Programs in the School of Education prepare graduates for Level I (beginning) and Level II (advanced) teaching credentials in multiple subject (elementary), single subject (middle level/secondary), and special education (Education Specialist, mild/moderate or moderate/ severe). In addition it offers Level I (certificate) and Level II (credential) programs in Reading and Language Arts and the Level I and Level II credentials for Educational Administration. All credential programs are fully accredited by the California Commission on Teacher Credentialing, and the unit is accredited by the National Council for Accreditation of Teacher Education.
The School of Education offers an M.A. degree in Education with concentrations in curriculum, teaching, and learning; early childhood education, educational administration, reading, and special education, and offers a joint Ed.D. in educational leadership in partnership with the University of California, Davis. While School of Education programs are designed primarily for positions in public schools, graduates are prepared to work in non-teaching positions in education or related human service fields in both public and private sectors.
University coursework and field experiences provide rich learning opportunities for our students. In line with our mission of excellence in education, our vision of our graduates is that they:

- Are agents of individual growth and social change as well as models and advocates of the broader intellectual and social values of a democratic society;
- Are knowledgeable and thoughtful about the content and methodology in their fields of emphasis;
- Promote social, emotional, and moral growth and learning in their classrooms, schools, and communities, and respect and encourage the contributions of families and caregivers in the education of children and youth;
- Design and carry out inclusive educational practice that respects human differences and aims to educate all learners; and
- Continually use inquiry, observation, study, and reflection to improve their practice as educators.

Coursework and field experiences in the School of Education emphasize the complex interaction of learning and teaching in the context of the diversity of California schools. Current educational theory and research provide the foundation for course and program offerings, with implications for practice drawn from theory/research and the realities of life in classrooms and schools. All programs provide substantive time for students to be in schools student teaching, intern teaching, or serving as administrative interns. The School of Education works closely with area schools and school districts in a variety of partnerships. School of Education faculty collaborate with faculty in other departments and schools across the University in subject matter preparation, pedagogy, and field experiences.

Admissions requirements are informed and regulated by the CSU as well as State and National Accrediting agencies. Prospective students should review the School of Education website regularly for current admissions requirements.

## School of Extended Education

DEAN
Mark Merickel
SCHOOL OFFICE
Stevenson Hall 1012
(707) 664-2394
www.sonoma.edu/exed/
The mission of the School of Extended Education is to support and complement the overarching institutional goals of Sonoma State University. The rapidly changing educational needs of lifelong learners has focused the mission of Extended Education on three critical elements of SSU's future: the development of sustainable infrastructure and relevant inventory of programs that will serve and support the needs of the growing diverse SSU student population; the enhancement of collaborative relationships with the local communities and the surrounding region to foster educational, social, cultural, and economic development; and the generation of revenue sources that will support the academic partners of Extended Education and help mitigate the impacts of the loss of state funding for higher education.

## Professional Certificate Programs

Child/Infant Mental Health
Conflict Resolution
Construction Management
Event and Meeting Planning
Green Building Professional
Human Resource Management
Legal Court Interpreter
Management and Supervision
Paralegal
Sustainable Landscape Professional

## Special Programs

EXCEL: a program for talented young students grades 4-9
Greenfarm: Summer Arts and Education Program
Osher Lifelong Learning Institute: a program of intellectually stimulating courses taught by distinguished emeritus faculty and regional experts for people ages 50 or older
Sonoma State American Language Institute: an intensive English program which prepares international students and foreign residents for successful academic study and careers
Wine Business Program: a series of professional development short courses pertaining to the wine industry under the auspices of the Wine Business Program in the School of Business and Economics
Educational Travel Programs: "learning vacations" with first-class accommodations, knowledgeable escorts, and local and national
guides to destinations such as Italy, China, Greece, Kenya, and Antarctica

## Degree Programs

Liberal Studies B.A. Degree Completion
B.A. Liberal Studies Napa Valley

Interdisciplinary M.A.:

- Action for a Viable Future
M.A. in Psychology
- Organization Development
- Depth Psychology
M.A. in Spanish (pending approval)
M.S. in Computer and Engineering Science

Post-master's family nurse practitioner certificate

## Continuing Education for the Professions

Coursework is offered each semester that fulfills continuing education requirements for attorneys, paralegals, licensed psychologists, counselors, social workers, nurses, and teachers.

## Summer Session

Summer Special Session offers University credit coursework featuring courses that count toward graduation. In addition to certificate program offerings, Summer Extension presents a selection of credit and non-credit professional development coursework for educators and mental health clinicians. A special feature is EXCEL, a unique enrichment program for young people in grades 4-9, offering a variety of academic, technical, and creative subjects to augment traditional offerings during the school year.

## January and August Intersession

Three-week intensive programs during the break between semesters featuring a selection of University courses.

## Open University

Through Open University, also known as concurrent enrollment, students may enroll without formal admission in resident courses offered at the University. Students are encouraged whenever possible to apply for acceptance into the resident program, but Open University may be available to those for whom such enrollment is not possible or appropriate, such as:

- High school juniors and seniors;
- Professionals seeking to upgrade skills, maintain licenses, or make career changes;
- Those with personal interest in a particular subject who have no degree objective; and
- Those interested in exploring college coursework before committing themselves to a degree program.

Registration fees are the same for in-state and out-of-state residents. Up to 24 units of academic credit taken through Open University may be applied toward a bachelor's degree, and up to 9 units may be applied toward a master's degree.

Complete program information is published each semester in the Extended Education catalog and on the Web at www.sonoma.edu/ exed. Free copies, as well as brochures detailing the many specialized programs, are available in the Extended Education office.

## School of Science and Technology

## DEAN

Saeid Rahimi
SCHOOL OFFICE
Darwin Hall 115
(707) 664-2171
www.sonoma.edu/scitech
DEPARTMENTS AND PROGRAMS
Biology
Chemistry
Engineering Science
Computer Science
Geology
Kinesiology
Mathematics and Statistics
Nursing
Physics and Astronomy
The curriculum offered in the School of Science and Technology meets the professional needs of students planning a career in sciences, computer and engineering science, mathematics, nursing, and kinesiology. The school also covers the needs of students in the schools of Arts and Humanities, Social Sciences, Business and Economics, and Education. Many of the general education courses offered in the school are directly beneficial to the general SSU students.

Students with career goals in fields such as business, management, law, and urban planning may find courses in mathematics, statistics, or computing essential to their future. In addition, the School of Science and Technology offers a rich selection of studies that can enhance a student's entire life. Courses in kinesiology, astronomy, biology, geology, and computer science can provide a basis for lifelong pursuits and enrichment.
Students preparing for careers in science and engineering, mathematics, statistics, or the health professions may follow quality programs in any of the school's nine departments and programs. Students interested in medical, dental, veterinary, and other graduate schools in the health professions may enroll in any of the science departments to complete their undergraduate work. Sonoma State pre-health students' success rates in entering medical schools are well above national averages.
The new Bachelor of Science in Engineering Science (BSES) program has a primary focus in Electronics and Communications and will prepare students for an exciting career in areas such as communications systems and networks, microprocessors and computers, and design and manufacturing of electronic systems. The graduates of this program may choose to have a rewarding and
successful career in the high technology industries in the region and beyond, or enter an advanced-level graduate program of their choosing.
The Nursing Department offers both undergraduate and graduate programs. Since the department enjoys a close relationship with the health community within the service area, students are provided with a variety of clinical opportunities in the hospital setting and other health care agencies prior to completion of their program. Many nursing graduate courses are delivered by distance learning methods and a significant number of nursing graduate students live and study outside Sonoma County.
The School of Science and Technology provides an excellent preparation for future mathematics and science teachers at the elementary and secondary level. The B.A. Program for secondary teaching in mathematics is fully accredited by the California Commission on Teacher Credentialing. Many departments, including Chemistry, Biology, Mathematics, and Statistics offer courses especially designed to prepare future elementary teachers. Faculty also work with local schools and county education agencies on many grant-funded projects to improve the math and science education of $\mathrm{K}-12$ students.
The school's dedicated faculty as professional scientists, engineers, mathematicians, and health professionals are proud of the education they provide and of the accomplishments of their students. Graduates have established excellent records; some have earned national awards, many have earned advanced degrees, and virtually all have found excellent employment opportunities.
The four master's programs in biology, computer and engineering science, kinesiology, and nursing provide graduate students with a wide variety of opportunities ranging from research to clinical studies. In certain departments, graduate students are also provided with teaching or research assistantships. Sonoma State University is surrounded by many high tech industries and centers, which include telecommunications, electronics, optics, biotechnology, and bioinformatics. In addition to our resident faculty, a number of scientists and engineers from our local high tech industry participate in exciting graduate and undergraduate research activities in the school. The Department of Mathematics and Statistics participates in a cooperative masters program with San Francisco State University. Students may complete part of their coursework in residence at Sonoma State University before completing their degree at San Francisco State University.
A $\$ 29$ million remodeling project has turned the main science building Darwin Hall, which houses the departments of Biology, Chemistry, Computer Science, Geology, Mathematics, and Physics and Astronomy, into a state-of-the-art science building consisting of smart classrooms, lecture halls, laboratories, and computational facilities. Additionally, millions of dollars have been invested in the school's new Cerent Engineering Science laboratories located in Salazar Hall. The new laboratories feature many advanced instruments, which are available to undergraduate and graduate students interested in the fields of biology, chemistry, computer science, engineering science, geology, and physics.

School of Social Sciences

DEAN
Elaine Leeder
SCHOOL OFFICE
Stevenson Hall 2078
(707) 664-2112

DEPARTMENTS
Anthropology
Counseling
Criminology and Criminal Justice Studies
Environmental Studies and Planning
Geography and Global Studies
History
Liberal Studies (Ukiah)
Political Science
Psychology
Sociology
Women's and Gender Studies
The social sciences are intimately concerned with human behavior in all its complexity and with the many kinds of social relationships that influence us as we grow and change as unique individuals throughout our lives. To comprehend adequately the state of the human condition, the interaction of people and environment - past, present, and future - must be examined. Social scientists are interested in discovering the ways people are affected by their associations with various human groups, both large and small, including the multiplicity of organizations and institutions that characterize modern society. Through the social sciences, the history of social institutions and the continuing process of social change are studied.

The School of Social Sciences at Sonoma State encompasses a particularly interesting combination of departments and programs. A student can choose from a variety of opportunities, ranging from the core of "traditional" social science fields with an emphasis on applications (anthropology, geography, history, political science, psychology, and sociology), to various cross-disciplinary programs (environmental studies and planning, gerontology, linguistics, women's and gender studies, and human development), to programs with a professional emphasis (counseling, criminology and criminal justice studies, Teaching English as a Second Language, and public administration).
The school also coordinates the Social Science Single Subject Preparation Program and oversees several respected centers and institutes, including the Anthropological Studies Center, the Center for Holocaust Studies, the Geographic Information Center, and the Institute for Community Planning Assistance. These centers and institutes generate a number of contracts and grants that come to the University and provide many paid student internships in a large variety of funded projects.
All social science programs permit enough flexibility to allow students to select some sciences, and a number of students make arrangements to carry two majors. Students in the social sciences have opportunities to study with faculty who are working in a wide spectrum of interests, including such areas as human services, demography, multicultural education, and energy studies.

At Sonoma State, a special working relationship between the liberal arts and sciences and professional social science fields has been developed. The University's goal is to teach students to become sensitive and skilled leaders who will strive toward the achievement of a more enlightened and egalitarian society.


## ACADEMIC PROGRAMS • UNIVERSITY CURRICULA

| Course Numb | g System |
| :---: | :---: |
| 0-99 No academic credit/prebaccalaureate course. <br> 100-299 Lower division. <br> 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 |
| CS | Computer Science |
| CES | Computer and Engineering Science (M.S.) |
| COUN | Counseling |
| CCJS | Criminology and Criminal Justice |
| EDCT | Education: Curriculum and Teaching |
| EDEC | Education: Early Childhood Education |
| EDEL | Education: Leadership |
| EDMS | Education: Multiple Subject |
| EDRL | Education: Reading and Language |
| EDSS | Education: Single Subject |
| EDSP | Education: Special Education |
| ECON | Economics |


| EDUC | Education |
| :--- | :--- |
| ENGL | English |
| ENSP | Environmental Studies and Planning |
| ES | Engineering Science |
| FILM | Film Studies |
| FR | French |
| GEOG | Geography |
| GEOL | Geology |
| GER | German |
| GERN | Gerontology |
| GLBL | Global Studies |
| HD | Human Development |
| HIST | History |
| ITDS | Special Major/Interdisciplinary Studies |
| LIBS | Hutchins School of Liberal Studies |
| KIN | Kinesiology |
| LING | Linguistics |
| MATH | Mathematics |
| MUS | Music |
| NAMS | Native American Studies |
| NURS | Nursing |
| PHIL | Philosophy |
| PHYS | Physics |
| POLS | Political Science |
| PORT | Portuguese |
| PSY | Psychology |
| SCI | Science |
| SSCI | Social Science |
| SOCI | Sociology |
| SPAN | Spanish |
| SELD | Supplemetary English Language Development |
| THAR | Theatre Arts |
| UNIV | University Courses |
| WGS | Women's and Gender Studies |
|  |  |

# AMERICAN MULTICULTURAL STUDIES 

DEPARTMENT OFFICE
Nichols Hall 214
(707) 664-2486
www.sonoma.edu/depts/amcs
DEPARTMENT CHAIR
Michael Ezra
ADMINISTRATIVE COORDINATOR
Perce Smith

## Faculty

Michael Ezra / African American History \& Culture; 20th Century US History; Race Relations; Sport History; Popular Culture
*James E. Gray / Cultural Theory; Ethnic Images and the Media; Health \& Culture/Medical Anthropology; African American Literature; Language \& Culture; African American Cinema; Cultural Identity; Methodology
Elenita Strobel / Transformative Education; Postcolonial Studies; Race, Ethnicity \& Race Relations; Globalization Studies; Language, Culture \& Identity
Christina Baker / Education; Race and Gender; Mass Media and Society; Race/Ethnicity and Identity
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Arts in American Multicultural Studies
Minor in American Multicultural Studies
American Multicultural Studies (AMCS) is devoted to the interdisciplinary study of ethnic and racial minority groups in the United States. A variety of courses focus on the historical, sociological, cultural, and ideological aspects of American ethnicity.
The program is designed to equip students with the knowledge and skills they will need to meet the ongoing challenge of living in a culturally and ethnically diverse society. AMCS students receive basic instruction in how to recognize and engage the underlying assumptions that guide our thinking about race, ethnicity, and multiculturalism. They will explore arts and literature, language, and philosophy. Additionally, they will examine historical, political, social, educational, economic, and cultural developments that affect ethnic and racial minority communities in the United States.
Through a critical study of the significance of the constructions of ethnicity and race in shaping social relationships in the United States, AMCS students are introduced to modes of intercultural learning and understanding that help them to develop the knowledge and sensitivities needed for the enhancement of multicultural communication. By examining the arts, literature, language, and philosophy of ethnic groups, students learn to appreciate the moral
and aesthetic values of others. Moreover, through an interdisciplinary approach, they come to a clearer view of the historical importance of ethnic identity in America and to a deeper understanding of the impact ethnic groups have had on America generally, the social thought, practice, and institutions.

## Careers in American Multicultural Studies

AMCS offers an innovative four-year B.A./teacher credentialing program. Students who complete the pre-approved curriculum will receive a simultaneous B.A. and CLAD certification. This academically rigorous program will allow students to receive both their Bachelor of Arts and a teaching certification in four years. With this program future teachers will be able to avoid an additional year of postgraduate training. The program combines classes in AMCS and education and provides extensive field training so students will be able to use pedagogical theory as well as practical experience. They will have the preparation needed to instruct and mentor an increasingly diverse student population.
The major prepares individuals to function effectively in the fields of education, personnel administration, business, law, human resources, public health, public relations, social services, and environmental planning. It provides a sound foundation for graduate work in many traditional disciplines and in emerging multidisciplinary fields of inquiry. The Department of American Multicultural Studies, through its major and minor, has the following goals:

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


## Bachelor of Arts in American Multicultural Studies

## Admission into the Major

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

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

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

## Major Core Requirements

Complete the Following 17 Units:

## AMCS 210 Ethnic Groups in America

AMCS 255 Ethnicity in the Humanities
AMCS 350 Ethics, Values, and Multiculturalism
AMCS 395 Community Involvement Program (CIP)
AMCS 480 Research and Methodology
Total Units In the Major Core
Total Elective Units
Total Major

## CIP/Service Learning

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

1. Students will do 30 hours of community service per unit received. Students may count a maximum of 4 units of CIP credit toward the AMCS major.
2. CIP advisors will request that students get a letter (on official letterhead) from their supervisors indicating their duties and the amount of time worked.
3. Students will submit a journal or a paper, two double-spaced pages per unit of CIP credit received, describing their experiences as a CIP volunteer.
4. Students are expected to keep a $\log$ of the dates and times they worked.
5. CIP advisor can give additional assignments if necessary.

## Major Electives and Repeated Courses

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

## Optional Courses in Related Fields and Departments

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

## Lower-Division Units

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

## Grading Minimums

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

## Sample Four-Year Program for Bachelor of Arts in AMCS

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| GE ENGL 101 (A2) (3) | GE AMCS 255 (C4) (3) |
| GE PHIL 101 (A3) (3) | GE AMCS 200 (A1) (3) |
| GE Elective (B1,C1,C2) (9) | GE Electives (B4, D2, D3) (9) |
| SOPHOMORE YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| GE AMCS 210 (D1) (4) | GE Elective (B3) (3) |
| GE Elective (B2) (3) | GE Elective (D4) (3) |
| Electives (8) | GE Electives (9) |
|  |  |

Fall Semester (15 Units)

Spring Semester (15 Units)
AMCS Elective (4)
AMCS 480 (4)
AMCS 350 (C3) (3)
AMCS Electives (8)
GE Electives (D5, E) (6) Elective (3)
Electives (2)
SENIOR YEAR:: 30 Units

Fall Semester (15 Units)
AMCS 395 (3)
Spring Semester (15 Units)

Electives (12)
AMCS Elective (4)

Electives (11)
TOTAL SEMESTER UNITS:: 120

## Integrated Program

## Bachelor of Arts / Teaching Certification in AMCS

Admission into the program; please see requirements for admission into the major.

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

Since this is an intensive program, students must follow closely the schedule below in order to complete a B.A. and CLAD certification in four years. Students must also pass the CBEST exam in order to take required Education courses. Several courses have equivalents that may be substituted for required classes. Please see assigned faculty advisor for a list of course equivalents. Students are required to consult with a faculty advisor every semester to ensure a timely graduation.

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

FRESHMAN YEAR:: 33 Units

| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| ENGL 101 (3) (GE A2) | AMCS 255 (3) (GE C4) (MAJ) |
| MATH 150 (3) (GE B4) | PHIL 101 (3) (GE A3) |
| AMCS 210 (4) (GE D1) (MAJ) | EDUC 250 (3) |
| BIOL 110 (4) (GE B2) | LING 200 (3) (GE D5) |
| GEOL 107 (3) (GE B1) | CHEM 107 (3) |
|  | EDUC 295 or equivalent (1) (MAJ) |
| SUMMER SESSION: Study for CBEST exam |  |
| SOPHOMORE YEAR:: 33 Units |  |


| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| Students apply for admission to credential program |  |
| AMCS 200 (3) (GE A1) (MAJ) | POLS 200 (3) (GE D4) |
| MATH 300A (3) | AMCS 350 (3) (GE C3) (MAJ) |
| HISTORY 201 (3) (GE D2) | HIST 252 (3) |
| HIST 251 (3) (GE D3) | AMCS 460 (4) (MAJ) |
| THAR 101 (3) | CALS 366 (3) (MAJ) |
| EDUC 295 or AMCS 395 (2) (MAJ) |  |
| JUNIOR YEAR:: 32 Units |  |
| Fall Semester (15 Units) | Spring Semester (17 Units) |
| ANY AMCS 300-level COURSE (3 or 4) | AMCS 445 (3) (MAJ) |
| MATH 300B (3) | AMCS 480 (4) (MAJ) |
| KINS 400 (3) | EDMS 420 (3) (GE E) |
| EDMS 470 (3) (MAJ) | EDUC 417 (3) (GE D1) |
| AMCS 360 (3) (GE C2) (MAJ) | AMCS 431 (4) (MAJ) |
| SENIOR YEAR:: 34 Units |  |

Fall Semester (17 Units)
Spring Semester (17 Units)
ART 101 or 202 (3)
EDMS 464 (2)
EDMS 463 (3)
EDMS 475 (3)
EDMS 411 (3)
EDMS 482F (10)
EDMS 474 (3)
EDMS 482S (2)
EDMS 471 (2)
EDMS 476F (3)
TOTAL UNITS FOR BA AND CREDENTIAL:: 131-132

## Notes

1. Students must take the CBEST prior to the beginning of the junior year.
2. Students need to apply for admission to the credential program during November of the sophomore year.
3. Once students enroll in the credential program, they must have an education advisor.

## Minor in American Multicultural Studies

Students must complete 20 units to fulfill requirements for a minor in American Multicultural Studies. Courses graded CR/NC are not applicable to minors awarded by the AMCS Department. Students must receive grades of C - or better to receive minor credit for courses. Core requirements:
AMCS 210 Ethnic Groups in America 4
AMCS 255 Ethnicity in the Humanities 3
AMCS 350 Ethics, Values, and Multiculturalism 3
Total Units In the Minor Core

## ANTHROPOLOGY

DEPARTMENT OFFICE
Stevenson Hall 2054
(707) 664-2312
www.sonoma.edu/anthropology
DEPARTMENT CHAIR
Karin L. Jaffe
ADMINISTRATIVE STAFF
Julie Wood, Ashley Wise, Shannon Fields

## Faculty

Carolyn Epple / Medical and Cultural Anthropology
Karin L. Jaffe / Biological Anthropology
Adrian Praetzellis / 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
Teaching Credential Preparation
Special Emphasis B.A. in Anthropology
Advisory Plan in Human Development
Advisory Plan in Biological 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 comparisons with behavior of other primate species.
- Archaeology examines our past ways of life through the interpretation of material remains, written records, and oral traditions.
- Cultural Anthropology explores the diversity of existing human ways of life, how they work, how they change, and how they interrelate in the modern world.
- Linguistic Anthropology examines the structure and diversity of language and related human communication systems.

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 helped the government of Venezuela to plan an entire new city in a previously sparsely-occupied region. Working for Xerox, cultural anthropologists assisted in product development by studying the problems office workers encountered when working with new equipment.
- 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 crime laboratories (as forensic anthropologists and expert witnesses), and in zoos and nature conservancies (as keepers and students of primates).
- Linguistic anthropologists are active and helpful in the design, evaluation, and implementation of curricula for teaching languages, whether to linguistic minorities who do not speak dominant languages or to those whose linguistic capacities differ. In Nicaragua, the emergence of a new sign language
helps us to understand how innate human predispositions to acquire language combine with social and cultural factors to produce a new sign language used by deaf Nicaraguans.
- Medical anthropologists interview indigenous peoples on meanings of disease to improve communication and quality of care among traditional healers, Euro-western caregivers, and local care receivers. In major U.S. urban areas, medical anthropologists have helped to create and document the effectiveness of needle exchange programs, reducing the spread of HIV/AIDS, while others have analyzed how stories of disease help individuals reconstruct their lives during and following a debilitating illness.
- 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 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. 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 provides students with the opportunity to participate in prehistoric and historical archaeology, geoarchaeology, the conservation and analysis of archaeological materials, local and architectural 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 ethnographic and primate film library, and computer services.

## Anthropology Scholarships

The faculty of the department contributes to an anthropology scholarship, awarded to an undergraduate major on the basis of academic achievement and commitment to the discipline. For further details, contact the department office. The David Fredrickson Research Grant is a competitive award funded by the staff of the Anthropological Studies Center and is offered annually to graduate students in Cultural Resources Management. Contact the ASC for details. The University offers another anthropology scholarship, the Conni Miller Memorial Scholarship. ASC also funds an annual scholarship in Cultural Resources Management. Contact the Scholarship Office for information.

## Bachelor of Arts in Anthropology

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

[^1]
## Major Core Requirements

Completethefollowingfourintroductorycourses. Theintroductorycourse should be completed prior to enrolling in the respective upper division subfield course.

Anth 201 Introduction to Biological Anthropology (Fall/Spring) (3)
Anth 202 Introduction to Archaeology (Fall) (3)
Anth 203 Introduction to Cultural Anthropology (Fall/Spring) (3)
Ling 200 Introduction to Linguistics (Fall/Spring) (3)
Complete the following synthesis courses during the first year of upperdivision instruction:

Anth 300 Nature, Culture, and Theory: The Growth of Anthropology (Spring) (4) Anth 342 Organization of Societies (Fall) (4)

Complete one course from each of the four subfields of anthropology as listed below. At least one subfield course must be a methods course and at leastonemustnotbeamethodscourse.Therespectiveintroductorycourse 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 305 Topics in Biological Anthropology (4)
Anth 414 Primate Behavior Laboratory (4) $\ddagger$
Anth 415 Forensic Anthropology Methods (4) $\ddagger$
Complete one of the following courses in Archaeology*:
Anth 322 Historical Archaeology (4)
Anth 325 World Prehistory (4)
Anth 326 Topics in Archaeology (4)
Anth 327 Archeaology of North America (4)
Anth 392 Research in California Prehistory (4)
Anth 420/421 Archaeology Methods: Lecture (3) and Archaeology Methods: Laboratory (1) $\ddagger$
Anth 424 Mesoamerican Archaeology Field School (4) $\ddagger$
Complete one of the following courses in Cultural Anthropology*:
Anth 345 Nature and Society: Topics in Anthropology and the Environment (4)
Anth 352 Global Issues (4)
Anth 354 Quest for the Other: Tourism and Culture (4)
Anth 358 Topics in Sociocultural Anthropology (4)
Anth 370 Cultures, Illness, and Healing (4)
Anth 372 Talk about feeling sick: Stories and metaphors of illness (4)
Anth 378 Skin, Genders, and Technologies (4)
Anth 451 Applied Ethnographic Methods (4) $\ddagger$
Anth 454 Ethnographic Field School (4) $\ddagger$

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)
Anth 480 Studies of Language Use (4) $\ddagger$

Complete the following course the spring semester prior to graduation: Anth 491 Senior Seminar

Total Units In Major Core
*At least one such course offered each semester.
$\ddagger$ Methods Course

## Major Electives

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

## Total Units In Major Electives

Total Units In the Major

## 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 latter case, we introduce them by "e.g." 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

Fall Semester (16 Units)
ENGL 101 (A2) (3)
BIOL 110 (B2) (4)
GE (C1), e.g., Art 212/ THAR 100 (3)
ANTH 203 (D1) (3)
University Elective (3)
Spring Semester (16 Units)
UNIV 200 (A1) (3)
PHIL 101 (A3) (3)
GE (D3) (3)
ANTH 201 (B3) (3)
University Elective (4)

## SOPHOMORE YEAR:: 30 Units

Fall Semester (14 Units)
ANTH 202 (3)
Spring Semester (16 Units)

GEOL 105 (B1) (3)
LING 200 (D5) (3)

Math, e.g., 165 (B4) (4)
ANTH 341 (D2) (3)

GE (C2) (3-4)
GE (D4) (3)
GE (C4) (3)
University Elective (4)

## JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| ANTH 342 (4) | 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) | GE (C3) e.g., NAMS 346/ |
|  | SOC 431 (3-4) |

## SENIOR YEAR:: Minimum of 28 Units

Fall Semester (15-23 Units)
U.D. GE (3-4)

ANTH Electives (4)
ANTH Special Studies (1-4)
ANTH Internship (1-4)
GE (E) e.g., ANTH 318/340 (3-4)
ANTH Special Studies/Internship (1-4)
University Elective (3)
TOTAL UNITS:: 120

## Bachelor of Arts in Anthropology with a Special Emphasis

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

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

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

## Procedures

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

## Course Requirements

Requirements consist of:

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


## Core Courses (15 Units)

Two of the Following Introductory Courses: ( 6 Units)
ANTH 201 Introduction to Biological Anthropology (3)
ANTH 202 Introduction to Archaeology (3)
ANTH 203 Introduction to Cultural Anthropology (3)
LING 200 Introduction to Linguistics (3)
History and Theory (4 units)
ANTH 300 Nature, Culture, and Theory: the Growth of Anthropology
Cultural Analysis and Theory (4 units)
ANTH 342 Organization of Societies
Senior Seminar (1 unit)
ANTH 491 Senior Seminar

## Special Emphasis Courses (12 Units Minimum)

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

## Supporting Courses (3 Units Minimum)

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

## Bachelor of Arts in Anthropology: Advisory Plans

## Advisory Plan in Human Development

This advisory plan, a 40 -unit major including a minimum of 11 units of supporting subjects, is designed for students interested in public service concerned with program planning, administration, education, and/or care of infants, children, adolescents, or the elderly in multicultural or cross-cultural settings. It gives students a broad background in anthropological, sociological, and psychological perspectives on human development across the life span in its various familial, social, and cultural contexts. (See Advisory Plan in Human Development, available in the Anthropology Department office, for course requirements.)

## Advisory Plan in Biological Anthropology

This advisory plan, a 40-unit major including 10 units of supporting subjects, is designed for students interested in M.A. or Ph.D. level graduate work in biological anthropology including work in forensic anthropology. The biology courses constitute the core requirements for a minor in biology; other courses in biology should be selected in accord with more specific interests. (See Advisory Plan in Biological Anthropology, available in the Anthropology Department office, for course requirements.)

## Minor in Anthropology

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

## Teaching Credential Preparation

The Anthropology 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. Anthropology majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For more information, contact Miriam Hutchins, School of Social Sciences, (707) 664-2409.

## Master of Arts in Cultural Resources Management

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

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

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

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

## Facilities and Faculty

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

## Requirements for the Degree

The design of the course of study as a $21 / 2$-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.

| 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 Praxis in National Register |  |
| of Historic Places | 2 |
| ANTH* 596/597 Internships | 3 |
| ANTH 599A/B Thesis | 4 |
| Supporting Courses | 7 |
| Total units in the CRM degree | 30 |

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

## Admission to the Program

Applications must be submitted separately in the fall to the Anthropology Department and to the Office of Admissions and Records for possible acceptance into the program the following academic year. Consult with the program's graduate coordinator for departmental requirements and submissions, as updated in the fact sheet Admission to the Cultural Resources Management Program in Conditionally Classified Status. While archaeology is a focus, the program emphasizes CRM as an interdisciplinary profession. Students with degrees in history, geography, and planning, as well as anthropology, are frequently accepted.

## APPLIED ARTS

PROGRAM ADVISORS AND OFFICES
Jeff Langley / Performing Arts
Ives Hall 207
(707) 664-4404

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

Stephen Galloway / Art Department
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)

## English

ENGL 342 Children's Literature
One literary genre course selected from the following:
ENGL 367 Introduction to Short Story (3)
ENGL 369 Introduction to Poetry (3)
ENGL 371 Introduction to Novel (3)
ENGL 373 Introduction to Drama (3)

## Music

MUS 105 Music Theory for Non-Majors3
Any combination of the following, to total 3 units: ..... 3
MUS 325 SSU Chorus (1). May be repeated for credit. orMUS 327 Symphonic Wind Ensemble (1) May be repeated for creditMUS 400 Music for the Classroom (2)MUS 115/415 Voice Methods (1)MUS 118/418 Guitar Methods (1)
Theatre Arts
THAR 101 Making Theatre ..... 3
THAR 300 Theatre in Action ..... 3
THAR 460 Drama for Children ..... 2 and
THAR 120 Acting: Fundamentals ..... 2
THAR 470 Dance for Children ..... 2 and
THAR 110 Dance Fundamentals ..... 1
Total units in activity courses ..... 9
Concentration CoursesTo earn the minor in Applied Arts, students must also complete a 9-unitconcentration in one of the three fields previously selected. The following areconcentration courses:
Art
ARTS 400 Art in the Classroom ..... 3
ARTH 210 or 211 Introduction to Art History ..... 3
ARTS Additional activity courses ..... 3
English
Any three upper-division creative writing courses, including at least two genres,and ENGL 342 if not taken previously.
Music
MUS 105 Music Theory for Non-Majors ..... 3
One of the following
MUS 150 Survey of US Music ..... 3
MUS 250 Survey of Western Music ..... 3
MUS 350 Survey of World Music ..... 3
3 units of the following (each may be repeated for credit)
MUS 323 Chamber Singers ..... 1
MUS 324 Sonoma County Bach Choir ..... 1
MUS 325 SSU Chorus ..... 1
MUS 326 Classical Guitar Ensemble ..... 1
MUS 327 Symphonic Wind Ensembles ..... 1
MUS 329 Chamber Music Ensembles ..... 1
MUS 330 Music Theatre Production ..... 1-3
MUS 379 Contemporary Jazz Ensemble ..... 1
MUS 391 Concert Jazz Ensemble ..... 1

## Theatre Arts

THAR 102 Introduction to the History of Drama and Dance: Origins to 18003
THAR 103 Introduction to the History of Drama and Dance: 1800 to the Present 3
THAR 300 Theatre in Action 3
THAR 301 Dance Ensemble 3
THAR 302 Drama Ensemble Workshop 3
THAR 110 Dance Fundamentals 1
THAR An appropriate selection of technique courses chosen in
consultation with an advisor
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
Stephen Galloway
ADMINISTRATIVE COORDINATOR
Cindy Menghini

## Faculty

Stephen Galloway
Nathan Haenlein
Kurt Kemp
*Susan McKillop
Susan Moulton
Jann Nunn
Mark Perlman
Jennifer Roberson
Gregory Roberts
Michael Schwager
Jennifer Shaw
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Arts in Art History
Bachelor of Arts in Art: Studio Concentration
Bachelor of Fine Arts: Studio Concentration
Minor in Art
Studio concentration
Art History concentration
Minor in Film Studies
Career Minor in Arts Management
Teaching Credential Preparation
Master of Arts through Interdisciplinary Studies
Majors pursue studies leading to the Bachelor of Arts degree in art history or the Bachelor of Arts degree in art with a studio concentration. A film history concentration is available in the art history degree. Within the art studio concentration emphases are available in painting, printmaking, photography, works on paper, sculpture, and ceramics. Minors in art history, film studies, studio art, and arts management are also available. A program for students working toward a teaching credential is included within the curriculum and available through the Education Department. Several art and film history courses meet general education requirements.

Designed specifically for the pursuit of studio art practices and the study of art history, film history, and arts management, the department facilities are located in one of the best equipped physical plants in the country. The programs are directed by a faculty of professional artists and scholars dedicated to their students and to the pursuit of their own creative and scholarly work. Students also have access to developing new technologies in a number of areas.

It is the departmental philosophy that a grasp of the history and theory of art is indispensable for the studio major and that creative activity is invaluable to the student of art history.
Art history is an interdisciplinary program 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 traditional European contributions, an introduction to the arts outside the European tradition, familiarity with historical methodology and research, including online and electronic sources, and critical thinking. Our core is enhanced by periodic offerings of specialized upper-division classes that have included in-depth studies of artists, themes, and post-modern theory, and of current issues, such as gender and multiculturalism. As a demonstration of mastery of skills and knowledge in the field, art history requires students to write a senior thesis, which indicates original research or interpretation. With prior approval from the faculty, students may write a more elaborate honors thesis in place of the senior thesis. Students are strongly encouraged to develop competency in at least one foreign language.

The film emphasis in art history situates film studies within the art historical discipline. It describes the historical development of the film medium and examines distinct traditions of filmmaking, Western and non-Western. The film emphasis acquaints students with basic film theory and analysis, offers more focused courses on specific topics, and allows students to explore various approaches to the study of the medium through courses in other departments. As a demonstration of mastery of skills and knowledge in the field, the film emphasis requires students to write a senior thesis, which is an original piece of research and interpretation.

The art studio curriculum is designed to develop the ability to create, analyze, interpret, and evaluate art. Students learn to express their thoughts, feelings, and values 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 modern world. Faculty are committed to the recognition of individuality and unique accomplishment. They work closely with each student to encourage personal direction and ideas.
The department 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

Film history emphasis
Art history, including courses in gallery and museum studies

## Art Studio (Areas Of Emphasis Below)

Painting
Printmaking
Works on paper
Sculpture
Photography
Ceramics
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 in the majors cannot be taken for $\mathrm{Cr} / \mathrm{NC}$. 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, film 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, law, 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.

## Bachelor of Arts in Art History

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

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

Note: Although the Department of Art and Art History does not specify a unit requirement, reading comprehension of at least one foreign language is considered essential for students who plan to pursue master's or doctoral degrees in the field of art history. Such students are advised to develop competence in French, German, Italian, and/or Spanish; however, the prospect of eventual specialization may make other languages advisable in particular instances. Art history majors are required to write at least two papers in upper-division courses before being admitted to the proseminar (490H).

## Requirements for the Major

Foundation Courses / Freshman And Sophomore Years (12 Units)
Art History (6 Lower-Division Units)
ARTH 210 Introduction to Art History, Ancient to Medieval 3-4
ARTH 211 Introduction to Art History, Renaissance to Modern

Studio Courses (5 lower-division units)
ARTS 101 or 102, Fundamentals. In addition, one course in drawing, a beginning course in any medium, or a second Fundamentals course.

> Minimum total lower-division units

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

PeriodCourses:Onecourseattheupper-divisionlevelineach ofthree ofthe following categories is required:

## Ancient

Medieval
Renaissance/Baroque
18th through 19th Centuries
History of Photography
Film
Modern/Contemporary: One upper-division course
Non-Western: One upper- or lower-division course. With prior approval by the art history faculty and department chair, this course may be taken in another department.

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

Inconsultationwiththeadvisor, thearthistorymajorwillchooseadditional-upper-division courses from any of the following:

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

## Senior Project (4-5 Units)

All students must complete a senior project consisting of the following:
A. ARTH 490 H 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: Submission of a scholarly paper overseen by two art history faculty is required in the senior year. 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
Total units in the major

## Bachelor of Arts in Art History, Emphasis in Film History

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

## Foundation Courses

ARTS 101 Art Fundamentals: Two-dimensional or ARTS 208 Basic Black and White Photography3
ARTH 210 Introduction to Art History ..... 3
ARTH 211 Introduction to Art History ..... 3
ARTH 212A World Film History (1894 to WWII) ..... 3
ARTH 212B World Film History (WWII to Contemporary) ..... 3
Total lower-division units ..... 15
Core Courses
ARTH 361 Classic Narrative Film ..... 3
ARTH 363 Other Cinemas (3-unit course, taken twice) ..... 6
ARTH 456 the History of Photography ..... 3
ARTH 461 Selected Topics (3-unit course, taken twice) ..... 6
Total core units ..... 18

## Electives

Choose 6 units from the following courses:
Literature and Film
ENGL 329/429 Screen/Script Writing
ENGL 377 Film and Literature
FREN 415 Selected Topics: French Film

Critical Perspectives
COMS 202/402 Media Criticism
LIBS 356 Film and Politics
PHIL 368 Philosophy and Film
SOCI 434 Cinema and Society

Multicultural Perspectives
AMCS 392 Ethnic Images in Film and Media
CALS 393 Chicano/Latino Cinema
COMS 201 Story Telling Via Video
NAMS 338 Native Americans and the Cinema Film and Other Media COMS 325 Video Workshop

Total elective units

## Sample Four-year Program for Bachelor of Arts in Art History

FRESHMAN YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| ARTH 210 (3-4)* | ARTH 211 (3-4)* |
| ARTS 101 or 102 (3) | Any beginning Art Studio Course (2) |
| GE courses (6), Elective (3) | GE courses (9) |
| SOPHOMORE YEAR:: 32 Units |  |
| Fall Semester (16 Units) | Spring Semester (16 Units) |
| Upper Division ARTH Period Course (3-4) | ARTH Non-Western (3-4) |
| GE courses (12) | GE courses (12) |
| JUNIOR YEAR | :: 29 Units |


| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| Upper Div. ARTH Period Course (3-4)* | Upper Div. ARTH Period Course (3-4) |
| Upper ARTH Period Course (3-4) | Upper Division ARTH Elective (3-4) |
| Upper Division GE (3) | Electives (3) |
| Upper Division ARTH Special Topic (2) | Upper-Division GE (3) |
| Elective (2) |  |

## SENIOR YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| ARTH 490H (3) | ARTH 491H or 492 (Advisor \#1) (1-2) |
| Upper Division ARTH Elective (4) | ARTH 491H or 492 (Advisor \#2) (1-2) |
| Upper Division ARTH Elective (4) | Upper Division ARTH Elective (3-4) |
| Other Electives (3) | Upper Division ARTH Elective (3-4) |
|  | Other Electives or Internships (5) |
| TOTAL UNITS:: 120 |  |
| * also counts for GE requirements |  |

## Minor in Art History

## Complete All Of the Following

ARTS 101-245 Any beginning studio course 2-3
ARTH 210 Introduction to Art History 3-4
ARTH 211 Introduction to Art History 3-4
ARTH Upper-division courses (except modern) 8
ARTH Upper-division modern or non-Western course 3
Total units needed for the minor
20

## Recommended Electives for Art History Minors

Upper-division art history or criticism courses.

Total units in the major

## Minor in Film Studies

Please see Film Studies section for a description of the film studies minor program.

## 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)
Film courses (361, 363, 461)
Modern: Two courses (460, 464, 465, 466)
Non-Western: One course (470, 474, 476)
Gallery and Museum Methods (494)
Pro-Seminar in Methods (490H)
At least one course per year from each period

## Senior Thesis

All semesters
All semesters
Every year, usually each semester Fall semesters Fall 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.

## Course Rotation: Film History

## Foundation Courses

212A World Film History to WWII
212B World Film History since WWII—At least one course per year in alternation.

## Core Courses

361 Classic Narrative Film Every other year

363 Other Cinemas
461 Selected Topics in Film
490F Theory and Methods
491F Senior Thesis

One time per year One time per year Spring semesters Spring semesters

## Bachelor of Arts in Art: Studio Concentration

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

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

## Requirements for the Major

The art major with studio concentration is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course offerings in studio and associated areas that allow for the development of an emphasis in one or more of the following: painting, sculpture, printmaking, works on paper, photography, and ceramics. Six units must be at the advanced (400) level. Admission to advanced classes requires successful participation in the Junior Portfolio Review during the last semester at the intermediate (300) level. The Junior Portfolio Review will be scheduled once each semester. Please see advisor for details.

## Major Core Requirements Freshman and Sophomore Years

Complete the following four courses for 12 units:
ARTS 101 Art Fundamentals ..... 3
ARTS 102 Art Fundamentals ..... 3
ARTH 210 Introduction to Art History ..... 3
ARTH 211 Introduction to Art History ..... 3
Complete the following two courses to total 4 units:
ARTS 202 Beginning Drawing ..... 2
ARTS 204 Beginning Life Drawing ..... 2
Chooseatleast threeofthefollowingstudio coursestototal a minimum of 6units; at least one course must be taken in a 2-D medium and a 3-D medium6-9ARTS 208 Basic Black and White Photography (2-4)ARTS 210 Introduction to Digital ImagingARTS 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 units22
Sophomore or Junior YearsChoose two courses from the following five courses to total 6 units6
ARTH 454 Nineteenth Century Art (3)
ARTH 460 History of American Art (3)ARTH 465 Modern Art from 1945 to 1979 (3)
ARTH 466 Contemporary Art (3)
Junior or Senior Years
Choose any combination of the following five courses to total 5 units5
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)Any 300-400 level studio course outside one's area of emphasis
Total upper-division core units

## 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 upperdivision 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. Please note that admission to advanced classes requires successful participation in the Junior Portfolio Review during the last semester at the intermediate (300) level. The Junior Portfolio Review will be scheduled once each semester. Please see advisor for details.

Painting (12)
Sculpture (12)

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

Specific content of concentrations is detailed below.

Total units in major emphasis

## Painting Emphasis

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

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

## Sculpture Emphasis

Complete 12 units of the following two courses (including repeats); 6 units must be at advanced level:
ARTS 336 Intermediate Sculpture (2-4)
ARTS 436 Advanced Sculpture (2-4)
A maximum of 3 units from the following may be applied to the 12-unit Sculpture Emphasis:
ARTS 335 Intermediate Bronze Foundry (2-4)
ARTS 435 Advanced Bronze Foundry (2-4)
ARTS 329 Intermediate Ceramics (2-4)
ARTS 429 Advanced Ceramics (2-4)
ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture (2-4)

## Ceramics Emphasis

Complete 12 units of the following four courses
(including repeats); 6 units must be at advanced level:
ARTS 329 Intermediate Ceramics (2-4)
ARTS 429 Advanced Ceramics (2-4)
ARTS 430 Large Scale Clay and Installation, Ceramics Sculpture (2-4)
ARTS 432 Ceramic Materials (2-4)
A maximum of 3 units from the following may be applied from the 12 -unit Ceramics Emphasis:

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

## Printmaking Emphasis

Complete 9-12 units of the following four courses (including repeats); 6 units must be at the advanced level:
ARTS 340 Intermediate Etching and Woodcut (2-4)
ARTS 440 Advanced Etching and Woodcut (2-4)
ARTS 342 Intermediate Lithography (2-4)
ARTS 442 Advanced Lithography (2-4)
A maximum of 3 units may be applied from the following:

## Works On Paper Emphasis

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

Choose a total of 12 units from the following four courses
(including repeats); 6 units must be at the advanced level:
ARTS 302 Intermediate Drawing (2-4)
ARTS 402 Advanced Drawing (2-4)
ARTS 304 Intermediate Life Drawing (2-4)
ARTS 404 Advanced Life Drawing (2-4)
Photography Emphasis
Complete 12 units of the following two courses (including repeats); 6 units must be at the advanced level:
ARTS 308 Photographic Darkroom Processes (2-4)
ARTS 457 Advanced Photography (1-4)
Recommended Electives For All Studio Majors
ARTS 492 B.A. Professional Artists' Practices (1-3)
ARTH 420-476 Art History Period Courses (3-4 each)
ARTH 466 Contemporary Art (3)
ARTH 480 Selected Topics and Lecture/Seminar (1-4)
ARTH 494 Gallery and Museum Methods (4)
ARTS 382 Intermediate Monoprint (1-4)
ARTS 482 Advanced Monoprint (1-4)
ARTS 491 Visiting Artists' Lecture Series (1)
ARTS 498 Selected Topics - Studio (1-4)

## Course Rotation: Art Studio

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

## Beginning Studio Courses:

All courses (202, 204, 208, 220, 229, 236, 245)

Every year; most every semester.
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.
1 unit fall, 2 units spring
Professional Practices - B.F.A.
\& B.A. (466/492)
Fall semesters
Directed Field Research Experience (496)
Most semesters
Note: Additional special topics courses will be offered each academic year to enrich and expand on the Studio curriculum.

## Sample Four-year Program for Bachelor of Arts in Art

## Studio Concentration, Painting Emphasis

FRESHMAN YEAR:: 30 Units

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

## SOPHOMORE YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| ARTS 202 Beg. Drawing (2) | ARTS 204 Beg. Life Drawing (2) |
| ARTS 220 Beg. Painting (2) | ARTS 245 Beg. Printmaking (2) |
| GE courses (9) | GE courses (12) |
| JUNIOR YEAR:: 31 Units |  |
| Fall Semester (18 Units) | Spring Semester (13 Units) |
| ARTS 320 Int. Painting (3) | ARTS 420 Adv. Painting (3) |
| ARTS 302 Int. Drawing (3) | ARTS 304 Int. Life Drawing (3) |
| ARTH 465 History of Modern Art (3)* | ARTS 236 Beg. Sculpture (2) |
| GE courses (9) | Other electives (2) |
| * also counts for GE requirements |  |
| SENIOR YEAR:: 27 Units |  |
| Fall Semester (15 Units) | Spring Semester (12 Units) |
| ARTS 420 Adv. Painting (3) | ARTS 420 Adv. Painting (3) |
| ARTS 382 Int. Monotype (3) | ARTH 466 Contemporary Art (3) |
| ARTS 492 B.A. Prof. Artists' Practices (3) | ARTS 495 Special Studies (3) |
| Electives (6) | Electives (3) |
| TOTAL UNITS:: 120 |  |

## Bachelor of Fine Arts

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

## Admission Requirements

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

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

## Bachelor of Fine Arts in Art: Studio Concentrations

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

The B.F.A. is comprised of a group of core courses representing minimum requirements for all areas of emphasis, plus course requirements in studio arts, art history, a B.F.A. seminar, and a B.F.A. professional practices course. Students accepted into the program decide on an area of emphasis from the following choices: painting, photography, printmaking, and sculpture.

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

## Major Core Requirements

## Freshman and Sophomore Years

Complete the following four courses:
ARTS 101 Art Fundamentals

ARTS 102 Art Fundamentals 3
ARTH 210 Introduction to Art History 3
ARTH 211 Introduction to Art History
Choose a combination of the following to total 4 units:
ARTS 202 Beginning Drawing (2-4)
ARTS 204 Beginning Life Drawing (2-4)

Total lower-division core units

## Junior and Senior Years

Complete the following 5 courses:
ARTH 464 Modern Art from 1850 to 19453
ARTH 465 Modern Art from 1945 to 19793
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

## 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 courses from three different studio emphases (excluding painting and drawing) to total 6 units:
ARTS 220 Beginning Painting (3)
Complete 5 units in intermediate and advanced auxiliary studio courses (may include 3 units of Advanced Monoprint):

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

## Photography

Complete at least three 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 emphasis34
Printmaking
Complete at least three 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 cours
of 12 units in any one printmaking area: ..... 20
ARTS 340 Intermediate Etching and Woodcut (2-4)
ARTS 342 Intermediate Lithography (2-4)
ARTS 442 Advanced Lithography (2-4)
Total units in the emphasis34
Sculpture
Complete at least three 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: ..... 3ARTS 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 emphasis34
Total units in the major ..... 70
Minor in Art: Studio Concentration
Complete all of the following:
ARTS 101 Art Fundamentals ..... 3
ARTS 102 Art Fundamentals ..... 3
ARTH 210 Introduction to Art History (3) or ARTH 211 Introduction to Art History (3) ..... 3
Studio courses at any level ..... 5
Upper-division studio courses ..... 6
Total units in the minor ..... 20

## Teaching Credential Preparation

The art major with a studio concentration generally fulfills the California Commission for Teacher Preparation and Licensing guidelines for the Single Subject Credential. For the Multiple Subject (elementary) Credential, students must pass the general knowledge portion of the National Teachers Examination. ARTS 400 is required of candidates for the Single Subject Credential, and ARTS 400 is recommended for Multiple Subject Credential students. Students interested in a teaching career are encouraged to consult with coordinators in the Art Department as well as the Education Department with reference to legally required education courses, along with field experience, leading to graduate or second degree studies in art and education with a teaching credential. The public school art instructor usually is expected to possess a vast range of aptitudes in 2- and 3-dimensional art forms, materials, and techniques, and to have a strong sense of the conceptualization and philosophies for art education for younger learners. A broadly based studio arts, art history, and Education Department course work program, including field experience in a concurrent pattern, is recommended after arrangements are made with both the Art Department and the Education Department. For further information, please see the Education section in this catalog. Contact departmental advisors and review the University's special bulletin, Programs in Teacher Education. Students seeking the Multiple Subject Credential may also wish to pursue a minor in applied arts (please see the Applied Arts section in this catalog).

## Career Minor in Arts Management

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

DEPARTMENT OFFICE
Darwin Hall 300
(707) 664-2119
http://www.phys-astro.sonoma.edu
DEPARTMENT CHAIR
Lynn R. Cominsky
ADMINISTRATIVE COORDINATOR
Cathi Cari-Shudde

## Faculty

Lynn R. Cominsky
*Bryant P. Hichwa
Jeremy S. Qualls
Saeid Rahimi
Scott A. Severson
Hongtao Shi
*Gordon G. Spear
*Joseph S. Tenn
*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 computercontrolled 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 the Earth.
The department is designing and constructing a remotely operable approximately 1-meter telescope in southern Mendocino county: the Galbreath Wildlands Preserve Observatory. This will be a sustainable and ecologically sensitive facility, making the project innovative and cross-disciplinary. The department also houses a laboratory for experimental astrophysics research, where students can test and build cameras, spectrometers, and other equipment for SSU's telescopes.
All students are strongly encouraged to participate in the ongoing research programs of the department, and/or to propose studentinitiated research programs.

## Minor in Astronomy

Completion of a minimum of 20 units in astronomy and other physical 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.

DEPARTMENT OFFICE
Darwin Hall 200
(707) 664-2189
www.sonoma.edu/biology/
DEPARTMENT CHAIR
Richard Whitkus
ADMINISTRATIVE COORDINATOR
Kathleen Hardy, Lakin Khan

## Faculty

Thomas N. Buckley
James L. Christmann
Michael F. Cohen
Daniel E. Crocker
J. Hall Cushman

Nicholas R. Geist
Derek J. Girman
Karina J. Nielsen
Murali C. Pillai
Nathan E. Rank
Eileen F. Thatcher
Richard Whitkus

## Programs Offered

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

The Biology Master's program is comprised of an active cohort of graduate students engaged in original research with faculty members in all areas of research specialization covered in the department. Graduate research is often supported by external funding and graduate student support includes teaching associateships that involve close mentoring relationships with instructional faculty. Many graduates of the masters program go on to pursue doctoral degrees, and others continue in research, biotechnology, resource management, and education.

Laboratory instruction provides students with hands-on opportunities with physiological equipment, ultracentrifugation, PCR,
electrophoresis, light microscopy, immunofluorescence microscopy, and microbiological techniques. Excellent laboratory and greenhouse facilities, such as the Raymond Burr Greenhouse and orchid collection, exist for maintaining live material for classroom use and research. A radioisotope laboratory is also available.

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

## Careers in Biology

Biology graduates are prepared to enter the job market in a variety of careers, including government agencies, park service, biological research, teaching, biotechnology, and medical technology. Students seeking a teaching credential may elect biology as their major within the teaching credential preparation program in science. Graduates from the department have an outstanding record of acceptance in advanced degree programs at technical, dental, veterinary, medical, and graduate schools, as well as in fifth-year hospital traineeships in medical technology.

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

## Biology Degree Concentrations

Many students are well served by the basic B.A. plan without a concentration. Some, however, select one of two concentrations for a B.A. Both the B.A. and B.S. share a common lower-division core, hence beginning students need not select a plan immediately. The B.A. program leaves more flexibility for electives and a minor. The B.S. requires a specific concentration, including more physical science, mathematics, and total units. Upon completion of specified course work, a concentration will be designated on the transcript and diploma. Students should contact the department for specific requirements.

| Bachelor of Arts | Bachelor of Science |
| :--- | :--- |
| Botany | Physiology |
| Zoology | Molecular and Cell Biology |
|  | Ecology and Evolution and Conservation |
|  | Marine Biology |
|  | Microbiology |

## Preparation for Applying to Health Professions

Students majoring in biology intending to pursue careers in the allied health fields may follow the guidelines for a B.S. degree or a B.A. degree (with the addition of MATH 161, CHEM 335B, and PHYS 210AB and 209AB). They are encouraged to enroll in SCl 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 biology courses be incorporated into the B.A. or B.S. degree. These include:

|  | Premedical | Preveterinary | Predental |
| :--- | :---: | :---: | :---: |
| BIOL 342 Molecular Genetics (4) | x | x | x |
| BIOL 472 Developmental Biology (4) | x | x | x |
| BIOL 349 Animal Physiology (4) |  | x |  |
| BIOL 328 Vertebrate Evolutionary |  |  |  |
| Morphology (4) | x |  | x |
| BIOL 344 Cell Biology (4) | x |  | x |
| BIOL 340 General Bacteriology |  |  | x |
| BIOL 307 Human Nutrition |  |  | x |
| BIOL 480 Immunology |  |  | x |

## Secondary Education Teaching Credential Preparation in Life Science

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

## Degree Requirements

|  | B. A. | B. S. |
| :---: | :---: | :---: |
| General Education ( 51 units, 12 units covered by major requirements in math and science) | 39 | 39 |
| Lower-Division Biology (BIOL 121, 122, 123) | 12 | 12 |
| Upper-Division Biology Core ( 1 course from each of 4 areas) | 16 | 16 |
| Upper-Division Biology Electives (as specified by concentration) | 15 | 17-20 |
| Concentration specific physical science | -- | 3-0 |
| Senior Research (BIOL 495 and 496) | -- | 3 |
| Physical Sciences and Mathematics: |  |  |
| CHEM 115AB | 10 | 10 |
| CHEM 335A or 232 | 5 |  |
| CHEM 335AB | -- | 8 |
| MATH 165 | 4 | 4 |
| MATH 161 | -- | 4 |
| B. $A$. |  |  |
| PHYS 210A/209A or GEOL 102 | 4 or 3 | -- |
| B. S. |  |  |
| PHYS 210A/210B and either PHYS 209 <br> A or B (PHYS 114/116/214 may substitute) | -- | 7 |
| General Electives | 15-16 | 3 |
| Total units needed for graduation | 120 | 126 |

## Upper-Division Biology Core

Complete one course from each of the following groups (Additional courses from each group may be used as electives or may be required for particular concentrations):

## Organismal Biology (4 Units)

BIOL 329 Plant Biology (4)
BIOL 340 General Bacteriology (4)
BIOL 322 Invertebrate Biology (4)
BIOL 327 Vertebrate Biology (4)
BIOL 382 Parasitology (4)
Physiology (4 Units)
BIOL 349 Animal Physiology (4)
BIOL 347 Environmental Physiology (4)
BIOL 348 Plant Physiology (4)
BIOL 328 Vertebrate Evolutionary Morphology (4)
Molecular And Cell Biology (4 Units)
BIOL 342 Molecular Genetics (4)
BIOL 343 Molecular Microbiology (4)
BIOL 344 Cell Biology (4)
BIOL 383 Virology (4)
Ecology And Evolution (4 Units)
BIOL 333 Ecology (4)
BIOL 341 Evolution (4)
BIOL 335 Marine Ecology (4)
BIOL 337 Behavioral Ecology (4)

## Upper-Division Biology Electives

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

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

## Restrictions

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

## Sample Four-year Program for Bachelor's Degree in Biology

## FRESHMAN YEAR:: 31-33 Units

Fall Semester (16 Units)
ENGL 101 (3)* (A2)
BIOL 121 or 122 (4) (B2)
MATH 165* (4) (B4)
CHEM 115A (5) (B1)
Spring Semester (15-17 Units)
PHIL 101 or 102 (3) (A3)
BIOL 121 or 122 (4) (B3) CHEM 115B (5) Electives** (3-5)

SOPHOMORE YEAR:: 31-35 Units
Fall Semester (15-17 Units)
BIOL 123 (4)
CHEM 232 or 335A (5)
Electives** (6-8)
Bology majors are expected to complete all of the lower-division core requirements before attaining junior standing ( 60 units). This maximizes flexibility in upper-division course selection by ensuring that essential prerequisites will have been completed. BIOL 121, 122, and 123 should be completed before taking any upper-division course.

JUNIOR YEAR:: 28-34 Units
Fall Semester (14-17 Units)
Spring Semester (14-17 Units)
Complete Written English Proficiency Test after completing a total of 60 units. Two BIOL UD core courses (8) 1-2 BIOL UD core courses (8) Electives ${ }^{* * *}(6-9) \quad E l e c t i v e s * * * ~(6-9)$

## SENIOR YEAR:: 30-36 Units

Complete the biology requirements by completing required and elective courses in the major and support courses in physical sciences and math. Complete general education requirements to a total of 51 units ( 48 for transfer students), including ethnic studies. All area $B$ GE requirements are met by courses required in the Biology major.

TOTAL UNITS::
FOR B.A. DEGREE, MINIMUM 120
FOR B.S. DEGREE, MINIMUM 126

Before or during Fall semester of the fourth year, all students planning to graduate that academic year must formally apply to graduate. With their advisor, students will complete the biology requirements form and list any remaining required courses they must complete to graduate.
*If a student is not eligible to take either of these courses in the first semester, that student must be enrolled in the recommended preparatory Courses(s) and complete these courses in the next semester. Students must also delay CHEM 115A until satisfying GE math eligibility. This may extend time to graduation beyond 4 years.
**Electives should include at least one lower-division (100-299) GE course each semester. Electives may include additional physical science and mathematics (consult your biology advisor). Unit total per semester should average approximately 15-16 throughout all eight semesters $(8 \times 16=128)$ to complete the degree requirements in four years.
***Electives include upper-division BIOL electives and physical science support as well as upper-division (300-499) GE courses. NOTE: Most upper division BIOL electives require completion of BIOL 123. Beginning in the semester in which 60 units total is reached, each student is required to complete 9 units of upper-division GE.

## Bachelor of Arts in Biology: Concentrations

The lower-division core is structured so that switching between the B.A. and B.S. programs in the first two years will not delay completing either degree program. The B.A. does not require a concentration. However, students may wish to focus their upper division course work in a particular area. Botany and Zoology are approved concentrations in the B.A., which may be designated on the diploma. Courses from all 4 core areas are included in each concentration. The upper division major requirements for each are:

## B.A. Botany Concentration (31 units)

BIOL 329 Plant Biology 4
BIOL 348 Plant Physiology 4
BIOL 330 Plant Taxonomy 4
BIOL 331 Aquatic Botany 4
BIOL 333 Ecology 4
BIOL 341 Evolution 4
One of the following 2 courses: 4
BIOL 342 Molecular Genetics, or
BIOL 344 Cell Biology
Additional upper division major electives

## B. A. Zoology Concentration (31-32 units) <br> BIOL 322 Invertebrate Biology

BIOL 327 Vertebrate Biology 4
BIOL 328 Vertebrate Evolutionary Morphology 4
BIOL 323 Entomology 4
One of the following 2 courses:
BIOL 347 Environmental Physiology or
BIOL 349 Animal Physiology
One of the following 3 courses:
BIOL 463 Herpetology, or
BIOL 468 Mammalogy or
BIOL 472 Developmental Biology
One course from the Molecular and Cell Biology Core Area
One course from the Ecology and Evolution Core Area

## Bachelor of Science in Biology

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

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

## B. S. Marine Biology Concentration (39 units)

BIOL 322 Invertebrate Biology 4
BIOL 331 Aquatic Botany 4
BIOL 335 Marine Ecology
BIOL 341 Evolution
BIOL 347 Environmental Physiology
BIOL 485 Biometry
One course from the Molecular and Cell Biology Core Area
Additional upper division major electives
BIOL 495 Special Studies prior to Senior Research
BIOL 496 Senior Research
B. S. Molecular and Cell Biology Concentration (39 units)

BIOL 340 General Bacteriology
BIOL 342 Molecular Genetics
BIOL 344 Cell Biology
BIOL 341 Evolution
One of the following 2 courses:
BIOL 348 Plant Physiology
BIOL 349 Animal Physiology
Two of the following 4 courses:
BIOL 343 Molecular Microbiology
BIOL 383 Virology
BIOL 472 Developmental Biology
BIOL 480 Immunology
One of the following 2 courses:
CHEM 445 Structural Biochemistry
CHEM 446 Metabolic Chemistry
One of the following 3 courses:
CHEM 441 Biochemical Methods
BIOL 544 Advanced Cell Biology
BIOL 545 Recombinant DNA Laboratory
Additional upper division major electives
BIOL 495 Special Studies prior to Senior Research
BIOL 496 Senior Research
B. S. Ecology, Evolution, and Conservation Concentration (39 units)

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

One of the following 3 courses:
BIOL 322 Invertebrate Biology
BIOL 327 Vertebrate Biology
BIOL 329 Plant Biology
One of the following 4 courses:
BIOL 335 Marine Ecology
GEOG 416 Biogeography and Landscape Ecology
BIOL 337 Behavioral Ecology
BIOL 243 Environmental Microbiology
One course from the Physiology Core Area 4
Additional upper division major electives 4
BIOL 495 Special Studies prior to Senior Research 1
BIOL 496 Senior Research 2
B. S. Physiology Concentration (39 units)
BIOL 344 Cell Biology
$\begin{array}{ll}\text { BIOL } 344 \text { Cell Biology } & 4 \\ \text { BIOL } 372 \text { Developmental Biology } & 4\end{array}$
CHEM 446 Metabolic Chemistry 3
Three of the following 4 courses: 12
BIOL 328 Vertebrate Evolutionary Morphology
BIOL 347 Environmental Physiology
BIOL 348 Plant Physiology
BIOL 349 Animal Physiology
One of the following 3 courses:
BIOL 322 Invertebrate Biology
BIOL 327 Vertebrate Biology
Biol 329 Plant Biology
One course from the Ecology and Evolution Core Area 4
Additional upper division major electives 5
BIOL 495 Special Studies prior to Senior Research 1
BIOL 496 Senior Research 2

## B.S. Microbiology Concentration (39 units)

*Required or recommended for application to Clinical Laboratory Science Internships
BIOL 340 General Bacteriology*
One of the following 3 courses: 4
BIOL 347 Environmental Physiology
BIOL 349 Animal Physiology*
BIOL 348 Plant Physiology
One of the following 3 courses:
BIOL 342 Molecular Genetics*
BIOL 343 Molecular Microbiology
BIOL 344 Cell Biology
One of the following 2 courses: 4
BIOL 333 Ecology*
BIOL 341 Evolution
Two of the following 3 courses: 8-9
BIOL 382 Parasitology*
BIOL 480 Immunology*
BIOL 481 Medical Microbiology*
One of the following 2 courses:
CHEM 255 Quantitative Analysis*
BIOL 243 Environmental Microbiology

Additional upper division major electives
BIOL 495 Special Studies prior to Senior Research
BIOL 496 Senior Research

## Minor in Biology

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

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

Take two of the 3 lower-division major's courses listed below
BIOL 121 Diversity, Structure, and Function
BIOL 122 Genetics, Evolution, and Ecology
BIOL 123 Molecular and Cell Biology
Twelve additional units in Biology
At least eight of these units must be upper-division courses for majors and at least one of those must have a laboratory. Only one GE course in biology or a third lower-division biology major's course can be applied to the minor, as well as one unit of Biology Colloquium (BIOL 390). All courses applied to the minor must be taken for a letter grade, except BIOL 390.

## Master of Science in Biology

The Master of Science degree in the Department of Biology is a thesis research program. Students complete 30 units of course work that allows them to master the concepts and techniques of their chosen discipline. They also conduct original research under the direction of a member of the faculty and write up their findings as a Master's Thesis. Typically, students take two to three years to complete their graduate degree requirements.

Graduate students in the Department of Biology are supported through a variety of sources. The Department has approximately 12 teaching associateships (two laboratory sections) available each semester, and these positions are filled one semester in advance (contact the Graduate Coordinator for details). In addition, students may receive research associateships through individual faculty members and their research grants. The University offers a limited number of tuition fee waivers for qualified teaching associates. Students can also obtain academic scholarships as well as financial aid (usually in the form of low-interest loans).

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

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

## Admission to the Program

To apply, you must submit: A) items 1-3 to SSU's Admissions and Records Office, and B) copies of items 1-3 and originals of items 4 and 5 to the Department of Biology Graduate Coordinator, Dan Crocker. 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. Complete a University application obtained from the Admissions and Records Office. NOTE: If you submit online, be sure to print a hardcopy to send to the Department of Biology.
2. Provide official copies of all undergraduate transcripts.
3. Provide a one-to-two page Statement of Purpose essay detailing your background in biology, objectives for graduate school, and career goals.
4. Request two letters of recommendation from individuals familiar with the student's background in biology and able to comment on the potential for conducting original work.
5. Provide Graduate Record Examination (GRE) scores for the General test. Biology Subject scores are strongly recommended, but not required.

IMPORTANT: The above 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 faculty member (tenure-track or approved SSU adjunct) to serve as a faculty advisor. Students are strongly encouraged to review the information on faculty members and contact them prior to completing an application.
III. Approval of the Graduate Committee. Applications will be reviewed for evidence that the prospective student is capable of initiating and performing original research. Students will be admitted into Classified Standing. Applicants deficient in undergraduate course preparation will be expected to demonstrate competency before being advanced to candidacy. As a general guideline, the Department uses the following criteria to determine this potential:

An undergraduate degree in biology or equivalent, including:
A. One course in calculus or statistics
B. One year of general chemistry and one semester of organic chemistry;
C. At least one other course in physical sciences;
D. Upper division coursework demonstrating competence in three of four core areas (organismal biology; physiology; molecular or cellular biology; ecology or evolutionary biology);
E. GPA of 3.0 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 forconducting independent and original research in biology.

## BUSINESS ADMINISTRATION

DEPARTMENT OFFICE
Stevenson Hall 2042
(707) 664-2377
www.sonoma.edu/busadmin
DEPARTMENT CHAIR
Terry Lease
ADMINISTRATIVE COORDINATOR
Barbara Dietrich
UNDERGRADUATE ACADEMIC ADVISOR
Sheila Mackintosh-Sims
INTERNSHIP COORDINATOR
Duane Dove
MBA COORDINATOR
Linda Nowak

## Faculty

*Sherri C. Anderson
Thomas Atkin
Richard Campbell
T.K. Clarke

Duane Dove
Kirsten Ely
Armand Gilinsky
Robert Girling
David Horowitz
Aidong Hu
Douglas Jordan
Terry Lease
Sandra Newton
Linda Nowak
Janeen Olsen
Vincent Richman
*James Robertson
Michael Santos
*Samuel Seward
Elizabeth Stanny
Janeira Sutanonpaiboon
Elizabeth Thach
Karen Thompson
John Urbanski
Ricardo Villarreal De Silva
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
Additional Professional Business Programs

## Department Mission

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

## Careers in Business Administration

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

## Bachelor of Science in Business Administration

The Bachelor of Science in Business Administration includes a pre-business program, a core of course requirements, and a broad range of fields of concentration. All majors take preparatory courses and core requirements and then select concentrations based on individual interest and career plans. The fields of concentration include: Accounting, Finance, Financial Management, Management (with a General track as well as tracks in Human Resource Management, International Business, and Small Business), Marketing, Wine Business Strategies, and a Special concentration designed by the student with the approval of a faculty advisor and the department chair. A Bachelor of Science in Business Administration with an emphasis in one or more areas of concentration prepares students for imaginative and responsible citizenship and leadership in societydomestic and worldwide.

## Degree Requirements

| General Education (Freshmen) | 51 or |
| :--- | ---: |
| General Education (Transfer) | 48 |


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

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

## Advising

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

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

## Pre-Business Administration Program

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

## Computer Competency

All business majors must demonstrate computer competency prior to taking BUS 211, BUS 230A, or any upper-division business core class.

Competency can be demonstrated by passing the Practical Computer Competency Requirement (PCCR) examination administered by the Department of Business Administration. Students should plan carefully and consult with the department web page, www.sonoma.edu/ busadmin/pccr/info.shtml for test and registration information.

## Pre-Major Courses

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

Preparatory Courses (units that are necessary but do not count toward the major) GEA-1
ECON 204 Introduction to Macroeconomics (4)
ECON 205 Introduction to Microeconomics (4)
MATH 131 Introduction to Finite Mathematics (3) or MATH 161 Calculus (4)
Lower-Division Business Core (units count in major)
BUS 211 Business Statistics (4) or MATH 165 Elementary Statistics
BUS 225 Legal Environment of Business (4) or ECON 388 Economics and the Law of Regulation
BUS 230A Principles of Accounting (4)
BUS 230B Principles of 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, 388, 466, 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) or BUS 491W ** Seminar in Management Strategy and Policy in the Wine Industry (4)
* BUS 334 is required for Accounting Concentration students.
** BUS 491 or BUS 491W is the capstone course in the Business Administration major designed to be taken in the student's final semester. Prerequisite: all business core requirements, a passing score on the WEPT, and application for award of degree.


## Concentrations for Business Administration Majors

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

## Concentration Advisors

Accounting: Anderson, Stanny, Lease, Richman, Ely, Taylor
Finance: Hu, Jordan, Santos
Financial Management: Anderson, Stanny, Hu, Jordan, Richman, Lease, Santos, Ely
Management Tracks:
General: Girling, Thach, Thompson, Gilinsky, Dove, Newton, Urbanski, Sutanonpaiboon
Human Resource Management: Dove, Thach, Thompson
International: Girling, Urbanski
Small Business: Gilinsky, Urbanski
Marketing: Clarke, Nowak, Olsen, Atkin, Campbell, Villarreal, Horowitz
Wine Business Strategies: Thach, Gilinsky, Olsen, Nowak, Atkin
Special: Wong, Department Chair

## Accounting Concentration: 5 Courses

Five courses, not to include BUS 232, are required. This prepares students for management-level accounting positions in business and government or public accounting. Specialized courses are offered in financial accounting, cost accounting, auditing, and taxation. Students who intend to sit for the CPA exam should take all upper-division accounting courses listed below. BUS 232 is optional.
BUS 232 Introduction to the Accounting Cycle 1
BUS 330A Intermediate Accounting 4
BUS 330B Intermediate Accounting 4
BUS 430 Advanced Accounting 4
BUS 433A Individual Taxation 4
BUS 433B Corporation and Estate Taxation 4
BUS 434 Auditing 4
BUS 435 Cost Accounting 3
BUS 436 Business Law 4
BUS 437 Governmental Accounting 4

## Finance Concentration: 5 Courses

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

## Required Courses

BUS 470 Managerial Finance 4
BUS 472 Investments
Select three courses from Group A OR select 2 courses from Group A and one course from Group B.

Group A
BUS 377 Financial Institutions (or ECON 375, Money and Banking) 4
BUS 385 Special Topics (with concentration advisor consent) 3-4
BUS 471 Financial Planning and Strategy 4
BUS 473 International Finance 4
BUS 474 Computer Applications in Finance 4
Group B
BUS 330A Intermediate Accounting 4
BUS 433B Corporate Tax for Financial Management 4
BUS 475W Wine Accounting and Finance 4
BUS 499F Internship in Finance (3-4)
ECON 311 Public Economics
ECON 411 Seminar in Public Finance 4

## Financial Management Concentration: 5 Courses

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

Required Courses
BUS 330A Intermediate Accounting
4
BUS 435 Cost Accounting
BUS 470 Managerial Finance
BUS 472 Investments
Select one of the following courses:
BUS 330B Intermediate Accounting
BUS 377 Financial Institutions (or ECON 375
Money and Banking)
BUS 437 Governmental Accounting
BUS 471 Financial Planning and Strategy 4
BUS 473 International Finance 4
BUS 474 Computer Applications in Finance
BUS 475W Wine Accounting and Finance

## Management Concentration: 5 Courses

Five courses are required. The management concentration is designed to prepare students for entry-level management positions. Four tracks are available depending upon the student's interests. The human resource track is for those students who are interested in issues related to the organization/employee relationship such as personnel, labor relations, wage and salary administration, and training and development. The international track is for those interested in working in the international area and includes the requirement of proficiency in a foreign language. The small business track is for those interested in managing in the smaller firm. The general track is for those students interested in management in general rather than a particular focus.
All students in the management concentration must take BUS 350. Each track has two additional courses required. The remaining two courses shall be selected from the lists below.

Required of all in Management Concentration
BUS 350 Management
Requirements for various tracks:
Human Resources
BUS 340 Survey of Human Resource Management (4) or BUS 340W*
BUS 446 Government Regulation of Human Resources
International
BUS 393 Introduction to International Business
BUS 394 International Business Strategy
Foreign Language Requirement
Small Business
BUS 451 Entrepreneurship/Small Business
BUS 453 Small Business Analysis
General
BUS 340 Survey of Human Resource Management (4) or BUS 340W*
BUS 452 Leadership in Organizations
Two additional courses required for all tracks:
BUS 340 Survey of Human Resource Management (4) or BUS 340W*
BUS 352 Organizational Theory
BUS 354 Applied Business Analysis

BUS 385 Special Topics (with concentration advisor consent) 3-4
BUS 391 Cross Cultural Communication and Negotiation 4
BUS 393 Introduction to International Business 4
BUS 394 International Business Strategy 4
BUS 417 Management of Services 4
BUS 441 Recruitment, Selection, and Performance Appraisal 4
BUS 442 Training and Development 4
BUS 446 Government Regulation of Human Resources 4
BUS 447 Labor Relations 4
BUS 451 Entrepreneurship/Small Business 4
BUS 452 Leadership in Organizations 4
BUS 453 Small Business Analysis 4
BUS 455 Conflict Management and Alternative Dispute Resolution 4
BUS 458 Organization Change and Development 4
BUS 466 Organizational Communications 4
BUS 499MG Internship in Business Management 3-4
Additional possible electives for those in international track:
BUS 368 International Marketing
BUS 473 International Finance 4
Additional possible elective for those in small business track:
BUS 367 Consumer Behavior
4

* Meets both MGT and WBS requirement. May not receive credit for both BUS 340 and 340W.


## Marketing Concentration: 5 Courses

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

Required Courses
BUS 367 Consumer Behavior 4
BUS 462 Marketing Research 4
BUS 469 Marketing Management 4
Select at least two courses:
BUS 366 Retail Management 4
BUS 368 International Marketing 4
BUS 385 Special Topics (with concentration advisor consent) 3-4
BUS 396W the Global Wine Industry 3
BUS 416W Production, Operations, and Distribution (Wine) 4
BUS 461 Promotion Management 4
BUS 463 Sales Management and Personal Selling 4
BUS 465 Wine Marketing 4
BUS 468 Marketing Decision Making 4
BUS 451 Entrepreneurship/Small Business 4
BUS 453 Small Business Analysis 4
BUS 499MK Internship in Marketing 3-4

## Wine Business Strategies (WBS): 5 Courses

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

## Required Courses

BUS 305W Introduction to Wine Business Strategy 4
BUS 464W Production, Operations, and Distribution (Wine) 4
BUS 465W Wine Marketing 4
BUS 499W Internship in Business (Wine) 3-4
Select at least one of the following courses:
BUS 340W Human Resource Management (Wine Section) 4
BUS 366 Retail Management 4
BUS 397W The Global Marketplace for Wine 4
BUS 475W Wine Accounting and Finance 4
BUS 396W Global Wine Industry 3
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. 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 courses, at least three unit, should be selected with approval from an advisor and the chair.

## Undergraduate Program Special Requirements

## Residency

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

## Change of Major

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

## Change of Status from Pre-Business to Business Administration Major

 Pre-Business students must file a Change of Status ("blue form") in the department to request change of status to the business administration major. This request should be submitted as soon as the student has completed, with a C or better, all required courses in the Pre-major program. A faculty advisor will be assigned to assist the student with matters related to the Major program. The change to Business Administration status will not become effective until completion of pre-major requirements (with minimum "C" grades) has been verified.\section*{Sample Four-year Program for Bachelor of Science in Business Administration <br> Select a lab with B1 or B2 GE; select an Ethnic Studies course for C1, C2, C3, C4, D1 or E. <br> FRESHMAN YEAR:: 32-33 Units <br> Take PCCR* <br> [Avoid UD GE until Junior year] <br> Practical Computer Competency Requirement (PCCR) exam should be taken in Freshman year <br> Fall Semester (16-17 Units) Spring Semester (16 Units) <br> ENGL 101 (A2) (3) <br> PHIL 101 or 102 (A3) (3) <br> ECON 205 (4) <br> GE (C1 or C4) (3) <br> | Math 131 or 161 (B4) (3-4) | GE (C1 or C4) (3) |
| :--- | ---: |
| GE (B3) (3) | Pols 200 (D4)(3) | <br> GE (D1 or D2) (3)}

SOPHOMORE YEAR:: 31-32 Units
[Avoid UD GE until Junior year]
Fall Semester (14-15 Units)
BUS 230A (4)
Spring Semester (17 Units)

BUS 225 (4)
BUS 230B (4)

GE (B1 or B2 with lab) (3-4)
GE (A1) (3)
BUS 211 (4)
GE (D3) (3)
GE (B2 or B1) (3)
Elective (3)

JUNIOR YEAR:: 31-32 Units
[Take WEPT]

Fall Semester (17 Units)
UD BUS Core** (4)
UD BUS Core ${ }^{* * *}$ (4)
GE (C2 or C3) (3)
GE (D2 or D1)(3)
Elective (3)

SENIOR YEAR:: 27-30 Units
[Apply for graduation at beginning of senior year]

Fall Semester (14-15 Units)
BUS concentration (3-4)
BUS concentration (3-4)
UD BUS Core (4)
UD GE (C4 or C1) (3)
Electives as needed

Spring Semester (13-15 Units)
UD BUS Core: 491**** (4)
BUS concentration (3-4)
BUS concentration (3-4)
UD GE (E) (3)
Electives if needed

TOTAL SEMESTER UNITS:: 124 [refer to catalog and consult advisor(s) for additional information]
*PCCR examination is a prerequisite for BUS 211, BUS 230A, or any upper division Business Core class.
${ }^{* *}$ choose BUS 344 first if planning management concentration; 360 first if marketing; 370 first if finance or financial management.
***for information systems, students should select BUS 334 if planning accounting or financial management; otherwise, select BUS 319.
****BUS 491, designed to be taken in the last semester of the program (prerequisite: all other core courses, passing score on the WEPT, and application for award of degree).

## Minor in Business Administration

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

BUS 230A Principles of Accounting 4
BUS 230B Principles of Accounting 4
BUS 344 Organizational Behavior 4
BUS 360 Introduction to Marketing 4
BUS 370 Introduction to Managerial Finance 4
The lower division Accounting courses must be completed before taking the upper division courses. Transfer courses must have an equivalent course offered in our catalog. BUS 150, 211, 219, 270, $292,295,296,388,495$, and 499 may not be counted in the minor. Students must complete a Business Administration Minor Declaration Form in consultation with their department faculty advisor. Minors must be approved by the department chair.

## Master of Business Administration

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

## MBA Admissions

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

The MBA application periods are as follows:
Fall semester - November 1 to March 30
Spring semester - August 1 to September 30
You can apply online at http://www.sonoma.edu/ar/prospective/gs/ apply.shtml.

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

## University Requirements

The requirements for admission to graduate study (work beyond the bachelor's degree) at Sonoma State University are in accordance with

Title 5, California Administrative Code. For admission, students must:

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


## Department Of Business Administration Requirements

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

Formula Score $=(200 \times$ Grade Point Average $)+$ Total GMAT score
To illustrate, if a candidate has a 3.20 grade point average for the last 60 units and a total GMAT score of 500, the total formula score would be 1140 .

Example Computation: 200(3.20) $+500=1140$
In this case, the candidate would meet the minimum formula score for admission.

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

A candidate with a minimum formula score of 1000 who otherwise demonstrates high promise of success in the program may be considered by the department for alternative admission into the MBA program. To be considered, the candidate must clearly demonstrate a record of at least five years of appropriate managerial experience since receipt of the bachelor's degree.
A candidate who is not accepted may appeal to the Graduate Committee for admission reconsideration. Such appeals are not routinely granted.

## Documentation Needed to Apply

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

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

The documents detailed in items 1 and 2 above must be sent to:
Office of Admissions and Records
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609
The GMAT score, item 3 above, should be sent directly to:
MBA Coordinator
School of Business and Economics
Department of Business Administration
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609
(707) 664-2377

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

Graduate Student Status
A candidate admitted into the MBA program will be admitted in one of two categories:

- Conditionally Classified Graduate Status. A student admitted to the MBA program as a Conditionally Classified Graduate Student can take only foundation courses. This student may not take MBA required or elective courses without permission of the MBA Coordinator. 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 MBA Coordinator.
- Classified Graduate Status. A student admitted to the MBA program as a Classified Graduate Student will have completed the foundation courses at the time of admission. This student may take MBA required or elective courses.


## Admissions Process

The Office of Admissions and Records performs the initial evaluation of the application and transcripts and determines eligibility for admission to the University. If the candidate is not eligible for admission to the University, the candidate is notified and the process stops.
If the candidate is eligible for admission to the University, Part B of the application along with a copy of the transcripts is forwarded to the MBA Coordinator for the department recommendation. When the GMAT score is received, eligibility for admission to the MBA program is determined and a recommendation for status of admission is returned to the Office of Admissions and Records, which will notify the candidate of the results.

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

## Transfer Credits

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

## Eligibility for MBA Courses

Courses offered in the MBA program have restricted enrollment.

- For MBA foundation courses, a student must be at least a Conditionally Classified MBA student or a Classified Graduate student in another graduate program at the University or obtain written permission from the MBA Coordinator.
- For MBA required or elective courses, a student must be a Classified MBA student or a Classified Graduate student in another graduate program at the University or obtain written permission from the MBA Coordinator.


## Readmission

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

## MBA Program Curriculum with a General Concentration (2004)

The MBA program consists of the following set of courses:

- MBA foundation courses (32 semester units)
- MBA required courses (21 semester units)
- MBA elective courses (9 semester units)

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

## MBA Foundation Courses (32 units)

The MBA 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
BUS 344 Organizational Behavior
BUS 360 Introduction to Marketing
BUS 370 Introduction to Managerial Finance
BUS 211 Business Statistics
ECON 204 and 205 Introduction to Economics
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.

## MBA Required Courses (21 units)

As the title signifies, the MBA 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

## MBA Elective Courses (9 Units)

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

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

## Analytical Writing Requirement

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

## Transfer Credits

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

## Grades

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

## Culminating Project

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

## MBA Program Curriculum with a Concentration in Wine Business (2007)

The MBA in Wine Business consists of the following set of courses:

- MBA Foundation courses (32 semester units)
- Wine Business MBA Required courses (24 semester units)
- Wine Business MBA Elective courses ( 6 semester units)

A student who has completed the MBA Foundation courses (see below) or their equivalents prior to admission need only complete the Wine Business MBA Required and Elective courses (a total of 30 semester units).

## MBA Foundation Courses (32 units)

The MBA 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 MBA Required Courses (24 units)

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

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

BUS 592 Entrepreneurship and New Venture Creation

## Wine Business MBA Elective Courses ( 6 units)

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

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


## Wine MBA 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 MBA. Graduate courses equivalent to our foundation courses will not be accepted to meet elective or required MBA courses. Transfer credits will normally only be accepted from AACSB accredited universities. Transfer courses must be approved by the MBA Coordinator. Be sure to get approval prior to taking any transfer courses.

## Grades

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

## Wine Industry Experience

All candidates for the MBA 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 MBA 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.

## CALIFORNIA CULTURAL STUDIES

PROGRAM OFFICE
Nichols 340
(707) 664-2903

Fax: (707) 664-4400
PROGRAM DIRECTOR
Robert Coleman-Senghor
E-mail: Robert.Coleman-Senghor@sonoma.edu

## Faculty

Robert Coleman-Senghor/ English
Marilyn Cannon/ Biology
Elizabeth Martinez/ Chicano and Latino Studies
Edward Castillo /Native American Studies
Steve Estes/ History
Michael Ezra/ American Multicultural Studies
Dorothy Freidel/ Geography
Anne M. Goldman/ English
Michelle Jolly/ History
Jeff Langley/ Director, Performing Arts
Ronald Lopez/ Chicano and Latino Studies
Andrew Merrifield/ Political Science
Susan Moulton/ Art History
Adrian Praetzellis/ Anthropology
Margaret Purser/ Anthropology
John Wingard/ Anthropology
Michael Schwager/ Director, University Gallery
Leni Strobel/ American Multicultural Studies

## Special Major (B.A.) and Minor in Interdisciplinary Studies in California Cultural Studies

The special major in Interdisciplinary Studies in California Cultural Studies has been established in order to bring together writers, scholars, artists, and students from various fields, organizations, and disciplines interested in the study of California. California Cultural Studies aims to attract a diverse group of students, representing a number of different ethnic and cultural groups as well as regions of California, into a learning community devoted to the study, preservation, and enrichment of California's cultural life. The program is designed so that students, scholars, and artists can work together on projects in an intellectually stimulating atmosphere.

California Cultural Studies is an interdisciplinary program that incorporates a range of critical perspectives, pedagogies, and resources, and is supported by a faculty with extensive backgrounds and scholarly work in history, literature, philosophy, art history, music, economics, political science, anthropology, environmental studies, natural history, geology, geography, and ethnic and cultural studies. With the exception of select CCS core courses, all course offerings are based in traditional disciplines and are cross-listed
by the departments of Art History, American Multicultural Studies, Native American Studies, Chicano and Latino Studies, Anthropology, History, Music, Film Studies, Geography, Geology, Biology, and Political Science.

The CCS major consists of 24-28 core course units and 1620 units in an area of concentration. In close collaboration with program faculty, majors complete their course of study through a capstone project or senior thesis grounded in original research and scholarship. Both the student's course of study and thesis or project must be approved by two CCS advisors and the program director. Students are encouraged to complete a minor in a discipline represented in the CCS program (i.e., History, Biology, English, Anthropology, Geography, Geology, AMCS, NAMS, CALS, or Film Studies, etc.).
The CCS Program also offers on and off campus internships in museum collection and exhibition, library special and regional collection, stream and river restoration, historical preservation, tourism, and agricultural and forest information services. Internships can be taken only credit/no credit and may not be used to fulfill major requirements. Students taking the internship course may receive financial assistance if the host institution makes it available. Consult an advisor for further details and restrictions.

## Prerequisites to the Major

1. Admission to the major.
2. Sophomore standing (though academic advising may begin earlier due to associated minors and supporting GE courses and programs).
3. Completion of GE categories:

A1 (California Cultural Analysis 200)
A2 (English 101)
A3 (Critical Thinking)

$$
\begin{array}{lr}
\text { Total units required for a B.A. in: Special Major in } \\
\text { California Cultural Studies Degree Requirements units } \\
\text { General education } & 51 \\
\text { California Cultural Studies major } & 44-48 \\
\text { General electives } & 24-28 \\
\text { Total units needed for graduation } & 120
\end{array}
$$

## Major Core Requirements

ENGL 280 Introduction to Studies in California Culture 3
ITDS 300 Faculty Forum 1
ENGL 302 Topics and Themes in California Cultural Studies 3-4
GEOG 390 Geography of California 3
ANTH 344 Material Cultural Studies 3
ANTH 444 Methods in Material Cultural Studies 1
ITDS 496 Senior Seminar in California Cultural Studies 3
HIST 472 California History I 4

Choose one of the following: California Ethnic Groups

AMCS 331 Ethnicity and History in California
AMCS 360 Asian-American Experience
ANTH 361 Indians in California
CALS 339 Chicanos/Latinos in U.S. Society: California Emphasis
NAMS 412 Native California History and Culture
Choose one of the following: California Arts
ARTH 480 Special Topics in Art: California Arts
ENGL 315* California Ethnic Literature
ENGL 480 Studies in California Literature
ENGL 485 California Writers


MUS 255 California Music
Total units in the core

* California Ethnic Literature fulfills GE C2 and the ethnic studies requirement.


## Areas of Concentration

One course is to be selected from each of the following areas, plus one additional course from any area. Courses taken in the areas of concentration may not be used to satisfy the core requirements.

## Arts and Literature Concentration

AMCS 360 Ethnic Literature: California emphasis
ARTH 480 California Arts
ENGL 215 Introduction to California Literature
ENGL 315 California Ethnic Literature
CALS 374 Chicano/Latino Literature
ENGL 480 Studies in California Literature
ENGL 485 California Authors
HIST 350 California Environmental History
MUS 255 Music of California
California Ethnic Groups Concentration
AMCS 210 Ethnic Groups in America
AMCS 331 Ethnic History in California
AMCS 377 Asian American Experience
ANTH 361 Indians in California
CALS 339 Chicanos/Latinos in U.S. History
NAMS 412 Native California History and Culture

## Culture, History, And Politics Concentration

ANTH 392 Research in California Prehistory
ANTH 420 Archaeological Methods
ANTH 444 Material Culture
ANTH 490 Topical Seminar in Anthropology
HIST 471 The American West 4
HIST 473 California History II 4
NAMS 412 Native California History and Culture 4
NAMS 418 Regional Historical Studies 3
NAMS 442 Contemporary Affairs of Native Americans of California 4
POLS 320 State, City, and County Government
POLS 428* Seminar in California Politics and Government

## Natural History and Geography Concentration

BIOL 314 Field Biology ..... 3
GEOL 111** Field Geology of Yosemite National Park ..... 1
GEOL 120 Regional Field Geoology: Death Valley ..... 3
GEOG 311 Geography of Wine ..... 4
GEOG 314 Field Experience: Northern California ..... 4
GEOG 314B Field Geography of Sonoma County Wine ..... 4
GEOG 318 Field Experience: Baja California, Mexico ..... 4
** GEOL 111 Field Geology of Yosemite National Park must be taken prior to or in conjunction with GEOL 102 Our Dynamic Earth.
Total units in the areas of concentration

## Sample Four-year Program for B.A. in ITDS Special Major in California Cultural Studies

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| GE ENGL 101 (A2) (3) | GE (C4) (3) |
| GE PHIL 101 (A3) (3) | ENGL 200 (A1) (3) |
| GE GEOL 102 (3) | GE Electives ( B4, D2, D3) (9) |
| GE Electives (C1, C2) (6) |  |
| SOPHOMORE YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| GE (D4) (3) | GE (D1) (3) |
| GE (B2) (3) | GE (B3, E) (7) |
| GE (D5) (4) | GE (C3) (3) |
| Electives (5) | Elective (2) |
| JUNIOR YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| HIST 472 (4) | ANTH 344 (3) |
| ENG 302 (3-4) | ANTH 444 (1) |
| AMCS 377 (3) | ENGL 480 (4) |
| GEOG 390 (2) | CCS Concentration (4) |
| CCS Concentration (3) | Elective (4) |
| SENIOR YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| ITDS 499 (4-8) | CCS Concentration (8) |
| ITDS 300 (1) | Electives (7) |
| POLS 428 (4) |  |
| Electives (7) |  |

TOTAL UNITS:: 120
Minor
Each California Cultural Studies minor consists of seven courses for
a total of 20-24 units.
Minor Core Requirements
ENGL 280 Introduction to California Cultural Studies (3) Or ..... 3
ENGL 302 Topics and Themes in California Cultural Studies ..... 3-4
GEOG 390 Geography of California ..... 3
HIST 472 California History I ..... 4
Total units in the minor core ..... 13-14
Choose one of the following: California Ethnic Groups (3-4 Units) AMCS 331 Ethnicity and History in California ..... 3
AMCS 377 Asian American Experience ..... 3
ANTH 361 Indians in California ..... 4
CALS 339 Chicanos/Latinos in US Society: California emphasis ..... 3
NAMS 412 Native California History and Culture ..... 4
NAMS 418 Regional Historical Studies ..... 4
Choose one of the following: California Arts (3-4 units)
AMCS 360 Ethnic Literature: California emphasis ..... 3
ARTH 480 California Art ..... 3-4
ENGL 315 California Ethnic Literature ..... 3
ENGL 480 Studies in California Literature ..... 4
ENGL 485 California Authors ..... 4
MUS 255 Music of California ..... 3
Choose one of the following: Natural History and Geography (3-4 units)
BIOL 314 Field Biology ..... 3
GEOL 111** Field Geology of Yosemite National Park ..... 1
GEOL 120 Regional Field Geology: Death Valley ..... 3
GEOG 311 Geography of Wine ..... 4
GEOG 314 Field Experience : Northern California ..... 4
GEOG 314B Field Geography of Sonoma County Wine ..... 4
GEOG 318 Field Experience: Baja California, Mexico ..... 4
Total units in the minor ..... 21-27

## Independent Study 495

Up to 4 units of independent study may be used to fulfill requirements in any area of concentration. Course must be approved by the CCS coordinator and an advisor.
** GEOL 111 Field Geology of Yosemite National Park must be taken prior to or in conjunction with GEOL 102 Our Dynamic Earth.

## 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, business 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:
Business, computer, or other related courses to be determined by the program advisor:
ARTH 312 Principles of Arts Management
ARTH 494 Gallery and Museum Methods
ARTH 499 Internship
Total units in the minor core
Students in the arts management career minor must also complete at least a minor in either art history or art studio.

## Career Minor in Health Systems Organizations

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

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

## Program Advisor

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

## Minor Core Requirements

Course selection is pending; please see advisor for details.
AMCS 432 Health and Culture
GERN/SOCI 452 Health Care and IIIness 4
GERN 499 Internship
Total units in the minor core

## Minor Electives

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

Total units in minor electives
Total units in the minor

## 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 enhancing the student's opportunities for employment in healthcare and other settings. The program is highly suitable for those interested, for example, in careers as nurses, physicians, counselors, therapists, public health workers, research analysts, and policy makers.
The career minor in women's health is designed to provide students with interdisciplinary course work, training, and work experience in the politics, practice, and experience of women's health. Career needs of both health care providers and liberal arts and sciences majors are addressed by the program.

## Program Advisor

Women's and Gender Studies
Rachel Carson Hall 18, 707 664-2840

## Minor Core Requirements

WGS 280 Women's Bodies: Health and Image
NURS 480 Sexuality, Health, and Society (3) or
WGS 350 Gender, Sexuality and Family
Practical Application
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)
Total units in the minor core
9-10

## Electives

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

## Suggested Electives

AMCS 432 Health and Culture 3
GEOG 396 Medical Geography 3
GERN 300 Basic Gerontology 3
3 GERN 408 Transitions in Adult Development 4
NURS 340 Health and IIIness in the Expanding Family 4
NURS 360 Community Health Nursing 3
3-4 PSY 404/WGS 330 Psychology of Women 4
PSY 454 Biofeedback and Somatic Psychology 4
SOCI 452 Health Care and Illness (cross-listed as GERN 452) 4
WGS 301 Women's Health Lecture Series 1-2
WGS 440/SOCI 440 Sociology of Reproduction 4
WGS/NURS 495 Special Study Research on Women's Health 1-4
Total units in electives 10-11
Total units required in the minor 20

## CHEMISTRY

DEPARTMENT OFFICE
Darwin Hall 300
(707) 664-2119
www.sonoma.edu/chemistry
DEPARTMENT CHAIR
Meng-Chih Su
ADMINISTRATIVE COORDINATOR
Cathi Cari-Shudde

## Faculty

Steven Farmer
Jennifer Whiles Lillig
Meng-Chih Su
Carmen F. Works

## Programs Offered

Bachelor of Science in Chemistry
(certified by the American Chemical Society)
Bachelor of Arts in Chemistry
Bachelor of Science in Biochemistry
Minor in Chemistry
Teaching Credential Preparation
Chemistry is the study of matter, its properties, and how it changes. An understanding of chemical principles is required to fully understand most scientific disciplines such as biology, medicine, physics, environmental science, geology, materials science, pharmaceuticals, agriculture, forensic science, most branches of engineering, and even studio art. Chemists not only study molecules that nature provides but also synthesize new molecules to be used in many of these fields.

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

## Careers in Chemistry

Sonoma State University is fortunate to be situated within the greater Bay Area, which is rapidly becoming a leading area for research in disciplines such as biotechnology, pharmaceuticals, materials science, and proteomics. Sonoma State graduates have a high success rate for acceptance into advanced degree programs in chemistry and biochemistry; medical, dental, and veterinary schools; cell and
molecular biology; and materials science. They have also entered the job market in a variety of careers, including government agencies (FBI, forensics), technical writing, chemical and biochemical research, cosmetics and perfumes, space chemistry, teaching at all levels, medical technology, pharmaceuticals, patent law, materials research, consulting, and applications of chemistry in business.

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

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

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

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

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements (may include 6 units in GE) | 47 |
| Supporting courses (may include 3 units in GE) | 22 |
| Electives | $0-9$ |
| Total units needed for graduation | 120 |

## Major Core Requirements

CHEM 115AB General Chemistry (or CHEM 125A)
( 6 units may be applied to GE)
CHEM 255 Quantitative Analysis (or CHEM 125B) 4
CHEM 310AB Physical Chemistry 6
CHEM 316 Physical Chemistry Laboratory 2
CHEM 325 Inorganic Chemistry 3
CHEM 335AB Organic Chemistry 8
CHEM 336 Organic Chemistry Laboratory II 2


## Sample Four-year Program for B.S. in Chemistry

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM 115A (5) | CHEM 115B (5) |
| MATH 161 (4) | MATH 211 (4) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (14 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| CHEM 335 A (5) | CHEM 335B (3) |
| MATH 261 (4) | CHEM 336 (2) |
| PHYS 114 (4) | PHYS 214 (4) |
| PHYS 116 (1) | PHYS 216 (1) |
|  | GE (3) |
|  | GE (3) |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
|  | CHEM $325(3)$ |
| CHEM $255(4)$ | CHEM $310 \mathrm{~B}(3)$ |
| CHEM 445 (3) | CHEM 316 (2) |
| CHEM 310 A (3) | CHEM $494(1)$ |
| GE (3) | GE (3) |
| GE (3) | GE (3) |


| SENIOR YEAR:: $\mathbf{3 0}$ Units |  |
| :--- | ---: |
| Fall Semester (13 Units) | Spring Semester (16 Units) |
| CHEM 401 (3) | CHEM 402 (3) |
| CHEM 494 (1) | CHEM 497 (1) |
| GE (3) | GE (3) |
| GE (3) |  |
| GE (3) |  |
|  |  |
|  |  |
|  |  |
|  | TOTAL UNITS:: $\mathbf{1 2 0}$ |

## Bachelor of Science in Biochemistry

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

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements (may include 6 units in GE) | 46 |
| Biology courses (may include 3 units in GE) | 12 |
| Supporting courses |  |
| (may include 3 units in GE) | $16-18$ |
| Electives | $0-7$ |
| Total units needed for graduation | 120 |

## Major Core Requirements

CHEM 115 AB General Chemistry (or CHEM 125A) ( 6 units may be applied to GE) 10

CHEM 255 Quantitative Analysis (or CHEM 125B) ..... 4
CHEM 310 AB Physical Chemistry ..... 6
CHEM 325 Inorganic Chemistry ..... 3
CHEM 335AB Organic Chemistry ..... 8
CHEM 401 Instrumental Analysis and Chemical Synthesis ..... 3
CHEM 441 Biochemical Methods ..... 3
CHEM 445 Structural Biochemistry ..... 3
CHEM 446 Metabolic Biochemistry ..... 3
CHEM 494 Undergraduate Research and Service Learning ..... 2
CHEM 497 Research Seminar ..... 1
Total units in the major core ..... 46
Biology CoursesBIOL 123 Molecular and Cell Biology (3 units may be applied to GE)4

Choose 2 from the following:
BIOL 340 General Bacteriology (4)
BIOL 342 Molecular Genetics (4)
BIOL 343 Molecular Microbiology (4)
BIOL 344 Cell Biology (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 courses

## Supporting Courses

MATH 161 Calculus I (3 units may be applied to GE)
MATH 211 Calculus II
PHYS 210A or 114 Physics I
PHYS 209A or 116 Physics Laboratory I
PHYS 210B or 214 Physics II
PHYS 209B or 216 Physics Laboratory II
Total units in supporting courses
16-18
Strongly recommended: additional units in
CHEM 494, Undergraduate Research and Service Learning
Sample Four-year Program for Bachelor of Science in Biochemistry

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM 115A (5) | CHEM 115B (5) |
| MATH 161 (4) | MATH 211 (4) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| CHEM 335A (5) | CHEM 335B (3) |
| PHYS 114 (4) or 210A (3) | PHYS 214 (4) or 210B (3) |
| PHYS 116 (1) or 209A (1) | PHYS 216 (1) or 209B (1) |
| BIOL 123 (4) | GE (3) |
| Elective (2 or 3) | GE (3 or 4) |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM $445(3)$ | CHEM $441(3)$ |
| CHEM $310 \mathrm{~A}(3)$ | CHEM $310 \mathrm{~B}(3)$ |
| CHEM $255(4)$ | CHEM $446(3)$ |
| GE (3) | GE (3) |
| GE (3) | GE (3) |


| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| CHEM 401 (3) | CHEM 325 (3) |
| CHEM 494 (2) | CHEM 497 (1) |
| BIOL elective (4) | BIOL elective (4) |
| GE (3) | GE (3) |
| GE (3) |  |
|  |  |
|  |  |
|  |  |
|  | TOTAL UNITS:: 120 |

## Bachelor of Arts in Chemistry

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

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements |  |
| (may include 6 units in GE) | 38 |
| Supporting courses | $16-18$ |
| (may include 3 units in GE) | $13-24$ |
| Electives | 120 |

## Major Core Requirements

CHEM 115AB General Chemistry ( 6 units
may be applied to GE) (or CHEM 125A)
CHEM 255 Quantitative Analysis (or CHEM 125B) 4
CHEM 310AB Physical Chemistry 6
CHEM 316 Physical Chemistry Laboratory 2
CHEM 325 Inorganic Chemistry 3
CHEM 335AB Organic Chemistry 8
CHEM 401 Instrumental Analysis and Chemical Synthesis 3
CHEM 497 Research Seminar 1
Elective (upper-division chemistry) 1
Total units in the major core 38

## Supporting Courses

MATH 161 Calculus I (3 units may be applied to GE) 4
MATH 211 Calculus II 4
PHYS 210A or 114 Physics I 3-4
PHYS 209A or 116 Physics Laboratory I 1
PHYS 210B or 214 Physics II 3-4
PHYS 209B or 216 Physics Laboratory II 1
Total units in supporting courses $\quad 16-18$
Strongly Recommended: CHEM 494, Undergraduate Research and Service Learning

## Sample Four-year Program for Bachelor of Arts in Chemistry

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM 115A (5) | CHEM 115B (5) |
| MATH 161 (4) | MATH 211 (4) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM 335 A (5) | CHEM 335B (3) |
| PHYS 114 (4) or 210A (3) | PHYS 214 (4) or 210B (3) |
| PHYS 116 (1) or 209A (1) | PHYS 216 (1) or 209B (1) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
|  | Elective (1-3) |

JUNIOR YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| CHEM 255 (4) | CHEM 310B (3) |
| CHEM 310A (3) | CHEM 316 (2) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (3) | GE (3) |
|  |  |
|  |  |
| Fall Semester (14 Units) | Spring Semester (16 Units) |
| CHEM 401 (3) |  |
| CHEM 494 (1) | CHEM 497 (1) |
| GE (3) | CHEM 325 (3) |
| GE (3) |  |
| Elective (4) |  |

TOTAL UNITS:: 120

## Minor in Chemistry

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

## Secondary Education Teaching Credential Preparation

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

## CHICANO AND LATINO STUDIES

DEPARTMENT OFFICE
Nichols Hall 214
(707) 664-2369
www.sonoma.edu/cals/
DEPARTMENT CHAIR
Elizabeth Coonrod Martínez
ADMINISTRATIVE COORDINATOR
Perce Smith

## Faculty

Patricia Kim-Rajal, Cultural Studies/Gender/Globalization Ronald López, History/Politics
Daniel Malpica, Sociology/Immigration/Labor
Elizabeth C. Martínez, Latin American/U.S. Latino Literature

## Lecturers

Frances Day, Minerva Flores, Marcia Ford, Laura Larque, Daniel Lopez, Roberto Ramirez

## Programs

Bachelor of Arts in Chicano and Latino Studies:
General Interdisciplinary Studies Track
Bachelor of Arts in Chicano and Latino Studies, Teacher-Preparation Track, CALS Liberal Studies Upper-Division SubjectMatter Preparation Program and Multiple-Subject Credential Bachelor of Arts in Chicano and Latino Studies, TeacherPreparation Track—CALS Liberal Studies Upper-Division Subject-Matter Preparation Program

CALS Social Science Single-Subject Matter (waiver) Program
Minors in Chicano and Latino Studies, various emphases

## History of the CALS Major and the Department

The major in Chicano and Latino Studies represents an interdisciplinary approach to the study of a particular population group in the U.S. Majors and minors in this program consider the historical, political, artistic, and cultural contributions of the Chicano and greater Latino population in the U.S. in courses that specifically address sociological, demographic, educational, and national and local issues that apply to this growing segment of U.S. society.

The Department was founded with the title of Mexican American Studies in 1969, one of several California State universities to do so. It is currently one of five original CSU departments in Chicano Studies, as most are now called, but SSU's department also incorporates the study of other Latino groups in the U.S.

The current major, while providing the history and basis for U.S. Latino studies, is up-to-date and cutting-edge in its approach to the
study of recent trends, statistics, and political issues that affect a population of more than 40 million in the U.S.
Students apply their studies to an analysis of contemporary society, through issues that include politics, linguistic and ethnic issues, demographic trends, immigration, education, poverty, literature, and the arts, to prepare them for employment in a variety of fields where it is important to analyze, speak, and write well. Graduates will be ready to assess the impact of regional and national affairs on society.

## Future Careers

CALS majors are optimally prepared for work in both the public and private sector, and as future teachers. The Chicano and Latino Studies B.A. provides a comprehensive foundation for liberal arts education. Graduates pursue careers in teaching, social services, law, criminal justice administration, business, community and public service, and counseling, or graduate school.
The Teacher-Preparation Track insures that students are betterprepared for classes, as well as for state exams, in the teaching credential certification process.
Students selecting the General Interdisciplinary Chicano and Latino Studies major embark on a variety of career paths, often discovering (as with all liberal arts majors) their true calling during the process of initial employment after graduation. For employers, they represent broadly trained and culturally astute professionals who can take on the challenges of careers in public service, government, and private enterprise. Graduates who select a Spanish emphasis are additionally prepared to communicate both orally and in writing in an additional language, thus opening more options in the job world.

## How to pursue interest in the major

## Freshman Students

Enroll in CALS 219, The Latino Experience, which provides a foundation for interdisciplinary studies in this field and also satisfies area D-1 in the G.E.
Another option is CALS 220, Chicano/Latino Arts \& Literature, which fulfills area C-4 in the G.E. and comprises a broad examination of the humanities and the U.S. Latino population.

## Transfer or Junior-level Students

Students are encouraged to enroll in CALS 339, Contemporary Issues in Chicano/Latino Communities, during their first semester at SSU. This class is an excellent background for students trying to decide between two or more majors, as it not only serves as an upper-division G.E. class-satisfying area D-1-it also provides an advanced-level introduction to interdisciplinary studies and constitutes an elective for the major.
The B.A. in Chicano and Latino Studies joins well with other majors for a double-concentration. The CALS Minor is often of interest to students pursuing majors in Business, History, Political Science, Spanish, Criminal Justice, Psychology, and Sociology.

## Bachelor of Arts in Chicano and Latino Studies

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 40 |
| Second major/Minor or Electives | 29 |
| Total units needed for graduation | 120 |

Courses suggested for students considering a CALS major:
CALS 219 The Latino Experience (3)*
CALS 220 Chicano/Latino Arts and Literature (3)*
*These courses are designed for lower-division, non-major students.

## Major Core Requirements

CALS 350 Latino Cultural Studies (4)
CALS 374 Chicano/Latino Literature (3-4)
CALS 403 Chicano/Latino Youth \& Adolescents (4) —OR—
CALS 405 The Chicano/Latino Family (4) CALS 426 Chicano/Latino Sociolinguistics (4)
CALS 445 Chicano/Latino History (4)
CALS 451 Chicano/Latino Humanities (3-4) —OR—
CALS 480 Latin American Migration to the United States (4)
CALS 458 Research \& Methodology (4)
Total units in the major core
CALS Electives: Choose an additional 12 units from the following courses for the general major:*
CALS 225 Spanish for Bilinguals (4) plus 225L (1)
CALS 310 Chicano/Latino Folk Arts \& Crafts (1)
CALS 339 Latinos and the U.S. Labor Market (3)
CALS 352 Chicano/Latino Philosophy (3-4)
CALS 365 Chicano/Latino Theater (2)
CALS 366 Mexican Folk and Traditional Dance (1)
CALS 368 Chicano/Latino Music (3)
CALS 393 Chicano/Latino Cinema (3)
CALS 400 Special Topics
CALS 403 Chicano/Latino Youth and Adolescents (4)
CALS 405 The Chicano/Latino Family (4)
CALS 432 Latinos in a Global Context (4)
CALS 442 Race, Class, and Gender Among Latinos (4)
CALS 450 Chicano/Latino Children's Literature (3)
CALS 456 Bilingual/Cross-Cultural Education (4)
CALS 474 Major Authors in Chicano/Latino Literature (4)
CALS 479 Chicano/Latino Art History (3-4)
CALS 480 Latin American Migration to the United States (4)

> Total units for general major

All majors must complete a capstone project/paper during their senior year in one of the following classes: CALS 405, CALS 426, CALS 445, CALS 480, or CALS 474.
*CALS double-majors have the option of using two upper-division courses from outside the department toward the 40 units.

Advising Four-year Plan for CALS Majors

FRESHMAN YEAR:: 32 Units

| Fall Semester (15-16 units) | Spring Semester (16 units) |
| :--- | ---: |
| ENGL 101 (A2) (3) | BIOL (B2) (3) |
| MATH (B4) (3) | CALS 219 (D1) (3) |
| ARTS GE (C1) (3) | PHIL 101 (A3) (3) |
| Physical Science GE (B1) (3) | HIST 201 (D2) (3) |
| Elective (Spanish is recommended) (4) | Elective (Spanish is recommended) (4) |

SOPHOMORE YEAR:: 31-33 Units

| Fall Semester (16-17 units) | Spring Semester (15 units) |
| :--- | ---: |
| HUMS 200 (A1) (3) | PHIL 120 or CALS 352(C3) (3) |
| ENGL or FL 214 or equiv, (C2) (3) | Physical Science GE (B3) (3) |
| POLS 200 (D4) (3) | Upper-division GE (D5) (3) |
| HIST 251 (D3) (3) | CALS 220 (C4) (3) |
| or CALS elective |  |
| CALS 225 (4+1) or CALS elective | CALS 339 (3) |
| JUNIOR YEAR:: 28-32 Units |  |

Fall Semester (15 units)
CALS 350 (4) Spring Semester (15 units)

CALS 451 (C4) (4)
CALS 374 (3-4)

CALS 458 (4)
Elective or 2d major or minor (4)
CALS elective (4)
CALS elective (4)
Elective or 2d major or minor (4)

## SENIOR YEAR:: 28-32 Units

| Fall Semester (16 units) | Spring Semester (16 units) |
| :--- | ---: |
| CALS 403 (UD GE, E1) or 405 (4) | CALS 445 (4) |
| CALS 432 or 442 (4) | CALS 426 (4) |
| Elective or 2d major or minor (4) | CALS elective (4) |
| Elective or 2d major or minor (4) | Elective or 2d major or minor (4) |

TOTAL SEMESTER UNITS FOR B.A. PROGRAM/CALS MAJOR:: 120-124

## Minor in Chicano and Latino Studies

Catalog currently states that classes for a CALS Minor of 20 units, must be selected from the CORE. This has not worked well for students with majors in various disciplines who are interested in adding a minor CALS focus that relates to their majors.
Therefore, because it has become an area of growing interest (the Minor), the following two options have been created to address two of the principal areas of interest.

## Social Science emphasis

CALS 339 3
CALS 405 4
CALS 458 4
CALS 445 4
CALS 456 or CALS 4804
CALS 395, Service-Learning Project 1-2
Total units required 20

## Spanish emphasis

CALS 225 (or Span 202):
One additional course in advanced-level Spanish required (up to two permitted), selected from the following: SPAN 301, SPAN 305, SPAN 307

Three or 4 classes selected from the following:
CALS 374, CALS 426, CALS 451, CALS 456, CALS 460 11-16
Total units required

## Spanish Language Proficiency

The CALS program is committed to the principle that students need to develop their Spanish language competencies. Proficiency in Spanish is a crucial skill for students who plan to become teachers, work in community services, go to graduate school, or do Chicano/ Latino-studies-related research. Spanish language competency may be demonstrated through completion of coursework at the upper-division level, by passing the language examination used for BCLAD credential students, or by approved study abroad.

## Subject-Matter (Teaching Credential) Preparation Programs

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

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

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

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

## Advising Plan for Four-Year Integrated Program

FRESHMAN YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| ENGL 101 (A2) (3) | BIOL 110 (B2) (4) |
| MATH 150 (B4) (3) | PHIL 101 (A3) (3) |
| ARTS GE (C1) (3) | HIST 201 (D2) (3) |
| Chemistry. Astronomy or Physics (B1) (3) | PHIL 120 (C3) (3) |
| POLS 200 (D3) (3) | ENGL 200 or AMCS 200 (A1) (3) |
| CALS 310 (1) |  |
| SOPHOMORE YEAR:: 31 Units |  |
| Fall Semester (16 Units) | Spring Semester (16 Units) |
| Geology or Physical Geography (B3) (3) | HIST 251/HIST 252 (3) |
| EDMS 417 (D1) (3) | CALS 365 or 366 (1) |
| HIST 251/HIST 252 (D3) (3)* | CALS 350 (4) |
| CALS 403 or EDMS 420 (E) (3) |  |
| CALS 458 (4) | CALS 368 or CALS 479 (C1) (3) |
| $\begin{aligned} & \text { GEOG } 302 \text { (D5) (3) } \\ & \text { EDMS } 470 \text { (3) } \end{aligned}$ |  |

## JUNIOR YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| CALS 451 (4) | CALS 426 (4) |
| CALS 460 (3) | MATH 300B (3) |
| CALS 374 (C2) or CALS 450 (3) | EDMS 471 (2) |
| EDMS 463 (3) | EDMS 474 (3) |
| MATH 300A (3) | EDMS 476F \& EDMS 476S (4) |

SENIOR YEAR:: 35 Units

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

TOTAL SEMESTER UNITS FOR B.A. PROGRAM AND CREDENTIAL:: 131
*Students need to take both sections of U.S. History in order to complete program requirements.

Notes:

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

Single Subject Matter Preparation Program in Chicano and Latino Studies/Social Science

This Single-Subject waiver program can no longer admit students as of July 1 , 2005. Sonoma State or community college students currently in track or planning for the program may continue but must complete the waiver by no later than July 1,2009 . This single subject program is currently under departmental review.

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

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

## Sample Four-year Program

FRESHMAN YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| ENGL 101 (A2) (3) | BIOL 110 (includes lab) (B2) (4) |
| MATH 150 (B4) (3) | PHIL 101 (D1) (3) |
| ARTS GE (C1) (3) | PHIL 120 (A3) (3) |
| Chemistry. Astronomy or Physics (B1) (3) | HIST 201 (D2) (3) |
| POLS 200 (D3) (3) | ENGL 200 or AMCS 200 (3) |
| SOPHOMORE YEAR:: 28-31 Units |  |
| Fall Semester (14-15 Units) | Spring Semester (14-16 Units) |
| Geology or Physical Geography (B3) (3) | HIST 252 (3) |
| CALS 350 (4) |  |
| CALS 225 (3) + lab (1) | EDMS 417 (D1) (3) |
| CALS 310 (1) | CALS 365 or 366 (1-2) |
| HIST 251 (D3) (3) | CALS 374 (C2) or CALS 450 (3-4) |
| Electives (3-4) | Elective or Concentration (4) |
| JUNIOR YEAR:: 31 Units |  |
| Fall Semester (17 Units) | Spring Semester (14 Units) |
| MATH 300A (3) | MATH 300B (3) |
| CALS 451 (C4) (4) | CALS 368 or CALS 479 (C1) (3) |
| CALS 458 (4) | GEOG 302 (D5) (4) |
| CALS 460 (3) | Electives (4) |
| KIN 400 (3) |  |

SENIOR YEAR:: 30-31 Units

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

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

## COMMUNICATION STUDIES

DEPARTMENT OFFICE
Nichols Hall 330
(707) 664-2149
www.sonoma.edu/communications/
DEPARTMENT CHAIR
Melinda Barnard
ADMINISTRATIVE COORDINATOR
Tai Sakamoto

## Faculty

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

## Programs Offered

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

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

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

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

Students are required to take a senior-year internship. The department emphasizes internships that provide students with real-world insights into the media. The department has developed professional media internships with community organizations, radio and television stations, newspapers, magazines, public relations firms, and other media groups.
All on-campus media operate in conjunction with communication studies classes. On-campus media offer a variety of opportunities for students. They include the Star, the student newspaper; KSUN, an Internet radio station that can be heard at www.sonoma.edu/ ksun; and SSU-TV, the campus television station that provides news, information, and entertainment.

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

## Careers in Communication Studies

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

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

## Bachelor of Arts in Communication Studies

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

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

- Major Core: All students complete 28 units of required coursework.
- Skill Sequence: Students complete one Skill Sequence comprised of a 4 -unit beginning \& 4 -unit advanced skill course.
- Major Electives: Students complete 12 units of COMS electives. Student may choose to work for one of the Campus Media outlets for their 12 units of electives.

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

## Four-year Plan for Bachelor of Arts in Communications Studies

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

FRESHMAN YEAR:: 30 Units

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

SOPHOMORE YEAR:: 28-31 Units

| Fall Semester (14 Units) | Spring Semester (***14-17 Units) |
| :---: | :---: |
| GE Science:B1,B2, or B3 (3) | GE (3) |
| GE: D3 or D4 (3) | GE: B1, B2, or B3 (3) |
| COMS 200 (4) | COMS 202 (4) |
| COMS Beg. Skill Class (4) | COMS Adv. Skill Class (4) |
|  | GE ***Optional (3) |
| JUNIOR YEAR:: 33 Units |  |
| Fall Semester (16 Units) | Spring Semester (17 Units) |
| Upper-Division GE (3) | Upper-Division GE (3) |
| Upper-Division GE Area E (3) | GE (3) |
| University Elective/GE (3) | COMS Elective (4) |
| University Elective (3) | University Elective (3) |
| COMS 301/302 (4) | COMS 301/302 (4) |

## SENIOR YEAR:: 26-29 Units

| Fall Semester (13 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| University Elective (3) | COMS 315 *must be taken last semester (4) |
| University Elective (3) | COMS 402 *must be taken last semester (4) |
| GE***(if not taken Sophomore year) (3) | COMS Electives (4) |
| COMS Elective (4) | COMS 499 (4) |

TOTAL UNITS:: 120

DEPARTMENT OFFICE
Darwin Hall 116
(707) 664-2667
www.sonoma.edu/cs
DEPARTMENT CHAIR
Lynn Stauffer
ADMINISTRATIVE COORDINATOR
Gina Voight

## Faculty

Ali Kooshesh
George Ledin Jr.
B. Ravikumar

Suzanne Rivoire
Lynn Stauffer
Tia Watts

## Programs Offered

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

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

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

Degree Requirements for a Bachelor of Science in Computer Science

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

## Major Core Requirements

CS 110 Introduction to Unix 1
CS 115 Programming I (GE Area B3) 4
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 4
CS 370 Software Design and Development 4
CS 415 Algorithm Analysis 4
CS 450 Operating Systems 4
CS 454 Theory of Computation 4
CS 460 Programming Languages 4
Total units in major core
49

## Computer Science Electives

Choose 9 units of upper-division CS electives (see list below). No more than 3 units can be satisfied by a combination of CS 349, 390, 495, and 497.
CS 340 Computer Security (3)
CS 349 Problem Solving in a Team Environment (1)
CS 360 Object-Oriented Programming (3)
CS 365 Computer Networking and the Internet (3)
CS 375 Computer Graphics (3)
CS 385 Selected Topics (1-4)*
CS 390 Computer Science Colloquium (1)
CS 452 Compiler Design and Construction (3)
CS 465 Data Communications (3)
CS 480 Artificial Intelligence (3)
CS 495 Special Studies (1-4)
CS 496 Senior Seminar (1-4)
CS 497 Internship (2)
*Selected topics courses include Bioinformatics, Data Compression, Computer Game Development, Parallel and Distributed Computing, Wireless Networks, and other current topics in computer science.

Total units in major electives

## CS Capstone Requirement

One of the following courses:
CS 470 Advanced Software Design Project (3)
CS 495 Special Studies (requires Instructor approval) (3)

> Total units in capstone requirement

Required Supporting Courses
MATH 161Differential and Integral Calculus I (GE Area B4)
Two additional courses from the following:
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

Total units in the major
71-73

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

## FRESHMAN YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| CS 110 (1) | MATH 161 (GE-B4) (4) |
| CS $115($ GE-B3 ) (4) | CS 215 (4) |
| GE (3), GE (3), GE (3) | GE (3), GE (3) |


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

## 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 110 Introduction to UNIX 1
CS 115 Programming I 4
CS 215 Programming II 4
Total units in minor core

## Minor Electives

Choose 11 units of CS major courses 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
Total units in the minor

## SOPHOMORE YEAR:: 30-31 Units

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

## JUNIOR YEAR:: 33-34 Units

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

DEPARTMENT OFFICE
Nichols Hall 220
(707) 664-2544
www.sonoma.edu/counseling
DEPARTMENT CHAIR
Carolyn Saarni
ADMINISTRATIVE COORDINATOR
Stephanie Wilkinson

## Faculty

Maureen Buckley
Adam Hill
Jayamala Madathil
Carolyn Saarni
Adam Zagelbaum

## Programs Offered

Master of Arts in Counseling
Option I Community Counseling: Marriage and Family Therapy (MFT)

Option II School Counseling: Pupil Personnel Services
Additional Programs
Community Counseling Center
MEAP (Migrant Education Advisor Program)
The 60 -unit graduate program in counseling offers two professional training options: Option I prepares students for Community Counseling/ Marriage and Family Therapy licensure (CC/MFT), and Option II prepares students for the School Counseling and the Pupil Personnel Services Credential (CC/PPSC). The program relies heavily on interpersonal skill training and field experience, beginning during the first semester and culminating with an intensive supervised internship/field experience in some aspect of counseling, permitting the integration of theory, research, and practical application. The Department is prepared to assist 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, community colleges, and college-level student services departments. 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.

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 that 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 in the student a sound foundation for a lifetime of continued professional growth -- a foundation which permits confident movement into an entry-level counseling position but which does not pretend to be more. Within the compass of a 60 -unit program, the faculty sees such a goal as attainable and eminently worthwhile.
The faculty is committed to the idea that counselors of the future should take an active role in helping to shape the social/environmental milieu in which they will work. While the faculty recognizes how difficult this task may be in specific instances and areas, it sees the counselor as one who actively participates in the life of an organization, not as a submissive keeper of the status quo or an unseeing iconoclast, but as a sensitive and perceptive voice representing individual freedom and human values. Leadership skills, and the skills necessary to facilitate change, are stressed in this program.
The master's program may be completed within two academic years; however, some students with jobs and/or family responsibilities may wish to move more slowly. Resources permitting, efforts will be made to accommodate individual patterns. For most students, 8 units per semester will be considered a minimal number. It should be stressed that individual program paths should be planned very carefully, since many courses will not be offered every semester.
The Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Recognition of Postsecondary Accreditation (COPA), has conferred accreditation to the Counseling Department at Sonoma State University in both Community Counseling and School Counseling. The School Counseling program is accredited by the California Commission on Teacher Credentialing (CCTC); in addition, the School Counseling program is accredited by the National Council for Accreditation of Teacher Education (NCATE). The Community Counseling program is not designed to meet criteria for CACREP's Marital, Couple, and Family Counseling/Therapy specialization; however, it is accredited by the Board of Behavioral Science for training required for licensure as a

Marriage and Family Therapist in California.
A student who has not been formally admitted to the Counseling Department may take no more than 12 units and only in the following course offerings: COUN $501,502 \mathrm{~A} / \mathrm{B}, 503,511,520,524,525,527 \mathrm{~A} / \mathrm{B}$, $528 A / B, 535,545$, and 581 . Admission to individual courses in no way implies admission to the Master's Degree program or to the PPSC program. You may take these courses through Open University. Call Extended Education for more information (664-2394).

## Master of Arts in Counseling

## Admission Requirements

1. A bachelor's degree, preferably in the behavioral sciences and with sound preparation in psychology, or in education for the School Counseling option, is required.
2. For both options a course in personality theory and an undergraduate or graduate level statistics course that includes Analysis of Variance is required; in addition, a course in abnormal psychology is required for the MFT/Community Counseling option. A course in child development, and documentation that you have taken the CBEST by the start of your first semester (www.cbest.nesinc.com), is required for the PPS School Counseling option.
3. Applicants are strongly encouraged to have acquired an undergraduate-level of understanding of human development, psychodynamic principles, family/educational systems, cogni-tive-behavioral applications, and client-centered therapy. This introductory knowledge base may be acquired by enrolling in relevant course-work or by undertaking thoughtful reading on these topics.
4. A 3.00 (B) grade point average in the last two years of undergraduate work is required. Applicants who satisfy all other requirements may petition the University for waiver of this requirement. It should be emphasized that such a waiver is not automatically granted.
5. Completion of Counseling Department application forms, in addition to those required by the University.
6. A personal interview for both programs is required for applicants considered for final review. In this interview, 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. Relevant work experience (paid or volunteer);
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; and
d. GRE results are not required for admission to the Counseling program.
For more information, please see Graduate Degrees in the Degree Requirements section of this catalog.
CREDENTIAL ONLY: Students with master's degree in a practitioner counseling area such as MFT, Social Work, Counseling, School Psychology (a M.A. program that required a practicum and internship/field experience or a two-year internship/field experience) may be considered for "Credential Only" admission. They must apply through the traditional process and go through an interview. Typically the credential-only admittees will have approximately 30 units to complete in our program. The number of units may vary depending on the individual transcripts assessment. They would have to take all of the School Counseling specific courses and would have to complete the 600 -hour (total) field experience/internships.

## Application Procedures

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

## General Information Meetings

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

## Major Core Requirements

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

## Option I - Community Counseling/Marriage and Family Therapy

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

COUN 502A/B Adult Development: Individual, Family, and Career Development 4 COUN 503 Dynamics of Individual Behavior
COUN 510B Counseling Practicum
COUN 512 Theory and Practice of Group Counseling 4
COUN 535 Development and Clinical Issues with Children and Adolescents 4
COUN 540 Marriage and Family Counseling
COUN 545 Law and Ethics for the Counselor
COUN 580A/B Relationship and Sexuality Counseling 4
COUN 581 Introduction to Chemical Dependency 1
COUN 582 Psychopharmacology
Additional elective units (with department approval)
Total units in the Community Counseling option
Total units in the degree

## Option II - School Counseling/Pupil Personnel Services Credential

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

COUN 510B Counseling Practicum 4
COUN 511 Counseling for Career Development 4
COUN 520 Introduction to School Counseling 4
COUN 521 Pupil Personnel Services: Concepts and Organization 4
COUN 523 Working with Families in a School Setting 4
COUN 524 Counseling Children and Adolescents 4
COUN 526 Group Counseling in Schools
COUN 527A Legal Issues in Special Education
COUN 527B Law and Ethics for School Counselors
2
COUN 528A Consultation 3
COUN 528B Crisis Intervention 1
Total units in the School Counseling option

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

## Community College Counseling Credential

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

## Sample Two-year Program for Master of Arts in Counseling

## FIRST YEAR:: 29-31 Units

| Community Counseling/MFT | School Counseling/PPSC |
| :--- | ---: |
| Fall Semester (15 Units) | Fall Semester (15 Units) |
| COUN 501 (4) | COUN 510A (4) |
| COUN 510A (4) | COUN 520 (4) |
| COUN 535 (4) | COUN 524 (4) |
| COUN 570 (3) | COUN 527A/B (3) |
| Spring Semester (14 Units) | Spring Semester (16 Units) |
| COUN 510 B (4) | COUN 501 (4) |
| COUN 503 (3) | COUN 510B (4) |
| COUN 525 (2) | COUN 511 (4) |
| COUN 581 (1) | COUN 526 (4) |
| COUN 582 (2) |  |
| Electives (2) |  |

SECOND YEAR:: 29-31 Units

| Fall Semester (15 Units) | Fall Semester (14 Units) |
| :--- | ---: |
| COUN 502A/B (4) | COUN 514A (4) |
| COUN 514A (4) | COUN 525 (2) |
| COUN 540 (4) | COUN 528A/B (4) |
| COUN 545 (3) | COUN 513 (4) |
|  |  |
| Spring Semester (16 Units) | Spring Semester (15 Units) |
| COUN 513 (4) | COUN 570 (3) |
| COUN 514B (4) | COUN 514B (4) |
| COUN 512 (4) | COUN 521 (4) |
| COUN 580A/B(4) | COUN 523 (4) |

## 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. An M.A. in English with a creative thesis option is also offered. The B.A. degree is a 40-unit program, and the M.A. degree is a 34 -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 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 Profane Halo, Lovers in the Used World, Beckon, Tall Stranger, and Some Gangster Pain. Widely anthologized, her work has appeared in the Norton Anthology American Hybrid, several Best American Poetry collections, The Pushcart Prize Anthology, and Lyric Postmodernisms. Gillian Conoley has taught at the Iowa Writers' Workshop, Tulane University, Vermont College MFA Program, and the University of Denver. Fiction writer Sherril Jaffe is the winner of a PEN award and author of eight books of fiction and nonfiction, including Scars Make Your Body More Interesting, One God Clapping, This Flower Only Blooms Every Hundred Years, The Unexamined Wife, The Faces Reappear, House Tours, and Interior Designs, all with Black Sparrow. She is also the author of two works of literary non-fiction from Kodansha: A memoir, Ground Rules: What I Learned My Daughter's Fifteenth Year as well as, with Alan Lew, One God Clapping: The Spiritual Path of a Zen Rabbi, a San Francisco Chronicle best seller and winner of the Josephine Miles Award for Literary Excellence in 2000. Her stories appear regularly in such literary journals as Zyzzyva, Epoch, and The Alaska Quarterly Review. Sherril Jaffe has also taught at the New School for Social Research in New York City. Noelle Oxenhandler is the author of three non-fiction books: A Grief Out of Season, The Eros of Parenthood, and The Wishing Year, An Experiment in Desire (Random House 2008). Her essays, which have been frequently anthologized, have appeared in many national and literary magazines, including The New Yorker, The New York Times Magazine, Vogue, "0" 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 nonfiction, including the widely anthologized collection of essays, Keeping Slug Woman Alive: A Holistic Approach to American Indian Texts, WatermeIon 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 Newkirk Reading Series Foundation, 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 Quentin Bell, Stephen Kessler, Rae Armantrout, Lawrence Weschler, David Halberstam, Ishmael Reed, Jessica Mitford, Allen Ginsberg, Lawrence Ferlinghetti, Charles Bernstein, Lyn Hejinian, Tom Wolfe, Yusef Komunyakaa, Czeslaw Milosz, Edward Albee, Kurt Vonnegut Jr., Stephen Spender, Michael Palmer, Donald Revell, Jane Miller, James Ellroy, Wanda Colemen, Lynn Freed, and Li Yun Li.

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.

VOLT is the 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.

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 CRIMINALJUSTICESTUDIES

DEPARTMENT OFFICE
Stevenson Hall 2084C
(707) 664-2934
www.sonoma.edu/ccjs
DEPARTMENT CHAIR
Patrick G. Jackson
ADMINISTRATIVE ANALYST
Lisa Kelley
ADMINISTRATIVE COORDINATOR
Katie Musick

## Faculty

Barbara Bloom
Diana Grant
Patrick Jackson
Eric Williams
Tryon Woods

## Programs Offered

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

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

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

## Bachelor of Arts in Criminology and Criminal Justice Studies

Degree RequirementsUnitsGeneral education51
Major core requirements ..... 36
Electives (chosen under advisement) ..... 24
Free electives ..... 9
Total units needed for graduation ..... 120
applied to the category "electives chosen under advisement." The course work taken at this University to complete the major requirements must be selected in consultation with a department advisor.

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

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

Major Core Requirements
CCJ 201 Criminal Justice and Public Policy
CCJ 220 Criminology or
CCJ 420 Seminar in Criminology
CCJ 330 Government and the Rule of Law or
CCJ 404 Introduction to Constitutional Law
CCJ 370 Seminar in Research Methods 4
CCJ 450 Punishments and Corrections 4
CCJ 489 Civil Liberties and the Constitution or
CCJ 405 Rights of the Accused
CCJ 490 Senior Seminar: Criminology and Criminal Justice Studies
CCJ 497 Juvenile Justice
CCJ 499 Internship* 4

Total units in major core

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


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

The sequence and selection of specific courses are suggestive.

FRESHMAN YEAR:: 32 Units

| Fall Semester (15 Units) | Spring Semester (17 Units) |
| :---: | :---: |
| ENGL 101 (3) | PHIL 101 (3) |
| Mathematics GE (3) | GE (3) |
| GE (3) | GE (3) |
| Electives (6) | Computer Science (3) |
|  | SPAN 101 (4) |
|  | SPAN 101L (1) |
| SOPHOMORE YEAR:: 31 Units |  |
| Fall Semester (15 Units) | Spring Semester (16 Units) |
| HUM 200 (3) | GE (3) |
| GE (3) | GE (3) |
| CCJS 201 (4) | CCJS 370 (4) |
| SPAN 102 (4) | Elective (3) |
| SPAN 102 L (1) | GE (3) |

Please note that transferable units from other institutions may be

| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| CCJS 399 (1) | CCJS 330 (4) |
| CCJS 420 (4) | CCJS 450 (4) |
| CCJS 489 (4) | Upper-Division GE (3) |
| Electives (3) | Electives (3) |
| Upper-Division GE (3) |  |
| SENIOR YEAR:: 28 Units |  |
| Fall Semester (13 Units) | Spring Semester (15 Units) |
| CCJS Upper-Division Electives (4) | CCJS 490 (4) |
| Upper-Division GE (3) | CCJS 499 (4) |
| Electives (6) | CCJS 497 (4) |
|  | Electives (3) |
| TOTAL UNITS:: 120 |  |

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

DEPARTMENT OFFICE
Stevenson Hall 2042
(707) 664-2366
www.sonoma.edu/econ/
DEPARTMENT CHAIR
Robert Eyler
ADMINISTRATIVE COORDINATOR
Barbara Dietrich
LOWER-DIVISION ADVISOR
Sheila Mackintosh-Sims

## Faculty

*Carlos Benito
Florence Bouvet
Steven Cuellar
Robert Eyler
Sue Hayes
Chong-Uk Kim
Michael Visser
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Arts in Economics
Minor in Economics
Secondary Teaching Credential Preparation

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 and to training students 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 decisionmaking in the private and the public sector.

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 business, 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 demonstrate:

- Understanding of economic terms, concepts, and theories;
- Ability to compare and contrast competing views within economics;
- Ability to research economic issues; and
- Ability to apply economic theories and concepts to contemporary social issues.


## General Skills

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

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


## Relating Knowledge to Values

Students are expected to acquire and demonstrate:

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


## Bachelor of Arts in Economics

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

## Prerequisites

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

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

| Total units in the major core | $26-28$ |
| ---: | ---: |
| Field concentration or advisory study plan | $15-16$ |
| Total units in the major | $41-44$ |

## B.A. Field Concentrations

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

Managerial Economics
Labor and Public Economics
International Economics

## B.A. Advisory Study Plans

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

## Minor in Economics

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

ECON 204 Introduction to Macroeconomics
ECON 205 Introduction to Microeconomics 4
ECON 304 Intermediate Macroeconomic Theory
ECON 305 Intermediate Microeconomic Theory
Upper-division Economics Course
Total units in the minor

## Sample Four-year Program for Bachelor of Arts in Economics

FRESHMAN YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| ENGL 101 (A2) (3) | PHIL 101/102 (A3) (3) |
| MATH 165 (B4) (4) or BUS 211 (4) | BIOL 110 (B2/ab) (4) |
| ECON 204 (D5) (4) | ECON 205 (4) |
| UNIV 102 (3) | U.S. History course (D3) (3) |
| SOPHOMORE YEAR:: 34 Units |  |
| Fall Semester (18 Units) | Spring Semester (16 Units) |
| Written/Oral Analysis (A1) (3) | Physical Science course(B1) (3) |
| Literature (C2)* (3) | POLS 200 (D4) (3) |
| ECON 305 (4) | Fine Arts course (C1)* 3 ) |
| ECON 317 (4) | Natural Science (B3) (3) |
| Social Sciences (D1*/D2) (4) | ECON 304 (4) |

JUNIOR YEAR:: 28 Units
Fall Semester (14 Units)
Spring Semester (14 Units)
Humanities (C3/C4)* (3)
Humanities UD(C4/C3)* (3)
Concentration/Advisory study plan (8) Concentration/Advisory study plan (8)
Social Sciences UD GE (D2/D1) (3)
Elective (3)

SENIOR YEAR:: 31 Units

Fall Semester (19 Units)
Electives (12)
Integrated Person UD GE (E)* (3)
Economics Seminar (4)
In order to total the 120 units necessary for graduation within four years, a student must average 15 units per semester.
(*One of these courses must be ethnic studies.)

TOTAL UNITS:: 120

## Double Majors

Students with majors in disciplines such as 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 should consult with their Economics Department advisor.

## Graduate Work in Economics and Related Fields

Economics majors planning graduate work in economics, business, and public administration should take one or more courses of calcuIus and linear algebra, probability theory, ECON 408, and ECON 417. Consult with an advisor early if possible, and plan accordingly.

## Teaching Credential Preparation

Economics is a required course for all California high school students. Economics majors wishing to qualify for such teaching positions should consult with the department chair and review the basic teaching credential programs offered by the Education Department.
sChOOL OFFICE
Stevenson Hall 1078
(707) 664-3115/2132
www.sonoma.edu/education

## CREDENTIALS OFFICE

Stevenson Hall 1078, (707) 664-2832

## Departments and Programs

Detailed program information can be found in the departments, which are listed in alphabetical order following this section.

Curriculum Studies and Secondary Education Department
Single Subject Credential, Single Subject Intern Credential (EDSS courses)

Integrated Programs in English, Kinesiology, Music, and Mathematics

Master of Arts in Education: Curriculum, Teaching, and Learning (EDCT courses)

Literacy Studies and Elementary Education Department Multiple Subject Credential, Multiple Subject Intern Credential (EDMS courses)

BCLAD (Bilingual Spanish), Multiple Subject Credential (EDMS-B) courses

Master of Arts in Education: Early Childhood Education (EDEC courses)

Early Childhood Education Certificate (EDEC courses)
Ukiah Multiple Subject Outreach Program
Reading Certificate (EDRL courses)
Reading Specialist Credential (EDRL courses)
Master of Arts in Reading and Language (EDRL courses)
Teaching Credential Subject Matter Preparation -
Elementary Programs
American Multicultural Studies
Environmental Studies
Liberal Studies (Hutchins)
Chicano and Latino Studies
Educational Leadership and Special Education Department
Education Specialist Credential (Special Education), Mild/ Moderate; Moderate/Severe Levels I and II, Intern (EDSP courses)

Administrative Services Credentials, Levels I and II, Intern (EDEL courses)

Master of Arts in Special Education (EDSP courses)
Master of Arts in Educational Leadership (EDEL courses)

Teaching Credential Subject Matter Preparation -
Secondary Programs
Art
English
Mathematics
Music
Physical Education and Adapted Physical Education
Science
Spanish
Social Sciences
Other single subject areas through state approved tests

## 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 integrated degree and elementary credential programs are currently available for majors in American Multicultural Studies (AMCS) and Chicano and Latino Studies (CALS) leading to a Multiple Subject Credential. The undergraduate blended degree program is currently available for Track 3 majors in Hutchins Liberal Studies, leading to a Multiple Subject Credential. Students in these programs 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 English, Mathematics, 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 Integrated/Blended Credential Program advisor in the appropriate department and the Credentials Office in the School of Education.

## General Information

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 3.0 GPA in all professional education courses (including prerequisites);
- Successful completion of required field experiences;
- Successful presentation of a program portfolio prior to advancement to the final phase of the program and/or completion of the final field experience; and
- Effective July 2008 all credential candidates in Multiple Subjects and Single Subjects will be required to successfully complete the Performance Assessment for California Teachers.

The Multiple Subject and Single Subject Credential authorize the teaching of students at various stages of English language development and from a variety of cultural backgrounds.

Individuals interested in teaching at the elementary school level should choose one of the following program emphases, Multiple Subject Credential or Multiple Subject Credential BCLAD. Both of these program emphases lead to a credential that authorizes the holder 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, 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 Education Specialist (special education) Credentials, Level I and Level II, are offered for Mild/Moderate and Moderate/Severe disabilities and authorize the holder to provide services in K-12 special day classes (SDC) or resource specialist program classes (RSP).

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.

Master of Arts 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.

## Credentials Office

The Credentials 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. Newly credentialed teachers are generally finding jobs rather rapidly today throughout the state, with equally good prospects for the future. Currently shortages of credentialed
teachers exist in mathematics, science, special education, Spanish, and bilingual education. In addition, graduates of the School of Education find positions in community agencies and in the private sector.

## Basic Teaching Credential Programs

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

- Possession of a bachelor's degree;
- Verification of appropriate subject matter competency, either completion of an approved subject matter preparation program or passage of appropriate state-approved examination(s);
- Basic Skills Requirement met via appropriate option;
- Completion of a college-level course or college-level examination that covers the U.S. Constitution. POLS 200 or 202 at SSU will meet the requirement;
- Completion of a state-approved program of professional teacher education;
- Valid Adult, Child, Infant CPR card (Single Subject and Multiple Subject only); and
- RICA (Multiple Subject and Education Specialist level 1 only).

Note: Students should consult with the Credentials Office during their first semester on campus if they plan to pursue a teaching credential. Students admitted to a credential program should contact the Credentials 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. Admission to the University;
2. Submission of application to a basic credential program through the School of Education;
3. Professional Goals Statement;
4. Grade point average of 2.75 in last 60 units of attempted course work or a 2.67 overall grade point average;
5. Basic Skills Requirement met or in progress via appropriate option;
6. Two letters of recommendation;
7. Verification of appropriate subject matter competency completed or in progress (requirement depends on type of credential sought);
8. Submission of negative TB test dated within 12 months of application to the program;
9. Filing of the application for a Certificate of Clearance, which includes fingerprinting;
10. Demonstration of aptitude, personality, and character traits that satisfy the standards of the teaching profession. Assessment of these qualities will be made by the School of Education through evaluation of interviews, letters of recommendation, candidates' professional goals statement, and spontaneous writing sample;
11. Evidence of 45 hours of experience working with school-age children; 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.

Some students may be admitted to basic teaching credential programs who have not met one or more of the above requirements when such students have compensating strengths in other required areas.

Note: Additional program-specific admission requirements are listed with each program description, available from the School of Education Credentials Office.

## Procedures for Admission to Basic Teaching Credential Preparation Programs

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

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

## Continuation In Basic Teaching Credential Preparation Programs

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

## 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 visit the School of Education website at www.sonoma.edu/education and look under "Student Support" for information or 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 five areas of concentration within the Master of Arts in Education degree. Each of these programs reflects the philosophy, purpose, and goals of the School of Education Conceptual Framework, developed by the School of Education faculty. In our M.A. programs students critically examine educational theories and research through a variety of empirical, theoretical, and cultural lenses to develop an informed educational vision and innovative pedagogy in a variety of educational settings. Students have the opportunity to collaborate with faculty and colleagues to examine and influence current educational practice through research, project development, and advocacy. We expect graduates to emerge from their work at Sonoma State University as leaders in their field and agents of change.
The five 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); and
- Special Education (see Department of Educational Leadership and Special 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 course work in the approved M.A. program as well as in all course work 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 and Early Childhood Education program areas).


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

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

## Pathways to Program Completion

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

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

## Thesis/Project

The thesis/project pathway is a 30 -unit course of study, including 18 units in the student's program area of concentration and 12 units of core courses (EDUC 570, 571, 598, and 599). In order to prepare for the thesis/project, students must take Education 598 (Developing a Thesis/Project) and 599 (Supervised Study for the Thesis/Project) as their final two courses in the M.A. program.
The thesis is a written product of a systematic study of a significant question, problem, or issue in education. The project is a written document describing a significant undertaking appropriate to
education. The thesis/project option requires an extensive write-up, including an in-depth literature review. Students must also present their thesis/project to their three-member committee in a public forum. Examples of a thesis investigation include process/product research, correlational 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.

## Cognate

The cognate pathway is a 36 -unit course of study, including 18 units in students' 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, that 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 candidates' 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.

## Individualized Examination

The individualized examination pathway is a 33 -unit course of study, including 18 units in the students' 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 four 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.

## 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.

## 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
Forstudentspursuingthethesis/projectpathway,twoothercorecoursesare required:
EDUC 598 Developing a Thesis/Project and 3
EDUC 599 Supervised Study for Thesis/Project 3
For students pursuing the cognate pathway, one other core course is required:
EDUC 572 Supervised Study for the Cognate Project
For students pursuing the individualized exam pathway, one other core course is required:
EDUC 573 Supervised Study for the Individualized Examination
None of the M.A. core courses may be taken through Extended Education.

# EDUCATION: CURRICULUM STUDIES \& SECONDARY EDUCATION (CSSE) 

DEPARTMENT OFFICE
Stevenson Hall 1078
(707) 664-4203
fax (707) 664-2483
www.sonoma.edu/education
DEPARTMENT CHAIR
Perry M. Marker
ADMINISTRATIVE COORDINATOR
Leslie Mouton

## Faculty

## Carlos Ayala

Kelly Estrada
*James Fouché
Karen Grady
John Kornfeld
Perry M. Marker
*Faculty Early Retirement Program

## Programs Offered

Single Subject (Secondary Schools) Teaching Credential
Master of Arts in Education with a concentration in Curriculum, Teaching, and Learning

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

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

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

## Special Resources

## Credentials Office

The Credentials 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 for providing application 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. Newly credentialed teachers are generally finding jobs rather rapidly today, with equally good prospects for the future. Currently there exist shortages of credentialed teachers in mathematics, science, special education, Spanish, and bilingual education. Due to recent 9th grade class size reductions, English teachers are beginning to be in short supply. In addition, graduates of the School of Education find positions in community agencies and in the private sector.

## Single Subject (Secondary Schools) Teaching Credential

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

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

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

Students pursuing the Single Subject Credential may select from among the following programs.

Art
Art Building 128
(707) 664-2151

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

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

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

Mathematics
Stevenson Hall 3019
(707) 664-2917

Music
Ives Hall 206
(707) 664-2324

Physical Education
PE Building 14
(707) 664-2357

Adapted Physical Education
PE Building 14
(707) 664-2357

Students may satisfy subject matter requirements by passing the appropriate state approved examinations (CSET).
The Single Subject Credential Program is a two-semester program that begins either in the fall or spring semester. Students are admitted to the program according to the subject they plan to teach (see following section):

| Fall Admission | * Spring Admission |
| :--- | :--- |
| English | English |
| Social Studies | Social Studies |
| Foreign Language |  |
| Music | *All other subject areas may |
| Physical Education | apply in Spring, but students |
| Art | must agree to a three- |
| Mathematics | semester program pathway. |
| Science |  |

## The Single Subject Credential Program

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

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

Program Co-Requisite Course
EDSP 433 Teaching Adolescents with Special Needs
Program Prerequisite Courses
EDUC 417 School and Society
EDSS 418 Learning and Development in Adolescents 3
Total co-requisite and prerequisite courses

## 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

Total units Phase I

Social Science
Stevenson Hall 2070
(707) 664-2112

Total units for program (including co-requisites and prerequisites)

## Requirements for Admission to the Single Subject Program

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

1. Admission to the University;
2. Grade point average of 2.75 in upper division and/or graduate coursework or a 2.67 overall grade point average;
3. Basic Skills Requirement met via appropriate option;
4. Two letters of recommendation; and
5. Demonstration of aptitude, personality, and character traits that satisfy the standards of the teaching profession and the elements that are listed in the School of Education Conceptual Framework. Assessment of these qualities will be made by the School of Education through evaluation of interviews, letters of recommendation, and candidates' professional goals statements and other written responses.

Note: Some students may be admitted to basic teaching credential programs who have not met one or more of the above requirements when such students have compensating strengths in other required areas.

## Procedures for Admission to the Single Subject Teaching Credential Program

The Credentials Office provides information regarding admissions requirements and dates for application to all programs in the School of Education. Obtain an application packet and additional information from the School of Education office, Stevenson 1078, or from the website, at www.sonoma.edu/education.

Submit to the Credentials Office, Stevenson 1078, a complete application packet containing the following:

- One set of official or unofficial transcripts from each college/ university attended (Check with the Sonoma State University Office of Admissions and Records regarding additional official transcripts required for admission to the University.);
- Two letters of recommendation;
- Basic Skills Requirement met via appropriate option;
- Professional goals statement;
- Responses to writing prompts in the application;
- CSET Examination (verification of enrollment for test or passing test scores) or Subject Matter Waiver (verification of enrollment in waiver program or completed waiver);
- Certificate of Clearance;
- TB Test Clearance (must be completed prior to full admission to the University); and
- Documentation of Application or Admission to the University.


## Continuation in Basic Teaching Credential Preparation Programs

1. All single subject credential candidates are required to meet each semester with an education advisor.
2. Students must successfully complete all requirements for the first semester program phase, including coursework and field experiences BEFORE entering the student teaching phase (second semester) of the program.
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 $D$ or $F$ in professional education courses must be removed and retaken to meet California statutory requirements prior to continuing enrollment in courses.
4. Candidates who must delay progress in the professional education program may file a written request with the program coordinator for an extended program or for a leave of absence. A student returning from a program delay will be subject to the screening requirements in effect at the time of reentry and will be accommodated as space allows. Any student on academic probation is subject to automatic disqualification as a credential candidate.

## Teaching Performance Assessment

A teaching performance assessment (TPA) is required for all those seeking a single subject teaching credential. The Performance Assessment for California Teachers (PACT) is the teacher performance assessment used by the Single Subject Program. This assessment is comprised of a teaching event that is an extended documentation of a segment of student teaching. It is the capstone performance assessment that integrates learning throughout the teacher education program. It consists of 2-3 lessons of teaching that are videotaped and analyzed by the student. It is structured in sections corresponding to developing a context for learners, planning, teaching, assessing, academic language, and reflecting on teaching. A subject matter expert scores the teaching event. The teaching event takes place in Phase II (student teaching) of the program. All students must pass the TPA to receive a teaching credential.

## Integrated Degree and Credential Pathway Program

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

## Basic Authorization to Teach in California Public Schools

The basic authorization to teach in California public schools requires all of the following before receiving a Single Subject teaching credential:

1. Possession of a bachelor's degree;
2. Verification of appropriate subject matter competency, either completion of an approved subject matter preparation program or passage of appropriate state-approved examination(s);
3. Basic Skills Requirement met via appropriate option;
4. Completion of a college-level course or college-level examination that covers the U.S. Constitution. (POLS 200 or 202 at SSU will meet this requirement);
5. Completion of a state-approved program of professional teacher education; and
6. Filing of the application for a Certificate of Clearance, which includes fingerprinting.

Completion of the requirements listed above will allow an individual to obtain a preliminary Single Subject teaching credential. Note: Students should consult with the Credentials Office during their first semester on campus if they plan to pursue a teaching credential. Contact the Credentials Office for any changes in credential requirements.

## 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;
- Basic Skills Requirement met via 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.

Eligibility for participation in the intern program also requires completion of Phase 1 of the Single Subject Credential Program.

## Requirements for Awarding of Teaching Credential:

- Successful completion of the Single Subject Intern Program and
- All interns must pass the TPA to receive a teaching credential.


## 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
EDCT 586 Teaching and Learning: Research and Application in the Classroom

Total area concentration units
The remaining units (12-16) are taken in an approved Area of Emphasis (AREM). The AREM is designed by the student and a faculty member. Students may select courses from other Education M.A. concentrations or courses in other University schools and departments. An AREM in Educational Technology is available for those interested in applying aspects of technology in educational or private sector settings. A field component may comprise part of the area of emphasis. A written rationale must accompany the AREM proposal. The total number of units in the Curriculum, Teaching, and Learning Master of Arts Program is 32-36 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 CT\&L coursework and take the courses in the sequence required by the program. This pathway assumes that students will take TWO classes per semester. For changes to this pathway, students must see the CT\&L advisor. Students may not take an AREM course without an approved AREM.

| If You Begin Fall Semester: | If You Begin Spring Semester: |
| :--- | :--- |
| Fall | Spring |
| EDUC 570 | EDUC 570 |
| EDCT 585 | AREM |
| Spring | Fall |
| EDCT 586 | EDCT 585 |
| AREM | AREM |
| Fall | Spring |
| EDUC 571 or AREM | EDCT 586 |
| AREM | EDUC 571 or AREM |
| Spring | Fall |
| AREM | EDUC 571 or AREM |
| AREM or EDUC 571 | AREM |
| Fall** | Spring** |

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

| Spring | Fall |
| :--- | :--- |
| EDUC 599 | 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.

## Requirements for the Master of Arts in Education degree program

Graduate 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. At least one-half of the units in 500 -level courses;
b. Not more than 9 semester units of transfer and/or extension credit; and
c. Filing of an Advancement to Candidacy form that verifies approval of the program portfolio, verifies writing proficiency, and describes the culminating project.
2. Completion and final approval of a 1) thesis, curriculum project, or creative project; 2) Cognate Project; or 3) Individualized Examination.

All requirements listed above must be completed within seven years ( 14 semesters) of the initiation of graduate study (i.e., first semester of coursework).

## EDUCATION: EDUCATIONAL LEADERSHIP AND SPECIAL EDUCATION (ELSE)

DEPARTMENT OFFICE
Stevenson Hall 1078
(707) 664-4203
fax (707) 664-2483
www.sonoma.edu/education
ADMINISTRATIVE COORDINATOR
Leslie Mouton
DEPARTMENT CHAIR
Mary Dingle

## Faculty

Emiliano Ayala
Heather Brace
Mary Dingle
Jennifer Mahdavi
Paul Porter

## Department Overview

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

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

The credential and M.A. programs, described below, offer a full complement of courses and fieldwork for students to achieve Level I and Level II (known as PASC I and II in the case of Educational Administration) credentialing, as well as Master of Arts degrees. Both traditional and intern programs exist. Courses are scheduled in the late afternoon, evenings, on Saturdays, and some are partially delivered online, in order to accommodate practicing educators.

Students in the Department of Educational Leadership and Special Education may expect to encounter programs that present cutting-edge information and skills, delivered by an expert, committed faculty, and scheduled for maximum access. Moreover, students can expect to be afforded respect, dignity, and 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.

## Credentials Office

The Credentials 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 for providing 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. Newly credentialed teachers are generally finding jobs rather rapidly today, with equally good prospects for the future. Currently there exist shortages of credentialed teachers in mathematics, science, special education, Spanish, and bilingual education. In addition, graduates of the School of Education find positions in community agencies and in the private sector.

## Programs Offered

Basic Teaching Credentials
Education Specialist (special education) Intern, Level I and Level II: Mild/Moderate and Moderate/Severe Disabilities

Service Credentials:
Administrative Services - Preliminary, Intern, and Professional
Master's Degree (M.A.) Programs
Educational Leadership
Special Education
Doctorate of Education (Ed.D.)
Educational Leadership (jointly with UC Davis).
For information call 707-664-4051.
The Education Specialist (special education) Credentials, Preliminary Level I and Professional Level II, are offered in the area of Mild/ Moderate and Moderate/Severe Disabilities and authorize the holder to provide services in K-12 inclusion programs, resource specialist program classes (RSP), special day classes (SDC), or other related fields, including work with adults with disabilities. At the completion of the Educational Specialist credential programs, candidates
will have met the requirements to teach students who are English learners.

The Administrative Service Credentials, Preliminary Administrative Services (PASC I), and Professional Administrative Services (PASC II) prepare graduates for positions of leadership in K-12 educational institutions. PASC II is offered alternate years on an as-needed basis.
M.A. in Education programs are designed with both full-time and part-time students in mind. Some master's degree programs may be taken concurrently with advanced credential programs. Note: Program requirements change periodically, and current information may not be available in this catalog. For more detailed information on credentials and other education programs, please see the University's special bulletins and the School of Education's current program brochures and policy statements or visit the Education website www.sonoma.edu/education.

## Preliminary Level I Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities

A Preliminary Level I Education Specialist Credential Program is offered in the areas of mild/moderate (M/M) disabilities and moderate/severe ( $\mathrm{M} / \mathrm{S}$ ) 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 $\mathrm{M} / \mathrm{M}$ disabilities authorizes the teaching of individuals with specific learning disabilities, mental retardation, other health impairment, and serious emotional disturbance. The credential in M/S disabilities authorizes the teaching of individuals with autism, mental retardation, deaf-blindness, serious emotional disturbance, and multiple disabilities.

A Multiple Subject or Single Subject credential is not required as a prerequisite for admission to a credential program in special education. The Preliminary Level I 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 Level I 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 Level I Credential that is valid for five years. The Preliminary Level I Education Specialist Credential holder must complete a Professional Level II preparation in special education within five years of the date of issuance of the Preliminary Level I Credential.

## Prerequisites

EDUC 417 School and Society (3) or
LIBS 312 Schools in American Society (3)

## Multiple/Single Subject Teacher Education Requirements

(Choose one of the following two options):
Multiple Subjects - Elementary Option
EDMS 411 Teaching Second Language Learners (3)
EDMS 474 Mathematics in the Elementary School (3)
EDMS 463 Teaching Reading and Language Arts in Elementary School (includes a fieldwork component) (3)
—OR—
Single Subject - Secondary Option
EDSS 442 Middle/Secondary Teaching in Multicultural Settings (4)
EDSS 446 Language and Literacy Across the Curriculum: Middle and Secondary Schools (includes a fieldwork component) (4)

Total general teacher education units

## Special Education Requirements

(Must complete common core plus $\mathrm{M} / \mathrm{M}$ or $\mathrm{M} / \mathrm{S}$ credential course work)

## Common Core For Education Specialists

EDSP 422 Collaborative Partnerships and Special Education (4)
EDSP 423 Assessment, Curriculum, and Instructional Strategies for Students with Disabilities (4)
EDSP 424 Classroom Ecology: Management, Discipline, and Behavioral Supports (4)

## Early Field Experience

EDSP 464A Participant Observation (2)
EDSP 464B Participant Observation Seminar (2)

## Credential-Specific Curriculum

Mild/Moderate Disabilities
EDSP 425 Developing Academic Performance of Students with M/M Disabilities (4)
EDSP 465 Student Teaching Practicum M/M (10) and
EDSP 466 Student Teaching Seminar M/M (2) or
EDSP 481 Intern Practicum/Seminar M/M (8-12)
Moderate/Severe Disabilities
EDSP 428 Pro Seminar: Topics in the Education of Students with M/S Disabilities (4)
EDSP 467 Student Teaching Practicum M/S (10) and
EDSP 468 Student Teaching Seminar M/S (2) or
EDSP 481 Intern Practicum/Seminar M/S (8-12)
Total Level I Special Education units
Total units for the Preliminary Level I Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities

## Level I Portfolio

All Level I Education Specialist credential students are required to develop and maintain a Professional Portfolio in the Level I program. This portfolio is based on the California Standards for the Teaching Profession and will include professional writing samples and a record of the students' reflections on the impact of their study on their professional practice.

## Basic Authorization to Teach in the California Public Schools

The basic authorization to teach in the California public schools requires all of the following:

1. Possession of a bachelor's degree;
2. Verification of appropriate subject matter competency, either completion of an approved subject matter preparation program or passage of appropriate state-approved examination(s) via CSET;
3. Basic skills requirement met via appropriate option;
4. Completion of a college-level course or college-level examination that covers the U.S. Constitution. POLS 200 at SSU will meet the requirement;
5. Completion of a state-approved program of professional teacher education; and
6. Completion of the Reading Instruction Competence Assessment test (RICA).

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

## Requirements for Admission to Preliminary Level I Education Specialist Teaching Credential Preparation Programs

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

1. Admission to the University;
2. Application for the Education Specialist Level 1 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;
7. Verification of appropriate subject matter competency, either completion of an approved subject matter preparation program or passage of appropriate state-approved examination(s) via CSET;
8. Submission of negative TB test dated within 12 months of application to the program;
9. Filing of the application for a Certificate of Clearance, which includes fingerprinting;
10. Demonstration of aptitude, personality, and character traits that satisfy the standards of the teaching profession. Assessment of these qualities will be made by the School of Education through evaluation of interviews, letters of recommendation, candidates' professional goals statement, and spontaneous writing sample; and
11. Evidence of 45 hours of experience working with school-age children.

Some students may be admitted to basic teaching credential programs who have not met one or more of the above requirements when such students have compensating strengths in other required areas.
Note: Additional program-specific admission requirements are listed with each program description.

## Procedures for Admission to Basic Teaching Credential Preparation Programs

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

1. Obtain application packets and additional information from the Credentials Office, Stevenson 1078, or from the website, www.sonoma.edu/education.
2. Submit to the Credentials Office, Stevenson 1078, a complete application as detailed in information provided by the School of Education.

## Continuation in Basic Teaching Credential Preparation Programs

1. All education students are required to meet each semester with an education advisor.
2. Students must successfully complete all requirements for each program phase, including course work, 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. The passing grade for each course in the program is a " C " or better, including prerequisite courses. Incomplete grades must be removed and statutory requirements must be met prior to continuing enrollment in courses.
4. Candidates who must delay progress in the professional education program may file a written request with the program coordinator for an extended program or for a leave of absence. A student returning from a program delay will be subject to the screening requirements in effect at the time of reentry and will be accommodated as space allows. Any student on academic probation is subject to automatic disqualification as a credential candidate.

## Special Education Credentials

The California Commission on Teacher Credentialing (CTC) adopted a two-level credential structure to respond to the changing needs in the field of special education. Candidates interested in obtaining a Special Education Teaching Credential must complete both the Preliminary Level I and the Professional Level II Education Specialist Credential programs. The School of Education offers both levels of the Education Specialist Credentials in Mild/Moderate Disabilities and in Moderate/Severe Disabilities.

## Internship Program in Special Education

The Education Specialist Internship Program in the areas of $\mathrm{M} / \mathrm{M}$ or M/S Disabilities allows public and nonpublic school special education teachers who do not hold the Preliminary Education Specialist Credential to complete a credential preparation program of study while employed as special education teachers with supervision and mentoring support for the internship assignment. Further information may be obtained from the Credentials Office.

Admission into the Education Specialist Internship Program at Sonoma State University is built upon communication and collaboration between the University, the North Coast Beginning Teacher Program (NCBTP), and the participating school district. The University will work with the districts in an effort to recruit, identify, and admit appropriate candidates for the internship program. To be eligible to participate in an internship program, each candidate must have:

- Completed 120 clock hours of initial teacher preparation (CTC, 3/08);
- Obtained an employment offer as a special educator;
- Earned a baccalaureate degree from an accredited college or university;
- Met basic skills requirement via appropriate option;
- Passed a subject matter knowledge exam or a waiver program of subject matter study;
- Completed character and identification clearance (fingerprints);
- Demonstrated knowledge via course or exam of the U.S. Constitution; and
- Obtained an Intern Credential.

Each internship program applicant must complete an application to the Sonoma State University Education Specialist Internship Program. As part of the process, applicants are required to submit:

- University application and application fee;
- School of Education program application;
- Basic skills requirement met via appropriate option;
- One official transcript from all accredited colleges and universities attended which includes the posted B. A. degree;
- A GPA commensurate with California State University requirements as outlined in Executive Order 547;
- A letter of recommendation from the employing district based, where possible, on teaching evaluations or those used in the employment process for newly hired candidates; and
- Verification of subject matter competence.


## Professional Level II Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities

A Professional Level II Education Specialist Credential program is offered in the areas of mild/moderate (M/M) and moderate/severe (M/S) disabilities. Following receipt of the Preliminary Level I Education Specialist Credential, all candidates must complete Professional Level Il preparation in special education within five years of issuance of the Preliminary Level I Credential. A major focus of the Professional Level Il program is to provide a mechanism for the successful induction of a new professional. The emphasis of the professional development program is to move the special educator beyond the functional aspects of teaching to more advanced knowledge and reflective thinking about his or her role in providing effective instruction and an environment for student success.

As soon as possible, but no later than 120 calendar days of service with the Preliminary Level I Education Specialist Credential, the beginning teacher, employer, and member of the SSU School of Education faculty in the program area of special education collaboratively design a Professional Induction Plan. The Level II induction plan addresses each beginning teacher's assessed needs and outlines specific goals and activities for facilitating professional development. The candidate must enroll in an approved program for the Professional Level II Education Specialist Credential before the induction plan is completed.

To be eligible for the Professional Level II Education Specialist Credential, the candidate must complete a period of induction for at least one full year with a field mentor (support provider) identified by the employer; must verify successful completion of two years of teaching experience in a full-time special education position or the equivalent, in a public school or private school of equivalent status, while holding a Preliminary Level I Education Specialist Credential; must enroll in and successfully complete the Professional Level II program; and, must be recommended for the Professional Level II Education Specialist Credential by the Institution of Higher Education. Additional requirements may be required for out-of-state or out-ofcountry credentials as delineated on the Level 1 credential.

## Prerequisites

1. Valid Preliminary Level I Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities and
2. Teaching position in Special Education in a public school or private school of equivalent status and assignment of a support provider.

## Required Professional Level II Courses

EDSP 511 Professional Induction Plan: Supervised Development (1)
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 516 Professional Induction Plan: Culminating Assessment (1)
Total Special Education units for Professional Level II

California Commission on Teacher Credentialing (CTC) Statutory Requirements for Level II are:

Computer Uses in Education Class
Health Education, Wellness and Drug Abuse Class
Cardiopulmonary Resuscitation (CPR) Training (to include Adult, Child, and Infant)
Candidates' work in district beginning teacher induction programs may be submitted for review of equivalency of these classes.

## Non-University Activities

Non-University Based Professional Development Activities approved by the Level II Special Education Program Advisor and the candidate's field mentor may be substituted for 3 units of University course work.

## Level II Portfolio

All Level II Education Specialist credential students are required to develop and maintain a Professional Portfolio in the Level II program. It includes professional writing samples and a record of the students' professional reflections on the impact of their graduate study on their educational practice and the attainment of their professional goals.

## 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 Preliminary Level I Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities may combine their master's degree studies with course work from their Professional Level II Education Specialist Credential program preparation. 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 (9-12 units), Special Education Level II course work (9-12 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)

## Procedures for Applying to the M.A. Program

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

## Requirements for the M.A. Degree in Education

Graduate 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. At least one-half of the units in 500 -level courses,
b. 21 semester units shall be completed in residence + no more than $30 \%$ of coursework shall be allowed in transfer, including work done through extended education,
c. Filing of an Advancement for Candidacy form that verifies approval of the program portfolio, verifies writing proficiency, and describes the culminating project.
2. Completion and final approval of EDUC 572,573 , or 598 and completion and final approval of a cognate, individualized examination, thesis, curriculum project, or creative project.
3. Completion of M.A. Program portfolio. See description below.

All M.A. requirements listed above must be completed within seven years ( 14 semesters) of the initiation of graduate study.

## School of Education Core Curriculum

The M.A degree with an emphasis in Special Education is built upon the M.A. core curriculum that includes: EDUC 570 the Reflective Educator (3), EDUC 571 Research Paradigms in Education (3), and one of the following pathways:

- Thesis or Project Options: EDUC 598 Developing a Thesis/ Project (3) and EDUC 599 Supervised Research for Thesis/ Project (3)
- Cognate Option: EDUC 572 Supervised Study for Cognate Project (3)
- Individualized Examination Option: EDUC 573 Supervised Study for the Individualized Examination (3)


## Special Education Concentration

The Special Education course work, taken in addition to the M.A. core curriculum, includes four 3-unit courses that are part of the Professional Level II Education Specialist Credential program in Mild/Moderate and Moderate/Severe Disabilities.

EDSP 512 Advanced Issues in Assessment, Curriculum, and Instruction of Students with Disabilities
EDSP 513 Current and Emerging Research and Practice in Special Education
EDSP 514 Advanced Communication, Collaboration, and Consultation in Special Education
EDSP 515 Advanced Legal Issues in Special Education
M.A. candidates will apply either 9 or 12 of the Level II special education coursework units toward their M.A. degree.

## 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. degree 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.

## Course of Study

## Professional Level II Candidates

Professional Level Il candidates may enter in the fall or spring semester and begin their credential program of study with the course being offered that particular semester. During the first and the final semesters of the program, candidates also take a one-unit seminar related to the initial development and subsequently the final evaluation of the Professional Induction Plan (EDSP 511 and EDSP 516). Qualified applicants to the M.A. program in Education with a concentration in Special Education can be accepted in both fall and spring semesters. Those accepted into the M.A. program would have the option of beginning the M.A. program core course work in the first semester of Level II study. Many students, however, may choose to take EDUC 570 in the second semester, particularly since the first semester of the Level II program requires four units of study.

## Non-Level II Candidates

Qualified applicants to the M.A. program in Education with a concentration in Special Education may be accepted in both fall and spring semesters. Candidates from other programs seeking an M.A. in Education with a concentration in Special Education are expected to complete three or four courses in the Level Il program ( $9-12$ units), although they are not expected to formally enroll in the Professional Level II program. Priority for enrollment in all Level II programs is given to candidates seeking the Professional Level II certificate. Therefore, consent of the instructor is required before outside candidates enroll in any Level Il course.

## 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.

## Pathways To Program Completion

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

In all three pathways, graduate students take 18 units in the program area of concentration and at least 6 units (EDUC 570 and 571) of M.A. core courses. All M.A. students work with a three-member committee, most closely with the committee chair, to complete a culminating activity that 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.

## Thesis/Project

The thesis/project pathway is a 30 -unit course of study, including 18 units in students' 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 problem in education. The project is a written document describing a significant undertaking appropriate to education. The thesis/project option requires an extensive write-up, including an in-depth literature review. Students must also present their thesis/ project to their three-member committee in a public forum. Examples of a thesis investigation include process/product research, correlational study, action research, ethnographic study, historical study, or theoretical study. Examples of a project include curriculum design, professional development for educators, program design, performance piece, or creative project.

## Cognate

The cognate pathway is a 36 -unit course of study, including 18 units in the students' 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 that students choose in consultation with a faculty advisor and/or committee chair and that allows students to examine areas of interest related to their M.A. concentration. In order to work with their threemember 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., portfolio, 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 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 must be included in the project. Students must present the completed project to their three-member committee in a public forum.

## Individualized Examination

The individualized examination pathway is a 33 -unit course of study, including 18 units in the students' 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 four 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 to 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.

## M.A. Portfolio

In order to advance to candidacy, all students must complete a 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 that 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; and
- Evidence of planning toward the completion of the culminating activity (thesis/project, cognate project, or individualized examination).


## Requirements for M.A. Advancement to Candidacy

- Completion of M.A. core courses EDUC 570 and 571, and of M.A. concentrations;
- Presentation and approval of program portfolio; and
- Filing of Advancement to Candidacy form with School of Education graduate director.


## Educational Leadership Program Administrative Service Credentials

The Administrative Services Credential programs were designed collaboratively with school administrators to prepare graduates for positions of leadership in K-12 educational settings. Both the PASC I and the PASC II credentials authorize the holder to serve as a vice principal, principal, coordinator, program director, superintendent, or in other district or county level positions. The Intern Credential authorizes individuals to serve in administrative positions while completing the approved program of PASC I study. Areas of competence addressed in each program are developmental and expand upon prior learning and experiences included in each level of preparation. Throughout all programs, participants progress from concrete applications of what is being studied to more advanced applications of theory into practice that call for the critique and redefinition of one's knowledge base. Likewise, throughout the programs, multiple learning opportunities are provided adult learners that emphasize the acquisition of personal awareness and personal reflection.

## Preliminary Administrative Services Credential

The Preliminary Administrative Services Credential (PASC I) program focuses on entry-level skills for effective administration with particular emphasis on the responsibilities of school site administrators. The program is 27 semester units and can be completed by starting in July/ August with a summer course and finishing the following June with an additional summer course. The classes are offered on a cohort basis in late afternoons and evenings or in periodic weekend class sessions (Friday evening and Saturday) spread throughout the semester.
In addition to the general admission requirements for advanced credential programs, PASC I candidates must:

1. 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;
2. Secure favorable recommendations from two school administrators indicating possession of administrative and leadership potential;
3. Submit evidence of successful passage of CBEST before or within the first semester of program course work; and
4. Attend a program admissions interview and/or submit a statement of professional goals.

## Internship Program In Educational Administration

Candidates to be employed immediately may enter the program as an administrative intern at any point in the calendar year as long as there is a supporting educational agency request. Candidates enrolled as interns complete the same coursework as PASC I candidates; however, the fieldwork is modified to suit the needs of an intern.

## PASC I/Intern Program Course Of Study

EDEL 580A Introduction to Educational Leadership and School Mgmt
EDEL 580B Advanced Educational Leadership and School Mgmt
EDEL 581 Mgmt of Educational Personnel: Policies and Procedures
EDEL 582 Educational Policy and Politics
EDEL 583 School Law
EDEL 588 Educational Curriculum, Instruction, and Program Assessment
EDEL 589 Leadership for Diverse Populations and Communities
EDEL 587A Beginning Field Experience in Administration 3
EDEL 587B Advanced Field Experience in Administration
Total units for PASC I/Intern Programs
The program is usually completed in eleven months; however, candidates can extend the time needed for program completion by meeting with an advisor and customizing the program to meet individual needs. Typically candidates who do not have an M.A. go on to complete the M.A. in Education with emphasis in Education Leadership.

## Professional Administrative Services Credential

The Professional Credential Program offers advanced study and fieldwork for practicing administrators in all areas of educational leadership. The program consists of 12 semester units of course work and focuses on candidates examining the six administrative standards adopted by the CCTC. This program is offered alternative years on an as-needed basis. Please contact the ELSE department for current information. The course work is offered in periodic weekend class sessions spread throughout the semester.

In addition to the general admission requirements for advanced credential programs, Professional Administrative Services Credential (PASC II) candidates must:

1. Verify grade point average of at least 3.0 in the last 30 semester units;
2. Secure favorable recommendations from two school administrators indicating applicant's administrative and leadership capability and current administrative activities and accomplishments; and
3. Provide two photocopies of a valid Preliminary Administrative Services Credential.
The Professional Administrative Services Credential Program is restricted to those formally admitted to the program. Employment in an administrative position requiring a Preliminary Administrative Services Credential is required for admission into the program.

## PASC II Program Course Of Study

EDEL 590A: Induction Plan 2
EDEL 596A: Introduction to Advanced Educational Problems 2
EDEL 596B: Completion of Advanced Educational Problems 2
EDEL 596C: Introduction to Collaborative Action Research 2
EDEL 596D: Completion of Collaborative Action Research 2
EDEL 590B Assessment of Completion of Induction Plan 2
Total units for PASC II Program

## Master of Arts with a Concentration in Educational Leadership

The objective of the M.A. degree program with concentration in Educational Leadership is to provide a strong academic foundation for competent administrative practice. The program is 30 semester units inclusive of course requirements for the PASC I program.
The M.A. degree with an emphasis in Educational Leadership is built upon the M.A. core curriculum of the School of Education. Candidates may refer to the previous section on Requirements for the MA Degree in Education for a complete description of the Master of Arts program.

# EDUCATION: LITERACY STUDIES AND ELEMENTARY EDUCATION (LSEE) 

DEPARTMENT OFFICE
Stevenson 1078
(707) 6643238
fax (707) 6642483
DEPARTMENT CHAIR
Charles A. Elster
(707) 6643238

ADMINISTRATIVE COORDINATOR
Kathryn Teixeira

## Faculty

Chiara Bacigalupa
Susan Campbell
Paul Crowley
Charles A. Elster
Johanna Filp-Hanke
Hee-Won Kang
Paula Lane
Kathy Morris
MaryAnn Nickel

## Programs Offered

The Department of Literacy Studies and Elementary Education offers the following credentials: Multiple Subjects, Multiple Subjects Bilingual (Spanish), Multiple Subject Ukiah Outreach, Early Education Emphasis Certificate (an advanced University-based certificate), M.A. in Education with an emphasis in Reading and Language Education, Reading Certificate (an advanced credential), and Reading and Language Arts Specialist Credential, M.A. in Education with an emphasis in Early Childhood Education.

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.

## Credentials Office

The Credentials 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 for providing application information and credential information to prospective students, continuing students, out-of-state teachers/administrators, University constituents, and the University service area in general.

## Multiple Subject Teaching Credential Programs

This credential authorizes the holder to teach in a self-contained classroom preschool through grade 12. It is most frequently used for teaching in elementary classrooms and early childhood settings.

Undergraduates interested in pursuing the Multiple Subject Credential may select from among the approved teaching credential subject matter preparation programs within the following departments:

Chicano and Latino Studies (CALS)
Nichols Hall 214, (707) 664-2369
Environmental Studies
Rachel Carson Hall 18, (707) 664-2306
Hutchins School of Liberal Studies
Rachel Carson Hall 44, (707) 664-2419
American Multicultural Studies
Nichols Hall 214, (707) 664-2486

## Multiple Subject Program

The Multiple Subject offers a 12-month program that includes two academic semesters with the opportunity to take co-requisite courses in the summer session.

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.

The basic authorization to teach in the California public schools requires the following:

1. Possession of a bachelor's degree;
2. Completion of CBEST;
3. Successful completion of a college-level course or collegelevel examination that covers the U.S. Constitution. POLS 200 or 202 at SSU will meet the requirement;
4. Completion of CSET: Multiple Subjects exam; and
5. Certificate of Clearance.

Completion of the requirements listed above will allow an individual to obtain a preliminary basic teaching credential.

Note: Contact the Credentials Office for the latest information regarding legislative changes in the basic credential programs. Students should consult with the Credentials Office and the program advisor during their first semester on campus if they plan to pursue a credential.

## Requirements for Admission to the Multiple Subject Credential Program

The following information applies to individuals applying to become a credential candidate in either Multiple Subject or Multiple Subject with BCLAD emphasis. The procedures for applying to the Intern program can be obtained by contacting the Credentials Office.

Multiple Subject candidates are admitted in fall or spring. All candidates must complete the following before admission to the program:

1. Admission to the University;
2. Proof of application to the University with your program application;
3. Grade point average of 2.75 in upper-division and/or graduate course work or a 2.67 overall grade point average;
4. Completion of CBEST;
5. A minimum of 45 hours of documented, pre-program field experience. (Please see Prerequisite Field Experience Requirement Documentation form for details.);
6. Filing of the application for a Certificate of Clearance, including fingerprinting;
7. TB test clearance;
8. Successful completion of an admissions interview;
9. Demonstration of aptitude, personality, and character traits that satisfy the standards of the teaching profession. Assessment of these qualities will be made through evaluation of interviews, letters of recommendation, and candidates' professional goals statements; and
10. Submission of scores for the California Subject Examinations for Teachers or CSET exam.

NOTE: Passing the CSET Multiple subjects subtest I, II, and III is required to enter the Multiple Subjects credential program.

The CSET should be complete at the time of admission to the program. The requirement is not considered complete until the passing scores of all Multiple Subjects subtests of the CSET exam are received. See the CSET exam information and registration guide, http://www.cset.nesinc.com/. Contact the Credentials Office for information about the latest test date that will be acceptable for the semester in which you are applying. Even if you request scores to be sent to the University directly from the testing company, also submit a photocopy of scores directly to the Credentials Office.

PLEASE NOTE: If you have not passed all three subtests of the CSET prior to full admission into the Multiple Subjects Program, you can A) petition to be admitted under our special admissions policy, or B) request to be admitted as a Pre-Credential student to take prerequisites to the program. For more information on these options, please e-mail the Credentials Office at credentials.office@sonoma.edu.
The Credentials Office provides information regarding standards and dates for application to programs in the School of Education. Some candidates may be admitted to basic teaching credential programs who have not met one or more of the above requirements when such candidates have compensating strengths in other required areas.
Additional program-specific admission requirements are listed with each program description.
NOTE: A Pre-Credential Track is available for all applicants who are currently working on CSET completion.

## Continuation in Basic Teaching Credential Preparation Programs

1. All education students are required to meet each semester with an education advisor.
2. Students must successfully complete all requirements for each program phase, including course work, fieldwork, student teaching portfolio, and any statutory requirements 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-, D, or F in professional education courses must be removed and statutory requirements met prior to continuing enrollment in courses.
4. Candidates who must delay progress in the professional education program may file a written request with the Department Chair 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.

## 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 diversity of our school population in terms of culture, social class, gender, language, and race is a significant focus of our course work and field experiences. Upon completing the program, candidates will have both breadth and depth of knowledge about teaching and learning, and candidates will be capable of making informed decisions in diverse settings. The design of Sonoma State University's Multiple Subjects Professional Teacher Preparation Program is based on models of learning, human development, and interaction supported by current policy, research and practice. The program is developmental and sequential.

## Prerequisites And Corequisites

The prerequisites/corequisites are offered in the summer and can be taken before admission into the program or any time after program admission.
EDUC 417 School and Society, or approved alternative
EDMS 420 Child Development in Family, School, and Community 3
EDMS 470 Multicultural Pedagogy
Total Prerequisite units for all M.S. Programs

## Phase I

AllPhase Icourses requireadmissiontothemultiplesubjectprogramorthe special education program. Courses are grade only.
EDMS 411 Second Language Pedagogy
EDMS 463 Teaching Reading \& Language Arts to Beginning Learners
EDMS 474 Teaching Mathematics in the Elementary School
EDMS 475 Teaching Science in the Elementary School
EDMS 476F Participant Observation
EDMS 476S Participant Observation Seminar
Total Phase I units

## Phase II

EDMS 464 Teaching Reading to Older and Struggling Readers
EDMS 471 Teaching Social Science in a Multicultural Society
EDMS 482F Student Teaching and Seminar
EDMS 482S Student Seminar
Concurrent with 482F
Total Phase II units
Total Program

## SB2042 Multiple Subjects Bilingual Program Courses

English language development and bilingual teachers are now central to staffing California's schools. With the introduction of a combined Bilingual Cross-cultural Language and Academic Development credential, many more teachers will enter the profession with the basic knowledge necessary to meet the needs of California's diverse student population. The program at Sonoma State has a Spanish language emphasis reflecting the demographics of Sonoma State University's service area. The program authorizes the candidate
to provide instruction for English language development, specially designed content instruction delivered in English, primary language development, and content instruction delivered in Spanish.
The Department of Literacy Studies and Elementary Education offers a Bilingual Spanish Emphasis Certificate providing professional preparation to teach kindergarten through grade 12 in self-contained Spanish bilingual programs. Candidates must fulfill all the same program admission requirements and demonstrate proficiency in the target language for which they seek authorization (Spanish) by taking a target language assessment test that will assess the candidate's ability in listening, comprehension, speaking, reading comprehension and fluency, and grammar and writing. The criterion for entry into the program prior to admission in all of the areas above is 2.5 or better on the Foreign Service Institute (FSI) scale (or equivalent). The criterion for exit and final authorization is FSI 3.0 prior to full-time student teaching.

## SSU SB2042 MS/Bilingual

## Prerequisites or Corequisites

1. Foundations of Education: Child Development School and Society Required Courses(s):
EDUC 417: School and Society or LIBS 312: Schools in American Society (Hutchins waiver program) EDMS 420: Child Development in the Family, School, and Community EDMS 470: Multicultural Pedagogy
CALS 451: Chicano/Latino Humanities
2. A basic understanding of issues related to bilingual education Required Courses(s):
Content infused in EDUC 417 or LIBS 312; infused also in EDMS 411, EDMS 471, and EDMS 480B (Phase I); infused also in EDMS 464 and EDMS $482 S$ (Phase II)
Alternative course work will be reviewed for equivalence.
3. Knowledge of the target culture

Recommended Courses(s):
Content also infused in EDMS 480B: Integrated Spanish Bilingual Curriculum in the Elementary Classroom
Alternative course work will be reviewed for equivalence.
4. Language qualifications

Phase I
EDMS 411 Teaching Second Language Learners 3
EDMS 463 Teaching Reading and Language Arts to Younger Students 3
EDMS 474 Mathematics in the Elementary School
EDMS 475 Science in the Elementary School
EDMS 476F Participant Observation-Bilingual Placement
EDMS 480B Integrated Spanish Bilingual Curriculum in the Elementary Classroom

Phase II
EDMS 464B Teaching Reading and Language Arts to Older Bilingual Students and Struggling Readers
EDMS 471 Teaching Social Studies in a Multicultural Society 2

Total

## Notes

1. Classes are integrated with MS general and bilingual students unless otherwise noted.
2. Bilingual candidates must achieve a 2.5 FSI in Spanish prior to Phase I; 3.0 FSI prior to Student Teaching and award of the credential.

## Multiple Subjects Intern Program

Student teaching while employed in a school program is permitted, contingent upon approval of the Multiple Subjects chairperson and the intern coordinator. The intern coordinator is available to assist prospective interns in each of the following application and program steps.

## Intern Process

As part of the approval process a student must be:

- Formally admitted to the University;
- Formally admitted to the Multiple Subject Program; and
- In good academic standing.

An application, initiated by the student, must be made to the chairperson and must include:

- Name of the school site person responsible for supervising the student teacher in the classroom;
- Statement of expected competencies, as outlined in the Handbook, the criteria for their demonstration, and a time commitment of no less than that of a non-paid student teacher;
- Definition of the role and responsibilities of the University supervisor, the student teacher, and the site supervisor (in lieu of the mentor teacher) as outlined in the Handbook; and
- Calendar of formal evaluation to be carried out jointly by the University supervisor, the school-site supervisor, and the student.

Recommendation of the individual who is student teaching in a paid situation is not automatic; all appropriate standards as outlined in the Handbook must be met before the credential will be recommended.

## Early Childhood Programs

The Department of Literacy Studies and Elementary Education offers a Master of Arts in Education with Concentration in Early Childhood Education and an Early Education Emphasis Certificate. Candidates may also apply Child Development courses to the

Child Development Permit matrix currently in effect for California state-funded preschool and school-age children certification. Please contact the Early Childhood Education Advisor for more information on the Permit and the Certificate.

## Master of Arts in Education with Concentration in Early Childhood Education

The Master of Arts degree in Education offers courses of graduate study to prepare candidates for specialized teaching and for curriculum and instructional leadership responsibilities in schools and other educational settings. The program, a minimum of 30 units, provides for areas of concentration in educational administration; curriculum, teaching, and learning; early childhood education; reading and language; and special education. Students must maintain a 3.00 grade point average in all course work in the approved master's degree program.

The Early Childhood Education Concentration is designed to prepare teachers and educators to work in public school and commu-nity-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 working with diverse families and young children and with advanced study of cognitive, language, social, emotional, and moral development. Improvement of classroom curriculum and assessment from infancy through the primary grades is another emphasis of the program. Candidates need not possess a teaching credential; 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 to admission to the program. Details are available from the Early Childhood Education Program Advisor.

## Prerequisites for the M.A. Program

1. A bachelor's degree from an accredited institution; and
2. 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.

## Procedures for Applying to the M.A. Program

1. Apply to the University as a graduate student;
2. Apply to the School of Education;
3. Submit the following:
a. Completed application form;
b. Official or unofficial transcripts (1 set from each institution listed on page 5 of the application form);
c. A photocopy of any valid California teaching credentials or permits, if appropriate. No teaching credential is required for the MA degree. A B.A. or B.S. degree is required;
d. Proof of at least one year of experience of working or volunteering in an early education setting;
e. Successful completion of at least one course in Child Development (minimum grade B);
f. Two letters of reference attesting to academic potential and professional promise (except where otherwise noted);
g. A professional biography ( 300 words approximately) which includes:
i. A synopsis of experiences in education or related fields;
ii. A narrative statement of career goals and of how the degree will contribute to goals; and
h. Documentation of University Admission or Application.

## Requirements for the M.A. in Education

Graduate 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 $30-36$ units of upper-division and 500 -level courses, as follows:
2. At least one-half of the units in 500 -level courses;
3. Not more than 9 semester units of transfer and/or extension credit;
4. Filing of an Advancement to Candidacy form that verifies approval of the program portfolio, verifies writing proficiency, and describes the culminating project; and
5. Completion and final approval of EDUC 598 (M.A. Thesis or Project Seminar) and completion and final approval of a (i) thesis, curriculum project, or creative project; (ii) Cognate Project; or (iii) Individualized Examination.
All requirements listed above must be completed within seven years ( 14 semesters) of the initiation of graduate study.

## Pathways to Program Completion

The M.A. program of study requires 30-36 semester units of course work, depending on the M.A. in Education pathway a student selects. There are three pathways to program completion, including the thesis/project, cognate, and individualized examination. We encourage students to become knowledgeable about each of the pathways in order to pursue a program of study that meets their professional goals within their preferred style of learning.
In all three pathways, graduate students take 18 units in the program area of concentration and at least 6 units (EDUC 570 and 571) of M.A. core courses. All M.A. students work with a three-member committee, most closely with the committee chair, to complete a culminating activity which is presented to the committee in a public forum. In addition to these points in common, there are distinct differences among the three pathways to program completion, as described below.

## Thesis/Project

The thesis/project pathway is a 30 -unit course of study, including 18 units in students' 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 problem in education. The project is a written document describing a significant undertaking appropriate to education. The thesis/project option requires an extensive write-up, including an in-depth literature review. Students must also present their thesis/ project to their three-member committee in a public forum.
Examples of a thesis investigation include process/product research, correlational study, action research, ethnographic study, historical study, or theoretical study. Examples of a project include curriculum design, professional development for educators, program design, performance piece, or creative project.

## Cognate

The cognate pathway is a 36 -unit course of study, including 18 units in the students' 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 that 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., portfolio, 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 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 must be included in the project. Students must present the completed project to their three-member committee in a public forum.

## Individualized Examination

The individualized examination pathway is a 33 -unit course of study, including 18 units in the students' 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 four 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 to 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.

## The Program Portfolio

In order to advance to candidacy, all students must complete a program portfolio and present it to their committee. In most cases, this presentation occurs at the same meeting in which 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; 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 with School of Education Director of Graduate Studies.


## Program Coursework: 30-36 units

The total number of units of the program varies from 30 to 36 semester units, depending on the Culminating Path selected by the students. The following is a list of the courses ECE M.A. candidates take.

Education Core (6 units in EDUC courses)
EDUC 570 Reflective Educator (3)
EDUC 571 Research Paradigms in Education (3)
Master's Degree Culminating Paths (6-12 units)
Students select one of the following three paths:

1. Thesis (6 units)
a. EDUC 598 Developing a Thesis Project (3)
b. EDUC 599 Supervised Research for the Thesis/Project (3)
2. Individualized exam (9 units)
a. EDUC 573 Supervised Study for the

Individualized Examination (3)
b. Two other courses
3. Cognate (12 units - may include Specialist Credential coursework)
a. EDUC 572 Supervised Study for the Cognate (3)
b. Three other courses

Required Core Courses in Concentration (12 units)
EDEC 531 (3) The Role of Play in Development and Learning (offered Fall of odd numbered years)
EDEC 532 (3) Social-Moral Development in Childhood (offered Fall of even numbered years)
EDEC 537 (3) Authentic Assessment in Preschool and Primary Programs (offered Spring of odd numbered years)
EDEC 538 (3) The Development of Language and Thinking in Infancy through Middle Childhood (offered Spring of even numbered years)

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-MA courses as offered will be chosen in consultation with the ECE Advisor and the Graduate Advisors of the above mentioned areas.
Some examples of course options are:
Special Education
EDSP 422 Collaborative Partnerships in Special Education
EDSP 423A Assessment, Curriculum and Instructional Strategies
EDSP 430 Special Education for Teachers
Curriculum Teaching and Learning
EDCT 585 Curriculum Development: Theory, Practice and Evaluation EDCT 586 Teaching and Learning: Research and Application in the Classroom

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

## Reading and Language Programs

The Department of Literacy Studies and Elementary Education offers three graduate programs to support in-depth exploration of language development, literacy learning, and teaching. The programs feature hands-on experiences that are immediately applicable in the classroom. Many of our students earn a state license and a master's degree simultaneously. Please explore our site at www.sonoma.edu/ Isee/reading/index.html.
The Department of Literacy Studies and Elementary Education is dedicated to excellence in the preparation of teachers and the ongoing 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.

## Credentials Office

The Credentials 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 for providing application information and credential information to prospective students, continuing students, out-of-state teachers/administrators, University constituents, and the University service area in general.

## Reading Programs

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.S. degree program and the Reading Certificate/ Reading and Language Arts Specialist Credential simultaneously.

## Master of Arts in Education with Concentration in Reading and Language

The M.A. degree program in Education offers courses of graduate study to prepare candidates for specialized teaching and for curriculum and instructional leadership responsibilities in the schools. The program, a minimum of 30 units, provides for areas of concentration in educational administration; curriculum, teaching, and learning; early childhood education; reading and language; and special education.

Students must maintain a 3.00 grade point average in all coursework in the approved master's degree program as well as all coursework taken subsequent to admission in conditionally classified standing.

For more information, refer to the section on graduate degrees.
Prerequisites for the Reading and Language Graduate Programs (M.A.; Reading Certificate; Reading and Language Arts Specialist Credential)

- A bachelor's degree from an accredited institution; and
- 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.


## Procedures for Applying to the Graduate Program

- Apply to the University as a graduate student;
- Apply to the School of Education;
- Submit the following:
- A professional goals statement;
- One set of official transcripts;
- One photocopy of a valid basic teaching credential (except where otherwise noted); and
- Two letters of reference attesting to academic potential and professional promise (except where otherwise noted).


## Requirements for M.A. Advancement to Candidacy

- Completion of M.A. core courses EDUC 570 and 571, and of M.A. concentrations;
- Presentation and approval of program portfolio; and
- Filing of Advancement to Candidacy form with School of Education graduate director.


## Requirements for the M.A. in Education

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

- Completion of an approved program consisting of a minimum of 30 units of upper-division and 500-level courses, as follows:
- At least one-half of the units in 500-level courses; and
- Not more than 9 semester units of transfer and/or extension credit.
- Filing of an Advancement for Candidacy form that verifies approval of the program portfolio, verifies writing proficiency, and describes the culminating project; and
- Completion and final approval of EDUC 572, 573 or 598/599 and completion and final approval of a cognate, individualized examination, thesis, curriculum project, or creative project.

All M.A. requirements listed above must be completed within seven years ( 14 semesters) of the initiation of graduate study.

## The M.A. Program Portfolio

Throughout their entire M.A. course of study, graduate students work on a reflective program portfolio. The portfolio addresses the following questions: Who am I in the context of the profession of education at this time in my personal and professional history and in the cultural context in which I live and learn? Under what conditions do I feel respected and engaged as a learner? What ideas have shaped and will impact my practice and my beliefs about education? What ideas, issues, and topics interest me as possible areas for in-depth inquiry?
Students will construct and review their program portfolios as an ongoing requirement for the graduate core courses. Presentation of the program portfolio is required for advancement to candidacy.

## 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
EDRL 521A Language Development in First and Second Languages
EDRL 522 Assessment and Teaching in Reading and Language Arts
Education Core Courses (9-12 units)
EDUC 570 The Reflective Educator
EDUC 571 Research Paradigms in Education
Thesis Path (30-unit course of study, including 18 units in the student's program area, 12 units of core courses):
EDUC 598 Developing a Thesis/Project
EDUC 599 Supervised Research for Thesis/Project
Cognate Path (36-unit course of study, including 18 units in the student's program area, 9 units of core courses, and a 9-unit cognate course of study):
EDUC 572 Supervised Study for the Cognate Project
Individualized Exam Path (33-unit course of study, including 18 units in the student's program area, 9 units of core courses, and 6 units of elective courses):
EDUC 573 Supervised Study for the Individualized Examination

## 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.

If you have attended the California Reading and Literature Project Summer Institute, or if you would be interested in doing so after enrolling in the program, 3 credit units can be applied to the M.A. in Reading/Language.

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

## Pathways to Program Completion

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

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

## Thesis/Project

The thesis/project pathway is a 30 -unit course of study, including 18 units in students' 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 problem in education. The project is a written document describing a significant undertaking appropriate to education. The thesis/project option requires an extensive write-up, including an in-depth literature review. Students must also present their thesis/ project to their three-member committee in a public forum. Examples of a thesis investigation include process/product research, correlational study, action research, ethnographic study, historical study, or theoretical study. Examples of a project include curriculum design, professional development for educators, program design, performance piece, or creative project.

## Cognate

The cognate pathway is a 36-unit course of study, including 18 units in the students' 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 that 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., portfolio, 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 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 must be included in the project. Students must present the completed project to their three-member committee in a public forum.

## Individualized Examination

The individualized examination pathway is a 33-unit course of study, including 18 units in the students' program area of concentration, 9 units of core courses (EDUC 570, 571, and 573), and 6 units of elec-
tive 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 four 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 to 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.

## 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.

## Block One: Developing a Personal Model of Literacy

## Spring

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
EDRL 522 Assessment and Teaching in Reading and Language Arts 3

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

EDRL 527A Clinical Field Experience in Reading and Language Arts

## 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 <br> EDRL 524 Literature and Literacy

## Reading and Language Arts Specialist Credential

All teacher preparation institutions in California were provided with new program standards for the Reading and Language Arts Specialist Credential by the California Commission on Teacher Credentialing. The newly designed SSU Specialist program is currently under review by the Commission. Contact Paul Crowley, Reading and Language Program Advisor, for information regarding the status of the program's approval.
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 assessment that leads 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)

## On-Campus Reading and Writing Clinic

Summer
Public school students attend SSU for reading improvement and enrichment in a supervised clinical setting. 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 of 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

## ENGINEERING SCIENCE

DEPARTMENT OFFICE
Salazar Hall 2004
Phone (707) 664-2030
Fax (707) 664-2361
E-mail: engineering@sonoma.edu
Website: www.sonoma.edu/engineering
DEPARTMENT CHAIR/PROGRAM DIRECTOR Jagan Agrawal

ADMINISTRATIVE COORDINATOR
Jennifer Aaseth
TECHNICAL STAFF
Shahram Marivani

## Faculty

Jagan Agrawal
Shailendhar Saraf
Jingxian Wu

## ASSOCIATED FACULTY

Elaine McDonald, Saeid Rahimi, B. Ravikumar, Hongtao Shi, Lynn Stauffer, Sunil Tiwari

ADJUNCT FACULTY
Gaurav Agrawal, Alan Bloom, Jim Brede, Eric Drucker, Don Estreich, Atul Garg, Tim Griesser, Leonid Grigorov, Mark Scott Johnson, Ali Kujoory, Shahram Marivani, Salam Marougi, Chris Miller, Mario Righi, Gordon Stuck, Giampaolo Tardioli

## Programs Offered

Bachelor of Science in Engineering Science (Specialization in Electronics and Communications)

Master of Science in Computer and Engineering Science (Specialization in Communications and Photonics or 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 engineering science, with focus in electronics and communications, deals with the processing of information and energy in electrical and magnetic forms involving conceptualization and formulation of the ideas, design to manufacturing to applications of many diverse electrical, electronic, and magnetic devices and systems.

The focus of the BSES curriculum is electronics and communication. The 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 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 the students with the opportunity for gaining selfdevelopment, technical competence, and awareness of economic and ethical responsibilities.

The MS-CES curriculum is designed to further the working skills and practical knowledge of engineers, computer scientists, and similar professionals. 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. These options include such areas as advanced analog and digital electronics, embedded systems, communications, networking, and photonics.

## Careers in Engineering Science

The BSES program has been designed to prepare students for an exciting career in industries or pursue graduate degrees. The graduates will find opportunities in the industries in the areas such as:

- Designing and manufacturing of electronic systems;
- Communications systems;
- Networking;
- Computer engineering;
- Telecommunications;
- Optical fiber communications;
- Integrated circuits;
- Research and development in the above areas; and/or
- Sales, marketing, and management in the areas above.

Some examples of the corresponding job titles are electronics engineer, computer engineer, hardware designer, systems engineer, communications engineer, communications analyst, telecommunications engineer, network engineer, network analyst, sales engineer, applications engineer, and field engineer.

Graduate degrees can be pursued in any one of the many fields such as electronics, communications, networking, computer engineering, and computer science.

## Bachelor of Science in Engineering Science (Emphasis in Electronics and Communications)

Consistent with the mission of the University, the mission of the Bachelor of Science in Engineering Science program is "to prepare students to be learned men and women who are capable of pursuing fulfilling careers in a changing world," and "to fulfill the undergraduate technical education needs of the community, busi-
ness, and industry of the North Bay region." A broader mission is to enable graduating engineers to acquire knowledge and experiences to prepare them to pursue lifelong learning, advanced study, and leadership roles in business and community.

The B.S. in engineering science at Sonoma State University is a focused and innovative program in which the curriculum has been designed to provide students with a basic education in engineering science based on a strong foundation of liberal arts.
The curriculum includes (1) 51 units of General Education courses; (2) a 35 -unit core in mathematics, computer science, and basic sciences ( 9 units overlap with GE units); (3) a 49-unit core in engineering sciences which includes electrical, computer, electronics, and communications engineering subjects such as circuits, analog/digital electronics, electromagnetic fields, microprocessors, analog and digital communications, and networking; and (4) 6 units of engineering science electives which provides senior-level choices for more depth in students' areas of interest. Theoretical and practical learning experiences are an important part of all course work. The senior year also gives students the opportunity to consolidate their educational experience with a capstone design project. The curriculum develops students' abilities to formulate problems, analyze alternatives, make decisions, and solve problems. Internship and co-op experiences will be encouraged to provide the students a real-world experience and to enhance students' communication and interpersonal skills.

## Program Educational Objectives

- Educate and prepare students to be successful in the profession of electrical engineering, particularly in the fields of electronics and communications;
- Educate students to successfully pursue graduate degrees; and
- Provide a strong foundation to the students for lifelong learning and to be responsible citizens.


## Program Outcomes

The students will attain:
a. An ability to apply knowledge of mathematics, science, and engineering;
b. An ability to design and conduct experiments, as well as to analyze and interpret data;
c. 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;
d. An ability to function on multidisciplinary teams;
e. An ability to identify, formulate, and solve engineering problems;
f. An understanding of professional and ethical responsibility;
g. An ability to communicate effectively;
h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context; and
i. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practices.

| Degree Requirements | Units |
| :--- | ---: |
| "GE courses | 51 |
| Major requirement | 49 |
| Support courses (Basic Sciences, |  |
| Computer Science, and Mathematics*) | 35 |
| Technical Electives | 6 |
| Total units needed for graduation | 132 |

[^2]
## Engineering Science

ES 110: Introduction to Engineering \& Lab Experience 2
ES 210: Digital Circuits \& Logic Design 4
ES 220: Electric Circuits 3
ES 221: Electric Circuits Laboratory 1
ES 230: Electronics I 3
ES 231: Electronics I Lab 1
ES 310: Microprocessors \& System Design 4
ES 314: Adv. Program., Modeling and Simulation 4
ES 330: Electronics II 3
ES 400: Linear Systems Theory 3
ES 440: Analog \& Digital Communications I 3
ES 441: Analog \& Digital Communications II 3
ES 443: Introduction to Optical Fiber Communication 3
ES 465: Introduction to Networking 3
ES 430: Electromagnetic Theory \& Applications 3
Approved Technical Elective I 3
Approved Technical Elective II 3
ES 492: Senior Design Project Planning 2
ES 493: Senior Design Project 3
ES 497: Engineering Science Colloquium 1
Subtotal 55
Current List of Technical Electives
ES 480: Artificial Intelligence (3)
ES 432: Physical Electronics (3)
ES 445: Photonics (3)

## Computer Science

CS 115: Programming I 4
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
MATH 211: Calculus II
MATH 241: Calculus III
MATH 261: Calculus IV
MATH 345: Probability Theory
Subtotal

## General Education

(Excluding Math, Physics, and CS Courses)
ENGL 101: Expository Writing \& Analytical Reading
Remaining GE courses

Subtotal

## GPA Requirements

Please refer to SSU catalog and department office for various general academic regulations and specific requirements, respectively; for undergraduate students such as grade point average requirement, course repeat policy, continuation in the program, etc.

## Minor in Mathematics

The course ES 400: Linear Systems Theory is crosslisted with Math 430 . As such, the BSES curriculum includes 25 units of mathematics including 6 units in upper division (Math 345 and Math 430) required to minor in mathematics. Therefore a student satisfying BSES degree requirement is automatically completing a minor in Mathematics.

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

## SEMESTER 1:: 15 Units

| ES 110: Introduction to Engineering \& Lab Experience | 2 |
| :--- | :--- |
| CS 115: Programming I | 4 |
| MATH 142E: Discrete Mathematics for Engineering | 2 |
| MATH 161: Calculus 1 | 4 |
| ENGL 101: Expository Writing \& Analytical Reading | 3 |
| SEMESTER 2:: 15 Units |  |

PHYS 114: Introduction to Physics I 4

PHYS 116: Introductory Lab Experience 1
MATH 211: Calculus II
GE

SEMESTER 3:: 18 Units

| PHYS 214: Introduction to Physics II | 4 |
| :--- | :--- |
| MATH 241: Calculus III | 4 |
| ES 220: Electric Circuits | 3 |
| ES 221: Electric Circuits Lab | 1 |
| GE | 6 |


| SEMESTER 4:: 18 Units |  |
| :--- | ---: |
| ES 210: Digital Circuits \& Logic Design (w/lab) | 4 |
| ES 230: Electronic I | 3 |
| ES 231: Electronics I Laboratory | 1 |
| MATH 261: Calculus IV | 4 |
| GE | 6 |
|  |  |
| ES 314: Adv. Program., Modeling and Simulation | 4 |
| ES 330: Electronics II (w/lab) | 4 |
| MATH 345: Probability Theory | 4 |
| ES 400: Linear Systems Theory | 3 |
| GE | 3 |
|  |  |

ES 310: Microprocessors and System design 4
ES 440: Analog and Digital Communications I ..... 3
ES 430: Electromagnetic Theory \& Applications ..... 3
GE ..... 6
SEMESTER 7:: 18 Units
ES 441: Analog and Digital Communications II ..... 3
ES 443: Introduction to Optical Fiber Communications ..... 3
ES 465: Introduction to Networking (w/lab) ..... 3
ES 492: Senior Design Project Planning ..... 2
ES 497: Engg. Science Colloquium ..... 1
GE ..... 6
SEMESTER 8:: 15 Units
ES 493: Senior Design Project ..... 3
Approved Technical Elective I ..... 3
Approved Technical Elective II ..... 3
GE ..... 6

## TOTAL UNITS:: 132

## Master of Science in Computer and Engineering Science

(Specialization in communications and photonics or 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. 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 at SSU.
A link with local industry in the form of an Engineering Science Advisory Board (ESAB) is an integral part of the program. Such an advisory board is critical to ensure that the program meets local community needs. The ESAB 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, and equipment and financial support from the industries. Through this link 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 by 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 a $30-33$ unit program, not including any prerequisite work.

## 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.


## Program Outcomes

The students of this program will acquire:

- Knowledge of the theory of high performance computing, communications, and/or networking;
- Critical thinking ability and analytical and simulation tools to do system performance evaluation;
- Ability to model and analyze scientific and engineering problems;
- Ability to apply theory to design and to implement efficient computing and/or communications systems;
- Ability to integrate knowledge from multiple interrelated disciplines to formulate, to design, and/or to implement interdisciplinary projects;
- Ability to investigate and to formulate research problems and/ or design projects independently; and
- Ability for effective written and oral communication skills.


## Internship Opportunities and Financial Aid

The industries in the region provide opportunities to students to work as interns onsite and to enrich their academic experience at SSU with valuable hands-on practical experience. Students are also eligible to apply for financial aid in the form of low interest loans through the SSU Financial Aid Office and for part-time employment on campus as student assistants.

## Admission to the Program

For admission, the applicant must have:

1. A baccalaureate degree in a scientific or technical discipline from a 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 $3.0(\mathrm{~A}=4.00)$ in the last 60 semester ( 90 quarter) units attempted;
3. Applicants whose native language is not English and who have not spent at least three years of school at the secondary level (or beyond) where English is the principal language of instruction must present a minimum score of 212 on the computerized Test of English as a Foreign Language ( 550 on the paper form or 79-80 on internet version);
4. Demonstrated competency in writing by one of the Written English Proficiency Test criteria for MS-CES students given below. Generally, this requirement must be met before entering the program. One of the criteria is demonstrating competency in writing through an essay. Therefore, if the applicant plans to use this criteria, the essay 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);
- 2 semesters of Calculus-based Physics with laboratory (PHYS 114, 116 and 214);
- 1 semester of Probability Theory (MATH 345);
- 1 semester of Analog and Digital Electronics (ES 230 and 231);
- 1 semesters of Programming in an approved high-level Procedural Language (CS 115);
- 1 semester of advanced programming, modeling, and simulation (ES 314); and
- 2 semesters of Digital Systems and microprocessors and System Design (ES 210 and 310, or CS 252 and 351).

Note: Occasionally, the department offers compressed prerequisite courses to enable students to satisfy the prerequisite requirements in an expeditious manner.

## Conditional Admission

The applicants whose GPA is less than 3.0 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 who writes and submits 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 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.

## Program of Study

The program offers two tracks or areas of specialization:

- Track 1: Communications \& Photonics - This area of specialization provides students with the expertise in the areas of (i) analog and digital electronics, (ii) semiconductor and photonics components and devices, (iii) communications techniques (wireless, wireline, and optical fiber media), (iv) local and wide area networking, and (v) broadband access technology.
- Track 2: Computer Hardware \& Software Systems - This area of specialization is intended to deepen students' ability to analyze and design computer systems. This specialization includes topics such as embedded systems, digital data compression, software engineering, and computer networks.
A student chooses one of the two tracks at the time of admission but can change it in the midstream. 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.


## Common Core

All students in the program must take three core courses (9 units). These courses are designed to give students the fundamentals necessary to master advanced-level academic work. These core courses are:

- CES 400: Linear Systems Theory
- CES 440: Data Communications
- CES 432: Physics of Semiconductor devices or CES 530: Analog and Digital Microelectronics

If any of the above core courses were part of a student's undergraduate program, the student must take a 500 -level course in its place approved by the student's faculty advisor. Furthermore, only two 400-level courses can be used to satisfy degree requirements. A petition must be filed with the department for any exceptions.

## Track Core

A student must take 12 units of courses from the list of courses for the chosen track. The lists of the courses for each track, which will be revised periodically, are given below.

Communications and Photonics Track Courses

- CES 430: Photonics
- CES 500: Queuing and Transform Theory
- CES 532: Advanced Semiconductor and Photonics Devices
- CES 540: Digital Data Transmission
- CES 542: Digital Signal Processing
- CES 543: Optical Fiber Communications
- CES 544: Wireless Communications
- CES 546: Data Compression
- CES 547: Digital Switching: Techniques and Architectures
- CES 550: Integrated Digital Networks
- CES 552: Network Architecture and Protocols
- CES 554: Broadband Access Technology
- CES 558: Multicasting on the Internet
- CES 590: Selected Topics in Communications and Photonics

Computer Hardware and Software Systems

- CES 500: Queuing and Transform Theory
- CES 510: Intelligent Systems Design
- CES 512: Theory of Software Systems
- CES 514: Data Mining
- CES 516: High Performance Computing
- CES 520: Embedded Systems
- CES 522: VLSI Design
- CES 524: Advanced Computer Architecture
- CES 530: Analog and Digital Microelectronics
- CES 546: Data Compression
- CES 592: Selected Topics in Hardware and Software Systems

The courses are selected with the approval of the student's faculty advisor to ensure that they form a cohesive plan of study in the desired subject area.

## CuIminating 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 Plan 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 for taking 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 MSCES student is required to do an internship in an industry, university, laboratory, utility company, government organization, etc. The objective 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. The internship must be completed within one year. The number of hours worked as an intern should be at least 100, preferably much more. 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 MSCES 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.

## Degree Requirements

A student must complete 30 to 33 units to graduate depending upon the culminating experience plan chosen as given below:

| Plan A | (Thesis, 30 units) |
| :--- | ---: |
| Common Core | 9 units |
| Track Core | 12 units |
| Electives | 3 units |
| Thesis | 6 units |
| Plan B | (Project, 30 units) |
| Common Core | 9 units |
| Track Core | 12 units |
| Electives | 6 units |
| Design Project | 3 units |
|  |  |
| Plan C | (LTR Experience, 33 units) |
| Common Core | 9 units |
| Track Core | 12 units |
| Electives | 9 units |
| CES 593 | 3 units |

The purpose of technical elective courses is to provide a student with greater depth and/or breadth in his/her area(s) of interest. A technical elective course can be from any of the two lists of the track courses and must be at 500 -level.

## GPA Requirements

Please refer to SSU catalog and department office for various general academic regulations and specific requirements; respectively, 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 hightech industries in the North Bay region of the San Francisco area.

## ENGLISH

DEPARTMENT OFFICE
Nichols Hall 362
(707) 664-2140
www.sonoma.edu/english
DEPARTMENT CHAIR
Greta Vollmer
DEPARTMENT VICE-CHAIR
Kim Hester-Williams
ADMINISTRATIVE COORDINATOR
Merle Williams
Sandra Piantanida

## Faculty

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

* Faculty Early Retirement Program


## Programs Offered

Bachelor Of Arts In English
Literature concentration
Creative Writing concentration
Secondary Teaching Credential Preparation
Master Of Arts In English
Minor In English
Minor In Linguistics

English remains one of the most various, comprehensive, and liberalizing of the liberal arts. It familiarizes us with the written documents that define the past and give meaning and purpose to the present; it investigates the sources and structure of language; it enriches our awareness of language in written and oral forms; it stirs the creative and recreative impulses; and it provides us with
multiple ways to envision our world and ourselves through the study of fiction, poetry, drama, and the essay.

The English Department is one of the University's largest departments. In addition to its majors, the department serves many other students who take English courses to improve their writing, to develop a minor or double major field, or to pursue interests in some aspect of literature, language, or creative writing. English is the field most frequently chosen by students combining fields of study in an interdisciplinary major-for example, literature and sociology; literature and history; literature and art; and linguistics and psychology.

Students who wish to major in English may choose one of three plans, each of which provides a coherent program with a particular emphasis. After a core of required courses, students will follow programs leading to a major in English and American literature, creative writing, or secondary teaching, which prepares students to enter postbaccalaureate teacher credentialing programs.

Students who have majored in English work in business, public relations and advertising, broadcasting, journalism, law and government service, as well as in elementary, secondary, and college teaching. All of these fields require an understanding of human motivation and of the conflicts and dilemmas that people face. Our graduates enter those fields able to express themselves clearly, logically, and with passion. They understand the relationship between language and authority.
The English Department also serves students in the applied arts minor, which may be of special interest to those seeking the Multiple Subject (elementary level) Teaching Credential and the University's pre-law and pre-health professions programs.

The English Department publishes the following professional and student publications: Zaum; and Volt, A Magazine of the Arts. Students wishing to participate in the production of these publications should contact the English Department office.

To be admitted to the English major, students must receive a grade of at least B- in ENGL 101 and 214 or their equivalents. A student with a grade lower than B- in either ENGL 101 or 214 may petition for a review by the department. The review will be based on the contents of an appeal folder, containing three essays from the class being reviewed, and a one-to-two-paragraph explanation of the basis of appeal.

## Bachelor of Arts in English

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements, Core (20 units) |  |
| and Concentration (20 units) | 40 |
| General electives | 29 |
| Total units needed for graduation | 120 |

## Major Core Requirements for All English Majors

(Except secondary teaching concentration students; please see Secondary Teaching Preparation, below.)

## An Introductory Course

Complete the following course:
ENGL 301 Literary Analysis: Seminar

## 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
ing, or secondary teaching.

## Literature Concentration

Three General Literature Courses:
Two of these courses ( 8 units) must be at the 400 level, and must be in literatures before 1914.
Electives:
Total units in the Literature Concentration

## Creative Writing Concentration

Four Or More Courses In Creative Writing:
4 At least three of these courses ( 12 units) must be at the 300/400 levels, and course selections must include two different writing genres (poetry, fiction, scriptwriting, or creative nonfiction).
ENGL 207 Introduction to Creative Writing (3)
ENGL 307 Introduction to Fiction Writing (4)
ENGL 318 Introduction to Poetry Writing (4)
ENGL 352 Personal Essay (4)
ENGL 407 Advanced Fiction Writing (4)
ENGL 409 Master Class in Fiction Writing (4)
ENGL 418 Advanced Poetry Writing (4)
ENGL 430 Creative Writing: Selected Genres (1-4)
ENGL 435 Directed Writing (4-8)
ENGL 475 Master Class in Nonfiction (4)

Electives:

## Total units in the Creative Writing Concentration

## English Education Concentration (Secondary Teaching Preparation)*

Pre-Requisites: 6 Units
Complete the Following Course: 3 Units
ENGL 201 Written and Oral Discourse (3)
Complete one of the following courses: 3 Units
THAR 300 Theatre in Action (3)
COMS 202 Methods of Media Criticism (3)
Core Requirements: 37 Units
Complete the Following Courses: 25 Units
ENGL 301 Literary Analysis: Seminar (4)
ENGL 315 California Ethnic Literature (3)
ENGL 341 Explorations in Language or History of the English Language (4)
ENGL 379 Pedagogical Grammar (4)
ENGL 491 Teaching Composition (4)
ENGL 492 Responding to Literature (4)
ENGL 495 Portfolio Preparation (2)
Complete one of the following courses: 4 units
ENGL 238 Survey: Later American Literature (4)
ENGL 237 Survey: Early 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 option 1 or option 2:
Option 1
Extended Studies: Literature and Text Analysis: 8 Units
Complete two of the following courses:
ENGL 343 Youth and Literature (4)
ENGL 470, or 472, or 474 Genre Course (4)
ENGL 481 Seminar in British Literature (4)
ENGL 482 Seminar in American Literature (4)
ENGL 485 California Authors (4)
OR an elective to be determined with and approved by an advisor
Option 2
Extended Studies: Composition/Rhetoric and Linguistics Emphasis:UUnits 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)
LING 401, or LING 430, or LING 432 Linguistics Department course (4)
OR an elective to be determined with and approved by an advisor
Collateral Requirements: 3 Units Plus 30 Hours
Complete the following:
EDUC 417 School and Society (3)
Field experience in schools (30 hours)
Total units in the English Education (Secondary Teaching Preparation) Concentration
*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 G.P.A. of 3.0 (in single subject program courses) to qualify for waiver approval.

## Teaching Credential Preparation

The English department offers a program of study that satisfies the subject matter preparation requirement for entry into an English teaching credential program and exempts the student from taking the CSET (California Subject Examination for Teachers) in English. English majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the CSET Multiple Subjects Assessment. For more information, contact the English Department Office at (707)-664-2140.

## Sample Four-year Program for Bachelor of Arts in English

## Literature Concentration

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| GE Area A2: ENGL 101 (3) | GE Area A3: PHIL $101(3)$ |
| GE (3) | GE Area B1 (3) |
| GE Area B2: BIOL 115 (3) | GE Area D2 (3) |
| Electives (6) | GE Area C2: ENGL $214(3)$ |
|  | Electives (3) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| GE Area A1: ENGL 201 (3) | GE Area C1 (3) |
| GE Area B3 (3) | ENGL 238 or $240(4)$ |
| ENGL 237 or $239(4)$ | GE Area D3 (3) |
| Electives (5) | Electives (5) |

JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |  |  |
| :--- | ---: | :---: | :---: |
| GE Area C3 UD (3) | ENGL 339 (4) |  |  |
| ENGL 301 (4) | GE Area C4 UD (3) |  |  |
| UD Major Literature Course (4) | Major Elective (4) |  |  |
| Electives (4) | GE Area D1 (3) |  |  |
|  | Electives (1) |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| ENGL 401 (4) | 400 Level Major Lit. Course (4) |
| 400 Level Major Literature Course (4) | 400 Level Major Lit. Course (4) |
| GE Area E UD (3) | GE Area D5 (3) |
| Electives (4) | Electives (4) |

## TOTAL UNITS:: 120

## Advising Clarifications

1. Six units of English C.I.P. may be included among the electives with permission of advisor.
2. Additional courses in upper-division writing (which may be repeated for credit) or additional literature courses may be taken as electives.
3. No course should be listed above if it has already been used for GE requirements. (ENGL 214, 215, 314, 315, 345 are exceptions.)
Only one course may be double counted for both English and GE area C2. No courses from other GE areas or from other universities may double count. However, if a course is
counted toward area C2 by an A \& R evaluator, it may still count toward the major if the student elects to take an additional English Department area C2 course in its stead.
4. At least 24 units of the courses listed above must be upperdivision.
5. The 40 units listed above will be used in computing the major GPA In accordance with University policy; no courses taken $\mathrm{Cr} / \mathrm{NC}$ may be counted toward the major unless they are offered with that option only.
6. Additional units in English, beyond the 40 units listed above, will be counted as general college electives and should not be listed on the Major/Minor Requirements form.

In accordance with University policy, courses in Independent Study $(495,595)$ shall not duplicate regularly offered courses listed in our catalog.

## Minor in English

Students majoring in other fields may develop, in consultation with an English Department advisor, a 20-unit English minor.

Required: Literary Analysis (ENGL 301), a survey course (to be selected from ENGL 237, 238, 239, 240, or equivalent), and an upper-division writing course (to be selected from ENGL 307, 318, $352,375,475$, or other at the recommendation of your advisor). A minimum of one course must be taken at the 400 level. All courses must be taken for a grade to count toward the minor. Nine units must be taken in residence at SSU.

## Minor in Linguistics

Students majoring in English or other fields may develop, in consultation with one of the Linguistics Program advisors, a 20-unit Linguistics minor.

Required: one introductory Linguistics course (to be selected from ENGL 341, LING 200, or SPAN 304), Linguistic Analysis (LING 400), and one methodological course (to be selected from ENGL 489, ENGL 588, ANTH 480, SPAN 400, or SPAN 490). All courses must be taken for a grade to count toward the minor. Nine units must be taken in residence at SSU.

## Master of Arts in English

The graduate program in English at Sonoma State University consists of 34 units of graded work. Literature and creative writing are emphases within the degree available to the student.

## Admission to the Program

The English Department M.A. program accepts applicants only for the fall semester of each year and requires at least a 3.00 GPA in the last 60 academic units taken. Program applicants must file the University application form and have all their academic transcripts sent to the University Admissions and Records Office by the admission deadline set by the department for that year, typically December 31. Applicants must also send to the English Department, care of the Graduate Advisor, the following: a second set of transcripts (the first goes to Admissions and Records); three letters of recommendation; a brief cover letter indicating the applicant's interest in the program and chosen field of study (creative writing or literary criticism); 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. Applicants should contact the English Department office and request a copy of the Guide to the English M.A.
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 postbaccalaureate status. Classified status is usually granted to admitted applicants with undergraduate majors in English; conditionally classified status, which requires the completion of 12 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 494 oral exam or the Literature GRE (minimum score at the $65^{\text {th }}$ percentile), and 3 ) completed the language requirement. Advancement to candidacy is formalized by the filing of a GS01 form with Graduate Studies.

## Program Requirements

The MA 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 complete 34 units of coursework plus an additional 3 units of English 597 (directed reading) during their final semester for a total of 37 units.
In addition to the 494 reading course recommended for all graduate students studying for the 494 exam prior to advancement to candidacy, students may take one course at the 400 level (senior seminar level) toward completion of their MA. 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 course work, plus 6 units of ENGL 599 for researching and writing a thesis;
2. Creative Writing Option: 28 units of course work, plus 6 units of directed writing, ENGL 535 , for writing a creative project prefaced with a critical introduction; or
3. Directed Reading Option: 34 units of course work, 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 34 units of graded course work plus three units of ENGL 597, which is graded $\mathrm{Cr} / \mathrm{NC}$.

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.

English Placement Test: The University offers 30 -level and 99level courses in English for students who pass the written English Placement Test (EPT) at an appropriate level. Please see the Admissions section for additional information.

## ENVIRONMENTAL STUDIES AND PLANNING

DEPARTMENT OFFICE
Rachel Carson Hall 18
(707) 664-2306
www.sonoma.edu/ensp/
DEPARTMENT CHAIR
Thomas Jacobson
ADMINISTRATIVE COORDINATOR
Jo-Ann Smith

## Faculty

Caroline Christian / Environmental Conservation and Restoration Thomas Jacobson / Planning
*Stephen Norwick / Water Quality, Hazardous Materials, GE Advising Steven Orlick / Planning
Rocky Rohwedder / Education and the Environment, Outdoor Leadership Alexandra von Meier / Energy Management and Design Laura Watt / Environmental Conservation and Restoration, Planning *Faculty Early Retirement Program

## Programs Offered

Bachelor of Arts in Environmental Studies Education and the Environment<br>Energy Management and Design<br>Environmental Conservation and Restoration<br>Outdoor Leadership<br>Planning Concentration<br>Water Quality and Hazardous Materials Management<br>Bachelor of Science in Environmental Studies<br>Energy Management and Design<br>Water Quality and Hazardous Materials Management<br>Minor in Environmental Studies and Planning<br>Elementary Teacher Credential Multiple Subject<br>Preparation in Environmental Studies<br>Double Major with Economics

Dedicated to producing environmental problem solvers, the Department of Environmental Studies and Planning offers a distinctive program of interdisciplinary study. Students and faculty work together to develop an understanding of environmental "sustainability" in all its dimensions. The program addresses current environmental concerns that have farreaching implications for human society, natural systems, and the fate of diverse species of plants and animals. This involves an integration of knowledge from a variety of disciplines to understand the functioning of ecological systems and the nature of human impact upon these systems at local, regional, and global scales. The department's two goals
are to prepare students for careers in the environmental professions, for graduate studies, and for positive action in their own lives; and to promote ecological literacy in order to help maintain and enhance the quality of the human and natural environments.
All students receive fundamental instruction related to ecology and the environment based on knowledge from the biological, physical, and social sciences and from the humanities. This broad understanding is applied in a particular area of environmental concern through a student's selecting one of the ENSP study plans. Career-oriented study plans are offered in conservation and restoration, energy management and design, education and the environment, outdoor leadership, city and regional planning, and water quality and hazardous materials. These study plans are described below. Many students pursue double majors, or a major and minor, in conjunction with traditional disciplines to prepare for specific careers related to the environment.
All students complete a senior project or internship.

## Supporting Programs

In addition to the programs above, our department is the academic sponsor of two professional certificate programs offered by the School of Extended Education.

Green Building Professional Certificate
Sustainable Landscape Professional Certificate

## Admission Requirements

When applying to Sonoma State University, a student may declare a major in Environmental Studies and Planning. A student considering this major should make an appointment to see a faculty member for academic advising. (Students seeking financial aid to assist them in their studies should contact the financial aid office. Several scholarships are provided specifically for ENSP students through the University scholarship program; please refer to the Scholarships section of this catalog.)

## Advisory Plans for the Freshman and Sophomore Years

In fulfilling their general education requirements, students who intend to major in Environmental Studies and Planning should select courses that will also meet the prerequisites for their intended study plans. Required and recommended prerequisites may be obtained by contacting the department office.
A broad-based program of lower-division work in the liberal arts and sciences is generally sufficient to meet the requirements for the B.A. degree. This program should include at least one course in biology; one in geology, chemistry, or physics; one in philosophy; and two or more in the social sciences, including a course in introductory economics (either microeconomics or macroeconomics is recommended). Additional course work is required for certain study plans.

## Required Courses

All ENSP majors are required to complete:
ENSP 200* Global Environmental Issues (3)
ENSP 201 Environmental Forum (1)
In addition, in consultation with an advisor, students must complete 36-53 units in one of the six study plans described below. Details of each study plan, including specific courses and options, are available from the office of the Department of Environmental Studies and Planning.

At least 24 units of ENSP course work are required for the B.A. and B.S. degrees.

Courses required for the Major must be taken for a traditional letter grade, except for courses that are offered CR/NC only.

## Bachelor of Arts in Environmental Studies

| Degree Requirements | Units |
| :--- | ---: |
| General education | 48 or 51 |
| Major requirements | $36-53$ |
| General electives | $16-36$ |
| Total units needed for graduation | 120 |

## Bachelor of Science in Environmental Studies

A Bachelor of Science degree is available for students in the Energy Management and Design and Water Quality and Hazardous Materials plans.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 48 or 51 |
| Natural science support courses | $32-34$ |
| Major requirements | $22-35$ |
| General electives | $10-15$ |
| Total units needed for graduation | 120 |

The following natural science support courses are required for the B.S. degree, in addition to the specific requirements for Energy Management and Design and Water Quality and Hazardous Materials Management.

| CS 101 Introduction to Computers and Computing | 3 |
| :--- | ---: |
| CHEM $115 A^{*}$ General Chemistry | 5 |
| CHEM $115 B^{*}$ General Chemistry | 5 |
| ENSP 403 Computer Modeling | 3 |
| MATH 161* Calculus I | 4 |
| MATH 211S Calculus II | 2 |
| MATH 165 Elementary Statistics | 4 |
| PHYS 210A* General Physics (Algebra/Trig |  |
| or Calculus-based) | $3-4$ |
| PHYS 210B General Physics | $3-4$ |

Total units natural science support courses
32-34

[^3]
## Study Plans

In consultation with an advisor, students must complete an additional 16-36 units in one of the six study plans outlined below. Details of each plan, including specific courses and options, are available from the office of the Department of Environmental Studies and Planning.

## Education and the Environment

## (B.A. degree option)

This track in environmental education is designed as a Subject Matter Preparation Program, approved by the California Commission on Teacher Credentialing, to prepare students in subject matter competency as defined by the K-8 Academic Standards of California. This track is excellent preparation for passing of the California Subject Examination for Teachers as well as for careers in outdoor leadership and education.

## 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.

## Environmental Conservation and Restoration

## (B.A. degree option)

There are two tracks in this study plan: 1) Biological Resource Management; 2) Resource Planning and Management. This is an interdisciplinary science-based study plan for students who intend to pursue a career or graduate study in a variety of fields related to conservation; restoration; and management of habitats, ecosystems, and biological resources. Under the plan, students combine a broad-based environmental studies education with in-depth work in a particular area of interest, giving them a specific area of expertise within the broader field of environmental conservation. Electives in the plan are organized to facilitate a double major or minor in biology or geography, which is strongly encouraged.

## Outdoor Leadership

## (B.A. degree option)

This study plan combines relevant coursework in business, environmental studies, kinesiology, and organizational leadership. Outdoor leaders are in demand for growing outdoor recreation, adventure tourism, and multisport industries. Outdoor leadership skills are directly applicable to the workplace in a wide range of leadership, management, and coordination positions.

## 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 or as a minor. Focus is on sustainable community planning, including land use, growth management, environmental impact assessment, transportation, and natural resource planning. Graduates may work for a wide variety of governmental agencies or private firms, or may pursue graduate studies in planning or related fields. Also, students interested in future careers in environmental law usually follow the planning concentration.

## Water Quality and Hazardous Materials Management (B.A. and B.S. degree options)

This program prepares students for employment in environmental enforcement agencies, large private corporations, engineering firms which serve the public and private sectors, and public agencies that provides water or treats wastewater. Some of these agencies and firms are very small and rural; others are large and urban. The course work provides a comprehensive foundation in the science of environmental quality. Our program welcomes students who are new to this field, provides upper-division course work for students who have had previous training in community college hazardous materials and water technology programs, and also gives additional training to workers already employed in water-related occupations.

## Double Major with Economics

The double major in economics and environmental studies and planning is intended for those students whose particular academic and career interests lie in natural resource economics, economic planning, energy management, and/or community development and redevelopment. The double major is also designed especially for students who intend to pursue graduate studies in natural resource management, urban planning, law, or related career fields. Students considering this double major should meet with their ENSP advisor to discuss requirements.

## Minor in Environmental Studies and Planning

The purpose of the minor in environmental studies and planning is to help students from traditional disciplines apply their expertise to environmental and planning problems and issues. A minimum of 20 units is required. Students considering the ENSP minor should meet with their ENSP advisor to discuss requirements.

## Special Resources in ENSP

The department utilizes several valuable learning environments and facilities on and off campus. They include:

The Fairfield Osborn Preserve: A 220-acre field station that provides environmental education programs and opportunities for scientific research. The preserve is a fifteen-minute drive from campus, atop Sonoma Mountain.

## The SSU Botanical and Kenneth M. Stocking Native Plant

Garden: A showcase of diverse California plant communities and a quiet place for education and relaxation. Located near the campus lakes, the garden includes a guided trail through woodland, marsh, and riparian ecosystems.

The Environmental Technology Center: A model for sustainable building techniques and technologies, this center includes energy and water-efficient landscaping, "smart building" control technologies, environmentally-sensitive materials, passive solar heating and cooling, and more. It serves as a training facility for building professionals and teachers and as an educational and research site.

The Institute for Community Planning Assistance: A research arm for the department, carrying out contract studies for local communities and public agencies, utilizing paid student assistants.

Galbreath Wildlands Preserve: A 3,670 acre preserve nestled in the Coast Range of northern California. The mission of the Preserve is to promote environmental education and research, as well as the effective stewardship of this diverse landscape.

## FILM STUDIES

PROGRAM OFFICE
Art Building 128
(707) 664-2364

## Faculty

Stephen Galloway / Art and Art History
Ajay Gehlawat / Hutchins
Michael G. Litle / Communication Studies
Susan Moulton / Art and Art History

## Programs Offered

Minor in Film Studies
Major in Film: See Art History: Film Emphasis
The Film Studies minor is an interdisciplinary and interdepartmental program that analyzes the history, theory, and practice of film in the larger context of humanistic studies. Students will study a broad range of film texts, from the classic narrative to abstractionist and experimental, and learn to appreciate the aesthetics and filmmaking practices of both Western and non-Western cultures. While exploring the medium's connection with several disciplines and art forms, students will also become familiar with the phases of film production and learn to approach film and the cinema in a critical and analytic manner. The Film Studies minor offers students a flexible curriculum that complements several existing major degree programs in the humanities and constitutes excellent supplementary preparation for a number of careers. In consultation with the program coordinator, students can design a minor with an emphasis relevant to their academic and career objectives.

## Minor in Film Studies

The minor consists of a minimum of 18 semester units distributed among a core ( 9 units) and a choice of electives ( 9 or more units).

## Minor Core Requirements

ARTH 212A or B Introduction to World Film History
ARTH 361 Classic Narrative Film
ARTH 363 Other Cinemas
Total units in the minor core

## Film and Literature Option

These courses study different aspects of the complex relationship between film and literature: the role of screenwriting in the process of film production, the problems of adaptation, the comparative study of literary and filmic texts, and the special contribution that literary analysis has made to the study of film.

ENGL 377 Film and Literature (3)
FREN 415 Special Topics in French Culture (4)
Total units in the option

## Critical Perspectives Option

Each of the following courses brings a specific disciplinary approach to bear on the study of film, drawing on perspectives from the humanities and social sciences: aesthetics, ethics, structuralism, semiology, politics, and sociological analysis.

COMS 202 Methods of Media Criticism (3)
COMS 402 Senior Seminar (3)
PHIL 368 Philosophy and Film (3)
SOCI 434 Cinema and Society (4)
Total units in the option

## Film and the Fine Arts Option

This group of courses focuses on the relationship of film with artistic and theatrical traditions and practices: film analysis and theories of visual aesthetics; film and artistic movements in the 20th Century (such as expressionism, futurism, and surrealism); film and the media arts; film and the theatrical arts of production design, acting, and directing.

ART 208 Basic Black and White Photography (1-4)
ARTH 464 History of Modern Art: 20th Century (3-4)
ARTH 465 History of Modern Art: American (3-4)
COMS 201 Storytelling via Video (3)
THAR 120 Acting Fundamentals (2)
THAR 144A Scenery (2) or
THAR 144B Lighting (2)
THAR 350 Directing Workshop (2)

## Minor Electives

Students may complete the Film Studies minor by choosing additional courses in film history or three courses within any one of the following four options. Because of rare or one-time offerings in film studies throughout the University, this list of electives is not comprehensive. In light of this and the variations of scheduling throughout the disciplines, students are advised to work closely with one of the faculty advisors listed above in order to insure progress in the minor.

Total units in the option
9-12

## International and Cross-Cultural Perspectives Option

These courses develop an understanding of aesthetics and filmmaking practices that stand outside the dominant model of the classic narrative film and the representation of the cultural "other" within the dominant Western tradition.

AMCS 392 Ethnic Images in Film and Media (3)
CALS 393 Chicano/Latino Cinema (3)
FREN 415 Special Topics in French Culture (3)
NAMS 338 Native Americans and the Cinema (3)

## Total units in the option 9-12

Total units in the minor 18-21
Note: No more than 6 units of work in the student's major may be counted toward the film studies minor. Students are encouraged to take at least one elective course with a regional or intercultural perspective.

## GEOGRAPHY

DEPARTMENT OFFICE
Stevenson Hall 3066
(707) 664-2194

Fax (707) 664-3332
www.sonoma.edu/geography
DEPARTMENT CHAIR
Rheyna Laney

## Faculty

Dorothy E. Freidel
Rheyna Laney
Matthew Clark
Ian Feinhandler

## 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 humanenvironment 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 everchanging world.

The Biophysical Environment Concentration focuses on natural environment systems from global to local scales, including weather and climate change, landform history, and biological patterns and processes.

The Geospatial Techniques Concentration focuses on geographic information science and its application in resource management, land-use planning, and land-change science.
All Geography Majors, no matter their concentration, take a range of core courses that ensure that they have a strong background in both the natural and social sciences. They also take geospatial techniques and field methods courses that develop their research and problem-solving skills. In addition, the curriculum strengthens students' writing, critical thinking, and oral presentation skills; areas that are important for any successful career. The department's strong intern program affords students on-the-job experience.

Geography majors may apply for the Terrence M. Smith Geography Scholarship, the Geography Alumni Scholarship, or the Claude Minard Memorial Scholarship. Students pursuing studies in climatology or meteorology are eligible to compete for the annual Call Memorial Scholarships.

## Careers in Geography

Sonoma State University graduates in geography find employment opportunities in both the public and private sectors. Private sector employers include consulting companies in fields such as agriculture, viticulture, environmental management, land use mapping, land change analysis, and marketing. Non-profits that regularly hire geographers range from international organizations, such as the Nature Conservancy or the International Crisis Group, to small local organizations such as the Sonoma Ecology Center. Government employers include the Environmental Protection Agency, U.S. Forest Service, State Department, Department of Homeland Security, CalTrans, California Division of Forestry, as well as various city and county departments in areas such as parks and recreation, open space, water, urban planning, and others.

Geographers work for these organizations in various capacities, including as geographic information technicians and analysts, remote sensing analysts, planners, location analysts, park rangers, resource managers, and consultants.

Many SSU geographers decide to go into teaching, from the elementary level to higher education. Please visit the department website for more information and career ideas.

SSU graduates in geography often decide to continue on to graduate school, entering various programs across the country. Fields of study include geography, international development, rural development, urban planning, transportation planning, journalism, law, and a host of others.

## Geography Department Resources

## Geospatial Technology Instructional Laboratory

The Geography Department has a well-equipped computer laboratory that supports advanced instruction in geographic information
systems (GIS), satellite image processing, and digital cartography. The GIS Lab includes 15 workstations supported by a file server, as well as ArcGIS Arc/Info, ERDAS Imagine, IDRISI, Adobe Illustrator, geobrowsers, digitizing tablets, and a color plotter and printer.

The Center for Interdisciplinary Geospatial Analysis (CIGA)
The Center for Interdisciplinary Geospatial Analysis promotes the application of geospatial technology to social and environmental problems through research, education, and community service. The lab seeks interdisciplinary collaboration among campus and external researchers, students, and other organizations in projects that involve geographic information and spatial analysis at local to global scales. The CIGA provides computer, software and data resources, Geographic Information System (GIS) and remote sensing expertise, consulting services, educational courses, and community outreach. Students are given a unique opportunity to broaden and refine their education by working on real-world problems in CIGA research projects and service contracts.

## Map Library

The Map Library houses an extensive collection of digital and paper maps, wall maps, aerial photographs, remotely sensed imagery, and one of the most complete historical weather libraries in California.

## Biophysical Geography Laboratory

The department's biophysical laboratory is equipped with various types of equipment and technology to support both instruction and research. It operates a base station for the spatial correction of global positioning system (GPS) data and maintains a collection of high-precision GPS mobile receivers. It houses a complete weather station that provides students with current weather data to complement historical resources. The lab also possesses a fully equipped soils and geomorphology lab for research and analysis.

## Bachelor of Arts in Geography

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Geography Courses | 42 |
| Supporting Courses | 8 |
| General Electives | 10 |
| Total units needed for graduation | 120 |

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

## Core Requirements for the Major (16 units)

Lower Division Core
GEOG 203: Cultural Geography (3)
GEOG 204: Global Environmental Systems (4)
GEOG 205: Map Reading and Interpretation (1)

Regional Synthesis
GEOG 392: Latin America (4)
GEOG 393: South Asia (4)
GEOG 394: Africa, South of the Sahara (4)
GEOG 396: Special Topics in Area Studies (4)
Geographic Research and Synthesis
GEOG 490: Senior Seminar (4)

## Environment and Society Concentration

This concentration is designed for students interested in humanenvironment relations, sustainable development, and natural resource management

## Breadth Courses (10 Units)

Geospatial Techniques
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3-4)
GEOG 387: Introduction to GIS (4)

Upper Division Physical
GEOG 360: Geomorphology (4)
GEOG 370: Weather and Climate (4)
Field Course and Internship

GEOG 314AB: Field Experience, Northern California (1-2)
GEOG 314C: Field Experience Beyond Northern California (1-2)
GEOG 314D: Field Experience Abroad (2-3)
GEOG 315: Field Methods in Geography (2)
GEOG 499: Internship (2-5)
Concentration Courses (16 Units)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 345: Resource Wars (4)
GEOG 365: Biogeography and Landscape Ecology (4)
GEOG 372: Global Climate Change (4)
GEOG 375: Natural Hazards (4)
Supporting Courses (8 Units)
Suggested courses, with substitutions possible in consultation with an advisor.
ANTH 345: Anthropology and the Environment (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)

## Globalization and Identity Concentration

This concentration is designed for students interested in focusing on global economic and political change, how this affects people's access to wealth and power, and how it shapes their sense of self in an ever-changing world.

## Breadth Courses (10 Units)

Geospatial Techniques
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3-4)
GEOG 387: Introduction to GIS (4)

Upper-Division Physical
GEOG 360: Geomorphology (4)
GEOG 365: Biogeography and Landscape Ecology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Climate Change: Past, Present, Future (4)
GEOG 375: Natural Hazards (4)

Field Course and Internship
GEOG 314AB: Field Experience, Northern California (1-2)
GEOG 314C: Field Experience Beyond Northern California (1-2)
GEOG 314D: Field Experience Abroad (2-3)
GEOG 315: Field Methods in Geography (2)
GEOG 499: Internship (2-5)
Concentration Courses (16 Units)
GEOG 302: World Regional Geography (4)
GEOG 320: Geopolitics (4)
GEOG 322: Geographic Perspectives on International Development (4)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 338: Social Geography (3)
GEOG 345: Resource Wars (4)
GEOG 350: Urban Geography (4)

## Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor

ANTH 352: Global Issues (4)
ECON 303: International Economics (4)
ECON 403: Seminar in Economic Development (4)
POLS 303: Intro to Comparative Government and Global Systems (4)
POLS 304: Introduction to International Relations (4)
POLS 452: Third World Political Systems (4)
WGS 385: Gender and Globalization

## Biophysical Environment Concentration

This concentration is designed for students interested in focusing on the natural environment, including weather and climate change, landform processes, and biophysical patterns and processes.

## Breadth Courses (12 Units)

Geospatial Techniques
4
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3-4)
GEOG 387: Introduction to GIS (4)

Upper-Division Human
GEOG 320: Geopolitics (4)
GEOG 322: Geographic Perspectives on International Development (4)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)
Field Course and Internship
GEOG 314AB: Field Experience, Northern California (1-2)
GEOG 314C: Field Experience Beyond Northern California (1-2)
GEOG 314D: Field Experience Abroad (2-3)
GEOG 499: Internship (2-5)
Concentration Courses (14 Units)
GEOG 315: Field Methods in Geography (2)
GEOG 360: Geomorphology (4)
GEOG 365: Biogeography and Landscape Ecology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Climate Change (4)
GEOG 375: Natural Hazards (4)

## Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor
ENSP 309: Soil Science (3-4)
ENSP 322: Conservation Biology (4)
ENSP 427: Conservation Design (3)
BIOL 300: Ecology (4)
BIOL 330: Plant Taxonomy (4)
BIOL 485: Biometry (4)
GEOL 303: Advanced Principals of Geology (3)
GEOL 304: Geological Mapping and Report Writing (1)
GEOL 323: Hydrology (3)
MATH 165: Elementary Statistics (4)

## Geospatial Techniques Concentration

This concentration is designed for students interested in geographic information science and its application in resource management, land-use planning, and land-change science.

## Breadth Courses (9-10 Units)

Upper-Division Human
GEOG 320: Geopolitics (4)
GEOG 322: Geographic Perspectives on International Development (4)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)
Upper-Division Physical

GEOG 360: Geomorphology (4)
GEOG 365: Biogeography and Landscape Ecology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Climate Change: Past, Present, Future (4)
GEOG 375: Natural Hazards (4)

Field Course and Internship
GEOG 314AB: Field Experience, Northern California (1-2)
GEOG 314C: Field Experience Beyond Northern California (1-2)
GEOG 314D: Field Experience Abroad (2-3)
GEOG 499: Internship (2-5)

## Concentration Courses (16-17 Units)

GEOG 315: Field Methods in Geography (2)
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3-4)
GEOG 387: Introduction to GIS (4)
GEOG 487: Advanced GIS (3)

## Supporting Courses (8 Units)

Suggested courses, with substitutions possible in consultation with an advisor

Math 165: Elementary Statistics (4)
CS 101: Introduction to Computers and Computing (3)
CS 115: Programming I (4)

## Geography Major Without Concentration

This option is intended for students who wish to design their own major. It allows students to take a broader range of courses.

## Breadth Courses (11-12 Units)

Geospatial Techniques
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3-4)
GEOG 387: Introduction to GIS (4)
Upper-Division Human
GEOG 320: Geopolitics (4)
GEOG 322: Geographic Perspectives on International Development (4)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)

Upper-Division Physical
GEOG 360: Geomorphology (4)
GEOG 365: Biogeography and Landscape Ecology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Climate Change: Past, Present, Future (4)
GEOG 375: Natural Hazards (4)

## Elective courses in Geography (14-15 Units)

Supporting courses outside Geography (8 Units)

## 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.

Fall Semester (15 Units)
GE MATH (B4) (3)
Spring Semester (15 Units)

GE ENG 101 (A2) (3) GE PHIL 101 (A3) (3)

GE ENG 101 (A2) (3) GE UNIV 200 (A1) (3)
GE (3)
GE GEOG 203 (D2) (3)
GE (3), University Elective (3)
GE (3), University Elective (3)

## SOPHOMORE YEAR:: 29 Units

| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| GE (3) | GEOG 204 (B3) (4) |
| GE (3), GE (3) | GE (3), GE (3) |
| GE (3) | GE (3) |
| University Elective (3) | GEOG 205 (1) |

## JUNIOR YEAR:: 30 Units

## Fall Semester (15 Units)

Upper-Division GE (3)
GEOG (Upper-Div Regional) (4)
GEOG (Upper-Div. Techniques) (4)
Upper-Div. Supporting (4)

Spring Semester (15 Units) Upper-Division GE (3) GEOG (Upper-Div. Human) (4) GEOG (Upper-Div. Physical) (4) University Elective (4)

## SENIOR YEAR:: 31 Units

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

## TOTAL UNITS:: 120

## Minor in Geography

GEOG 203 Cultural Geography
GEOG 204 Global Environmental Systems ..... 4
Upper-division courses chosen in consultation with advisor ..... 13

Total units in the minor

## Teaching Credential Preparation

The Geography Department participates in a teacher preparation program that certifies the subject matter competence in social sciences required for entry into a teaching credential program and exempts the student from taking the Praxis II Subject Assessment Examination in the social sciences. Geography majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact Miriam Hutchins, School of Social Sciences, (707) 664-2409.

## GEOLOGY

DEPARTMENT OFFICE
Darwin Hall 116
(707) 664-2334
www.sonoma.edu/geology
DEPARTMENT CHAIR
Matthew J. James
ADMINISTRATIVE COORDINATOR
Gayle Walker

## Faculty

Matthew J. James<br>Daniel B. Karner<br>Matty Mookerjee<br>Michael E. Smith<br>*Walt Vennum<br>*Faculty Early Retirement Program

## Programs Offered

Bachelor of Science in Geology
Bachelor of Arts in Geology
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 was based on field studies; thus, geology is primarily a field science. The basis for field analysis is a firm background in the principles of geology. The department is committed to undergraduate training that includes a well-balanced treatment of geologic principles, with an emphasis on field studies. Students take a fundamental curriculum that concentrates on the analysis of rocks and minerals, geologic mapping, and report writing. Techniques of field study are part of the fundamental curriculum. Six field-mapping classes are required. Required courses in physics, chemistry, and mathematics support understanding of geologic principles.

## Careers in Geology

Within the general field of geology, students may choose from major programs that lead to either the B.A. or B.S. pre-professional degrees. The B.S. and B.A. degrees provide an excellent back-
ground 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. Because of the selectivity involved in choosing a program that meets their own particular interests and goals, students must consult with a departmental advisor about their plan of study and their course load each semester.

## Bachelor of Science in Geology

This plan is intended to give the student basic professional competence in geology. It provides an excellent foundation for graduate school or a professional career for those students who have or desire a strong background in mathematics.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 46 |
| Supporting courses | 26 |
| General electives | 1 |
| Total units needed for graduation | 124 |

## Major Core Requirements

GEOL 205 Mineralogy 2
GEOL 303 Advanced Principles of Geology 4
GEOL 304 Geologic Mapping and Report Writing 1
GEOL 305 Optical Mineralogy 3
GEOL 307 Igneous and Metamorphic Petrology 4
GEOL 308 Igneous and Metamorphic Field 1
GEOL 411 Sedimentary Petrology 4
GEOL 412 Sedimentary Petrology Field 1
GEOL 413 Paleontology 4
GEOL 417 Structural Geology 4
GEOL 418 Structural Geology Field 1
GEOL 420 Field Geology 4
GEOL 427 Advanced Field Geology 4
Total units in the major core 37

## Major Electives

Choose 9 units of upper-division geology electives in consultation with an advisor.

Total units in major electives
9

## Required Supporting Courses

CHEM 115AB General Chemistry 10
PHYS 114 Introduction to Physics I 4
PHYS 116 Introductory Laboratory 1
PHYS 214 Introduction to Physics II 4
PHYS 216 Introductory Laboratory 1
MATH 161 Calculus I with Analytic Geometry 4
MATH 211S Calculus II with Analytic Geometry
(MATH 211 is the 4-unit version of 211S and is highly recommended)

Total units in supporting courses
Total units in the major

## Sample Four-year Plan for Bachelor of Science in Geology*

FRESHMAN YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| GEOL 102 (3) | GEOL 105** (3) |
| CHEM 115A (5) | CHEM 115B (5) |
| GE (6) |  |
| GE (6) |  |
| SOPHOMORE YEAR:: 33 Units |  |
| Fall Semester (17 Units) | Spring Semester (16 Units) |
| GEOL 303 (4) | GEOL 413 (4) |
| GEOL 304 (1) | GEOL 414 (1) |
| GEOL 205 (2) | MATH 211S (2) |
| MATH 161 (4) | GE (9) |
| GE (6) |  |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| GEOL 305 (3) | GEOL $307(4)$ |
| PHYS 114 (4) | GEOL $308(1)$ |
| PHYS $116(1)$ | PHYS $214(4)$ |
| GEOL $417(4)$ | PHYS $216(1)$ |
| GEOL $418(1)$ | GE (3) |
| GE (3) | Elective (2) |

SENIOR YEAR:: 30 Units

| Fall Semester (14 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| GEOL 411 (4) | GEOL 420 (4) |
| GEOL 412 (1) | Geology Elective (3) |
| Geology Elective (3) | Geology Elective (3) |
| GE (6) | GE (6) |
|  |  |
| SENIOR SUMMER:: 4 Units |  |

GEOL 427 (4)
TOTAL SEMESTER UNITS:: 124

* the B.A. degree in geology is identical to the BS, except that MATH $211 S$ is not required, and PHYS 210AB and PHYS 211AB (Algebra Physics) are substituted for PHYS 114, 116, 214, and 216 (Calculus Physics).
** Course not required, but strongly recommended.
Students are strongly encouraged to take GE courses in the summer and in January intersession to the extent possible.


## Bachelor of Arts in Geology

This plan is intended to give the student basic professional competence in geology, and is suitable as a foundation for either graduate school or a professional career. The geology course content is the same as in the BS degree, but the calculus and physics requirements are less rigorous.

| Degree Requirements | Units |
| :--- | ---: |
| General Education | 51 |
| Major Requirements | 46 |
| Supporting Courses | 22 |
| General Electives | 7 |
| Total units needed for graduation | 120 |

## Major Core Requirements

GEOL 205 Mineralogy 2
GEOL 303 Advanced Principles of Geology 4
GEOL 304 Geoologic Mapping and Report Writing 1
GEOL 305 Optical Mineralogy 3
GEOL 307 Igneous and Metamorphic Petrology 4
GEOL 308 Igneous and Metamorphic Field 1
GEOL 411 Sedimentary Petrology 4
GEOL 412 Sedimentary Petrology Field Course 1
GEOL 413 Paleontology 4
GEOL 417 Structural Geology 4
GEOL 418 Structural Geology Field 1
GEOL 420 Field Geology 4
GEOL 427 Advanced Field Geology 4
Total units in the major core 37

## Major Electives

Choose 9 units of upper-division geology electives in consultation with an advisor.
Total Units in Major Electives ..... 9
Required Supporting Courses
CHEM 115AB General Chemistry ..... 10
PHYS 209AB, 210AB General Physics with Laboratory ..... 8
MATH 161 Calculus I with Analytical Geometry ..... 4
Total units in supporting courses ..... 22
Total units in the major ..... 68

## Minor in Geology

Completion of a minimum of 20 units from Geology Department courses will constitute a minor in geology. Six of the 20 units must be upper-division. Students should consult with an advisor in the Geology Department regarding required courses.

## Minor in Paleontology

## PROGRAM COORDINATOR

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

ADVISORS
Matthew J. James / Geology Department (707) 664-2301, james@sonoma.edu
Nicholas R. Geist / Biology Department (707) 664-3056, geist@sonoma.edu
Karin E. Jaffe / Anthropology Department (707) 664-2944, karin. jaffe@sonoma.edu

## Minor in Paleontology

The Minor in Paleontology offers students from any major on the SSU campus a cross-disciplinary concentration in the study of ancient life on Earth. Paleontology is by its very nature an interdisciplinary field of study, blending both laboratory and field studies of modern organisms and extinct organisms. Some paleontologists approach the field from a geological perspective, and others approach it from a biological perspective. For a Minor in Paleontology, students must complete 20 units as described below.

## Minor Core Requirements

GEOL 102 Our Dynamic Earth
GEOL 413 Paleontology
BIOL121 Diversity, Structure, and Function, or
BIOL 122 Genetics, Evolution, and Ecology

Total units in the minor core

## 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:

* Field courses - one course is required for the minor
+ 4-unit laboratory courses - one course is required for the minor

ANTH 301 Human Fossils and Evolution 4
$\dagger$ ANTH 415 Forensic Anthropology 4
$\dagger$ BIOL 220 Human Anatomy 4
†BIOL 322 Invertebrate Biology 4
$\dagger$ BIOL 327 Vertebrate Biology 4
$\dagger$ BIOL 328 Vertebrate Evolution and Morphology 4
BIOL 310 Dinosaurs 3
GEOG 370 Weather and Climate 4
GEOG 372 Climate Change 4
GEOL 105 The Age of Dinosaurs 3
†GEOL 303 Advanced Principles of Geology 4
*GEOL 304 Geologic Mapping and Report Writing 1
†GEOL 326 Stratigraphy and Earth History 4
*GEOL 414 Paleontology Field Course 1
GEOL [496] Paleoclimates 3
*GEOL [496] Burgess Shale Paleontology 3
Total elective units in the minor 9
[ ] = courses that will have newly-proposed number changes in the near future, pending approval
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

## Secondary Education Teaching Credential Preparation

Geology 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 geology.
The BA or BS degree in geology is 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.
For more information, please contact Professor Dan Karner, Darwin Hall 124, (707) 664-2334.

## Department Policy on Independent Study

1. The student must have a 3.00 or higher grade point average.
2. The student must have demonstrated ability to work independently and do quality work in field classes.
3. The student must have submitted a detailed proposal of work, a schedule, and the results expected.
4. 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. This will be reported on the standard University Special Studies form and signed by the student, faculty advisor, and department chair.
5. A copy of all documents and two copies of the final paper or report will be filed with the department office before a grade will be assigned.

DEPARTMENT OFFICE
Stevenson Hall 3075/3092
(707) 664-2586/2411
www.sonoma.edu/gerontology
PROGRAM COORDINATOR
Susan Hillier Ferreira
ADMINISTRATIVE ANALYST
Celeste McDonald
ADMINISTRATIVE COORDINATOR
Mary Hanson

## Programs Offered

Minor in Gerontology
Certificate in Gerontology
Career Minor in Health Systems Organization (Career Minors)
Master's degree option (Interdisciplinary Studies)
The study of gerontology provides students with a broad, multidisciplinary perspective to examine the aging process and to understand the significance of age in biological, social, cultural, psychological, and political processes. Participation in the gerontology program encourages students to view aging as a normal part of the life cycle, to become aware of the aging process so that they may view it in others with understanding, and eventually in themselves with equanimity, and to consider work in the field of aging.

## Careers in Gerontology

Gerontology prepares students for working directly with elders in program development (health promotion, intergenerational activities, social service centers, community agencies, and retirement communities); direct care (care to frail, ill, or impaired elders in hospitals, clinics, nursing homes, adult day care, or home care programs); counseling elders and their families about caregiving issues, employment, death and dying, or mental health; and advising elders about estate planning and investments, financing long-term care, or housing options. It also prepares students for working on behalf of elders, by analyzing issues related to elders such as retirement opportunities, income maintenance, health care and housing; planning, administering, and evaluating community-based services and service delivery systems for older persons; advocating with or on behalf of elders; designing products to meet the special interests and needs of elders; and advising business, industry, and labor regarding older workers and consumers. Many students continue their education through graduate work in social work, nursing, psychology, and kinesiology.

The gerontology program focuses primarily upon the experience of aging in the United States, although comparative analyses of other societies are developed. By applying an integrated liberal arts
perspective to the issues, problems, and dilemmas posed by a longer life span and a dramatically increased population of older persons, students develop their critical faculties and problem-solving abilities. The field of gerontology offers students opportunities to engage in firsthand research, to develop conceptual analyses, and to plan community projects, as well as to develop a strong background for career development. Those who already work as volunteers or staff in agencies serving the elderly will find the gerontology program valuable in updating their training. Students who plan to pursue professional degrees in psychotherapy, medicine, dentistry, nursing, or social work will find that participation in the gerontology program will assist them in understanding the problems of their future clients. Students may choose to complete (1) the minor in gerontology, (2) a certificate in gerontology, or (3) a special major in gerontology at either the bachelor's or master's levels. In the special major program, students construct individually designed interdisciplinary majors in consultation with the gerontology program coordinator and special major advisor.

## Minor in Gerontology

Students must complete the following 22-unit program:

## Minor Core Requirements

BIOL 318 Biology of Aging 3
GERN 300 The Journey of Adulthood 3
GERN 319 Aging and Society OR
GERN 432 Group Work with Older Adults 4
GERN 499 Gerontology Practicum 4
GERN 421 Psychology of Aging 4
Total units in the minor core 18

## Minor Electives

Choose courses to total a minimum of 4 units from the following list:
AMCS 435 Ethnicity and the Life Cycle (3)
BIOL 224 Human Physiology (3)
BIOL 307 Human Nutrition (4)
GERN 304 Sibling Relations (4)
GERN 312 Adult Development Lecture Series (2)
GERN 332 Death and American Culture (4)
GERN 408 Transitions in Adult Development (4)
GERN 422 Living and Dying (4)
GERN 452 Health Care and IIIness (4)
GERN 493 Narrative: Theories \& Methods (4)
NURS 493 Health Care Delivery and Financing (3)
KIN 360 Physiology of Exercise (4)
KIN 410 Lifespan Motor Development (3)
NURS 504A Health Care Delivery and Financing (2)
NURS 504B Health Care Delivery and Financing (2)
PSY 404 Psychology of Women (4)
Total units in minor electives

## Certificate in Gerontology

The 28-unit certificate program is open to those students who are completing or who have received a bachelor's degree.

## Certificate Core Courses

BIOL 318 Biology of Aging 3
GERN 300 The Journey of Adulthood 3
GERN 319 Aging and Society OR
GERN 432 Group Work with Older Adults 4
GERN 499 Gerontology Practicum 8
GERN 421 Psychology of Aging; or
GERN 500 Social and Psychological Issues in Aging 4
Total units in the certificate core 22

## Certificate Electives

Choose courses to total a minimum of 6 units from the minor electives list above.
Total units in the certificate electives 6
Total units in the certificate 28

## GLOBAL STUDIES

DEPARTMENT OFFICE
Geography and Global Studies
Stevenson Hall 3066
(707) 664-2194

MAJOR COORDINATOR
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 intermediatelevel proficiency exam or by completing a fourth-semester standard language course (202 [plus lab] or equivalent) with a grade of C or better.

All Global Studies majors are expected to participate in an intensive cross-cultural experience of at least three months duration, during which they speak primarily a language other than their mother tongue. Students normally will meet this expectation by studying or working abroad. When travel abroad is impossible, students may arrange an extended cross-cultural experience closer to home, e.g., living and working for a summer in an immigrant community. (Students who have spent extended time in other than mainstream U.S.-American circumstances, speaking a language other than English, may already have met this expectation.)

Students interested in declaring a Global Studies major are urged to take MATH 165 to meet the GE requirement for Mathematics, category B.

## Careers in Global Studies

Most Global Studies majors intend to pursue international careers. Positions most readily available to new graduates without specialized training are with non-profits such as the federal government (Peace Corps, Foreign Service), international service agencies (CARE, UNICEF, or Direct Relief International), and English-language teaching jobs.
Many overseas careers require an advanced degree (e.g., law, business, and international affairs) and/or working your way up within an organization and positioning yourself for an international assignment.

## Bachelor of Arts in Global Studies

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Foundational requirements | $8-24$ |
| Basic Areas | $25-28$ |
| Concentration | 20 |
| Capstone requirements | 11 |
| General electives | $0-5$ |
| Total units needed for graduation | $120-134$ |

Note: Courses required for the major must be taken for a traditional letter grade, except for courses that are offered CR/NC only. Students must earn a $C$ - or better in any course applied to the major. Students must also achieve intermediate-level proficiency in a modern language other than English.

## I. Foundational Requirements (8-24 Units)

GLBL 200: Introduction to Global Issues ..... 3
GEOG 302: World Regional Geography ..... 4
GLBL 350A: Community Service ..... 1Language Requirement(Intermediate level proficiency, except where noted)0-16
II. Basic Areas (25-28 Units)(One course from each of the following seven areas)1. Culture
ANTH 203: Cultural Anthropology (D1) ..... 3
ANTH 340: Living in a Pluralistic World (E) ..... 3
GEOG 203: Cultural Geography (D2) ..... 3
2. Global Environment
ENSP 200: Global Environmental Issues (D5) ..... 3
GEOG 204: Global Environmental Systems (B3) ..... 4
ENSP 330: Energy, Technology, and Society ..... 4
GEOG 340: Conservation of Natural Resources ..... 4
3. Historical Perspectives

HIST 202: Development of the Modern World (D2)
HIST 380: 20th Century World (D2)
4. Political Ideas and Institutions

POLS 303: Intro. to Comparative Government and Global Systems
POLS 304: Introduction to International Relations
POLS 315: Democracy, Capitalism, Socialism (D5)
POLS 452: Third World Political Systems
5. Global Economy and Business

ECON 201A: Introduction to Macroeconomics
ECON 303: International Economics
GEOG 322: Geographic Perspectives on International Dvlpmnt
BUS 393: Introduction to International Business
POLS 498: International Political Economy
6. Globalization and its Social Impacts

AMCS 475: Sem. on Race, Racism, and Globalization
WGS 385: Gender and Globalization
ANTH 352: Global Issues
GEOG 338: Social Geography (E)
SOCI 499: Project Censored Internship
COMS 321: International Communications
7. Religious and Ethical Perspectives

PHIL 302: Ethics and Human Value Theory (C3)
SOCI 305: Holocaust Lecture Series (D5)
SOCI 431: Sociology of Religion (C3)
HUM 301: War and Peace Lecture Series (C3)

## 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, International Economic 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 basic area 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)

GEOG 320: Geopolitics
GLBL 350B: Global Social Movements
GLBL 497: Community Service Internship
GLBL 498: Senior Capstone Seminar
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.

## 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 (ACTFL 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
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: Special Topics: Eastern Europe (1815-1918) 4
HIST 416: Special Topics: Eastern Europe (1918-1989) 4
HIST 417: Russian Empire 4
HIST 418: Fall of Communism 4
HIST 419: Modern Russia and the 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 Culture and Environment
HIST 339: Ancient and Colonial Latin America
HIST 342: Modern Latin America
POLS 453: Political Systems of Latin America
SPAN 307: Cultures of Latin America
Group II: Elective Courses
GEOG 314D: Field Experience Abroad (when Latin America)
ECON 403: Seminar in International Economic Development
HIST 348: Race and Ethnicity in Latin America
HIST 433: History of Mexico
HIST 449: Gender and Sexuality in Latin America
SPAN 402: Latin American Literature
SPAN 491: Seminar in Literature (when L.A. focus)
POLS 345: Model United Nations (when L.A. focus)

## 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
HIST 438: Modern Japan
HIST 335: Early China to 1500
HIST 435: History of Modern China
HIST 436: Class and Gender in Modern East Asia
HIST 498: Senior Sem: The Pacific since 1500
HIST 498: Senior Sem: Asian Revolutions
POLS 450: The Politics of Asia
POLS 345: Model United Nations *
Group II: Arts and Humanities (choose classes from different departments)
ARTH 474: Islamic Art
ARTH 480: Selected Topics *
LIBS 320C: The Arts and Human Experience *
MUS 301: The Sacred Traditions of South Asia
MUS 352: History, Music and Secular Traditions of South Asia
PSY 342: Psychology of Meditation
PSY 352: Psychology of Yoga
PHIL 390: Advanced Topics in Philosophy * 4

## International Economic Development Concentration

Students must take all required courses (Group I) and choose more elective courses (Group II) to meet the 20-unit minimum. Those who have taken courses from Group I as basic areas selections will choose more elective courses.

Group I: Required Courses
ECON 303: International Economics 4
ECON 403: Seminar in Economic Development 4
BUS 393 Introduction to International Business 4
Group II: Elective Courses
ANTH 352: Global Issues 4
BUS 394: International Business Strategy 4
BUS 473: International Finance (prereq = BUS 370) 4
ENSP 330: Energy, Technology, and Society 4
GEOG 321: Geographic Perspectives on International Development 4
GEOG 335: Global Agricultural Systems and Issues 4
GEOG 394: Sub-Saharan Africa: People, Envrnmnt \& Development 4
POLS 304: Introduction to International Relations 4
POLS 345: Model United Nations
(when developing world)
POLS 452: Third World Political Systems 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 to meet the 20-unit minimum.
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: Applied Physical Science 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 340: Conservation of Natural Resources 4
GEOG 345: Resource Wars 4
GEOG 372: Global Change: Past, Present, and Future 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

The minor consists of course work totaling between 22 and 28 units. Students will take all core courses, meet the language requirement, and take one course in each of the elective areas. Only 4 units may double count with a student's GE requirements.

## Core Courses (All required)

GEOG 302: World Regional Geography 4
HIST 380: 20th Century World 3
GLBL 350A Community Service, or GLBL 350B Global Social Movements 1

## 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.

## Elective Courses (Take one course from each group)

## I. Culture

ANTH 203: Cultural Anthropology (D1) 3
ANTH 340: Living in a Pluralistic World (E) 3
GEOG 203: Cultural Geography (D2) 3
II. Political Ideas and Institutions

POLS 303: Intro. to Comparative Govnt and Global Systems 4
POLS 304: Introduction to International Relations 4
POLS 315: Democracy, Capitalism, Socialism (D5) 3-4
POLS 452: Third World Political Systems 4
III. Global Economy and Business

ECON 201A: Macroeconomics (D5) 4
ECON 303: International Economics 4
GEOG 322: Geographic Perspectives on International Dvipmnt 4
BUS 393: Introduction to International Business 4
POLS 498: International Political Economy 4
IV. Globalization and its Social Impact

AMCS 475: Sem. on Race, Racism, and Globalization 4
WGS 385: Gender and Globalization 4
ANTH 352: Global Issues 4
GEOG 338: Social Geography (E) 3
GLBL 497: Global Studies Internship: Project Censored 3
COMS 321: International Communications 3

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 medicine, osteopathic medicine, dentistry, veterinary medicine, podiatry, optometry, pharmacy, physical therapy, physician assistant, and chiropractic medicine. Please note that advising for Physical Therapy and Nursing are done by the Departments of Kinesiology and Nursing, respectively.

Students interested in entering the health professions will select an appropriate major for undergraduate study. Since a majority of the courses required for admission to health-related programs are in the sciences, most students earn degrees in biology or chemistry before going on to professional schools, although many nonscience 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. Preveterinary 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:
Biology Units
General biology (through cellular and molecular biology) 8-12
Some medical schools also require an upper division course in cell biology or genetics.

Chemistry
Inorganic or general chemistry
Organic chemistry
Some schools also require biochemistry.
English
Composition and Literature
Physics
A one-year course with lab
Mathematics
Some schools require a year of college mathematics and/or a calculus course or statistics.

## Foreign Language

A few schools recommend a modern foreign language course.

Psychology
An introductory psychology course is recommended by some schools.

## 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
BIOL 122* Genetics, Evolution, and Ecology 4
BIOL 123* Molecular and Cell Biology
BIOL 328 Vertebrate Evolutionary Morphology
BIOL 342 Molecular Genetics
BIOL 344 Cell Biology
BIOL 472 Developmental Biology
CHEM 115AB* and 116AB* General Chemistry and Lab 10
CHEM 335AB* and 336 Organic Chemistry and Lab (336 lab often not required)
CHEM 446 Biochemistry
PHYS 210AB* and 209AB* General Physics and Lab 8
ENGL 101 and 214 Expository Writing and Literature 6
MATH 107 Precalculus Mathematics 4
MATH 161 Calculus 4
MATH 165 Elementary Statistics 4
PSY 250 Introduction to Psychology

* Required courses for all California medical schools.

Applicants with a grade point average below 3.00 are almost never considered by medical school admissions committees, and few students with a grade point average below 3.40 are accepted.
In addition to the required courses, most health professions students are required to take an appropriate examination such as the Medical College Admissions Test, Dental Admissions Test, or the Graduate Record Examination at, or before, the time of application.

The School of Science and Technology Health Professions Advisory Committee 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 Health Professions Advisory Committee has the opportunity to communicate with students on a personal basis. Individual departments may also have pre-health professions advisors;
2. Evaluate candidates and write letters supporting their admission to health professions schools;
3. Provide a practice admissions interview for candidates applying to health professions schools;
4. Coordinate a one-credit university course (Science 150, Introduction to Careers in the Health Professions - offered in fall semester only). This course offers general information sessions by the course coordinator and several guest speakers (health care providers and health professions school admissions officers); and
5. Maintain career information related to health professions, including catalogs from various schools and registration materials for examinations, and centralized application services required for admission to certain programs such as medicine, osteopathic medicine, veterinary medicine, podiatry, and dentistry.

The chair of the Health Professions Advisory Committee is the advisor to the Pre-Health Professions Students Club.

Students interested in a career in the health professions are strongly encouraged to meet with a health professions advisor immediately upon enrolling at Sonoma State University. Appointments to meet with an advisor can be made through the Health Professions Advisory Committee office in Darwin Hall, Room 200, (707) 664-2535. Visit the committee website (www.sonoma.edu/hpac) for more information.

## HISTORY

DEPARTMENT OFFICE
Stevenson Hall 2070
(707) 664-2313
www.sonoma.edu/history
DEPARTMENT CHAIR
Michelle Jolly
ADMINISTRATIVE STAFF
Shannon Fields, Ashley Wise, Julie Wood

## Faculty

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

## Programs Offered

Bachelor of Arts in History
Master of Arts in History
Minor in History
Teaching Credential Preparation

History is an integrative discipline that studies both our collective and our individual pasts. It is holistic because it is involved with humanity in all of its dimensions, interests, and activities, from the economic and political to the psychological and cultural. Thus, the study of history encourages students to reflect upon and analyze the interrelationship of ideas and material circumstances and of individual and group behavior as revealed in a wide range of human institutions and activities. The study of the ways in which humanity has organized itself, interacted, and explained its existence not only promotes the development of a historical perspective on the present but also provides a means of assessing the potential for change. The study of other cultures and their histories also fosters the development of a broader world view as well as other perspectives on one's own culture. In addition, the study of history provides insight
into the sources of one's thoughts, aspirations, and behavior, as well as the appreciation of a shared cultural tradition.

The history major is designed both to provide the basis for an excellent 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 their own country as well as that of other cultures. They are also introduced to methods of historical inquiry, to different philosophies of history, and to historical writing. Beyond these requirements, students may arrange course work that meets their needs and interests. Course offerings provide opportunities to study selected areas and periods as well as individually designed research projects.

## 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 postbaccalaureate programs, including law, business, library science, and cultural resource 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 are advised to diversify their studies rather than concentrate on any single geographic area or nation-state. Those who plan extensive graduate study are encouraged to take foreign language courses and to consider the history honors program. Credential candidates should consider securing classroom experience in a communityinvolvement program. A wide variety of internships exist in local museums, historical societies, businesses, and schools.

## Bachelor of Arts in History

The B.A. in history is a 40-unit program that students plan in consultation with a departmental advisor. Courses graded $\mathrm{Cr} / \mathrm{NC}$ are not applicable to the history major, except in the cases of HIST 497 Internships and HIST 496 History Journal, where 3 units of CR/NC are accepted.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 40 |
| General electives | 29 |
| Total units needed for graduation | 120 |

## Major Core Requirements

HIST 201 Foundations of World Civilization (3)*
( 3 units applied to GE, category D2) 3-4
HIST 202 Development of the Modern World*
HIST 251 The United States to 1877 (3)**
(3 units applied to American Institutions)
HIST 252 The United States Since 1865**
HIST 498 Senior Seminar

Total units in the major core
16-18
*History majors may replace HIST 201 with HIST 303, 335, 339, 400, 401 OR replace HIST 202 with HIST 337, 342, 382, 383, 411, or 412. Either HIST 201 or HIST 202 MUST be taken.
**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.

## Major Electives

Tofinishthemajor,studentsmustcompleteadditionalunitsinhistorytototal40 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-divisionsubstituteforHIST201/202maycountforthiswhenappropriate). Three(3)unitsofelectivescanbelowerdivision;theremaining20-21 unitsmust be upper division.

Total units in major electives
Total units in the major

## History Honors Program

Eligible* students must have completed the major core requirements, except for the Senior Seminar, to earn the honors degree:
HIST 498 (or designated Senior Seminar)
HIST 499 Honors Seminar (to complete an Honors Thesis)
Total units needed for history honors degree
*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

The History Department offers two minors-the General History minor and the Secondary School Content minor, with a focus in either world or United States/California history. Students contemplating a minor in history should consult the History Department for advising early in their academic careers. Courses graded $\mathrm{Cr} / \mathrm{NC}$ are not applicable to the history minor.

## I. General History Focus

Complete the Following:

## Minor Core Requirements

One lower-division course in world history

One lower-division course in United States History
EITHER HIST 251 History of the United States to 1877
OR HIST 252 History of the United States since 1865
(This course also satisfies GE area D3.)
Total units in the minor core
6

## Minor Electives

To finish the General 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
Total units in minor

## II. Secondary School Teaching Options

The State of California permits teachers with secondary teaching credentials in fields other than social sciences to teach world or United States/California history in the secondary school classroom if they complete a focus in one of the following fields. Each of the minor options described below meets state requirements (as of November 2005).

## A. World History Focus

Complete the following:

## Minor Core Requirements

One lower-division course in world history
EITHER HIST 201 Foundations of World Civilization
OR HIST 202 Development of the Modern World
(This course also satisfies GE area D2.)
One lower-division course in United States History
EITHER HIST 251 History of the United States to 1877
OR HIST 252 History of the United States since 1865
(This course also satisfies GE area D3.)
HIST 380 Twentieth Century World
(This course is an upper-division GE course in area D.)
Total units in the minor core

## Minor Electives

To finish the World History minor, students must complete 12 units of additional upper-division coursework in history, usually 3 courses. These courses must emphasize the history of regions other than the United States (e.g., Europe, Asia, Latin America, or Africa). Students may not count additional lower-division units toward the minor. Note: Students planning to teach world history are strongly encouraged to take courses that span a range of time periods and regions. Students should consult with an advisor in the history department before choosing courses.

EITHER HIST 201 Foundations of World Civilization
OR HIST 202 Development of the Modern World
(This course also satisfies GE area D2.)
B. United States/California History Focus

Complete the Following:

## Minor Core Requirements

One lower-division course in World History
EITHER HIST 201 Foundations of World Civilization
OR HIST 202 Development of the Modern World (This course also satisfies GE area D2.)

One lower-division course in United States History
EITHER HIST 251 History of the United States to 1877
OR HIST 252 History of the United States since 1865
(This course also satisfies GE area D3.)
One upper-division course in California History
EITHER HIST 472 California History I
OR HIST 473 California History II
Total units in the minor core

JUNIOR YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| HIST 391 (4) | History Electives (8) |
| History Elective (4) | UD GE (C4) (3) |
| UD GE (D4) (3) | UD GE (C5) (3) |
| Electives (5) |  |

SENIOR YEAR:: 29 Units

| Fall Semester (14 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| History Elective (8) | HIST 498 (4) |
| Electives (6) | Electives (11) |

TOTAL UNITS:: 120

* ENGL 101 (or its equivalent) is a prerequisite for HIST 201, 202, 251, and 252.


## Teaching Credential Preparation

History majors interested in seeking a general elementary credential or secondary school credential for social sciences may demonstrate subject matter competency by passing the Praxis II Multiple Subject Assessment for Teachers or the Single Subject Assessment test respectively. For further information and guidance, contact Miriam Hutchins, School of Social Sciences, (707) 664-2409.

## 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; 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 postgraduate 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
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
Graduate courses at the 500 level (including HIST 500 and 510) 9
HIST 598 Comprehensive Examination Reading and Research 6
Total units required for the M.A. 30

## HUMAN DEVELOPMENT

PROGRAM OFFICE
Stevenson Hall 2054
(707) 664-2312

HUMAN DEVELOPMENT COORDINATOR
Richard Senghas / Anthropology and Linguistics
(707) 664-2307
e-mail: richard.senghas@sonoma.edu
www.sonoma.edu/humandevelopment
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
Myrna Goodman / Sociology (707) 664-4296 /
email: myrna.goodman@sonoma.edu
Susan Hillier Ferreira / Gerontology/Psychology (707) 664-2586 /
email: hillie@sonic.net
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

## 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 electives, 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. A B.A. in Human Development 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.
- 2.5 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 115 (Introduction to Biology) or ANTH 201 (Introduction to Biological Anthropology; prerequisites to ANTH 318).
- MATH 165 (Elementary Statistics).
- ANTH 203 (Introduction to Cultural Anthropology) or SOCl 201 (Introduction to Sociology) (prerequisites to ANTH 342).
- LING 200 (Introduction to Linguistic Studies).


## Total units required for B.A. in Human Development

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements*, including |  |
| $22-24$ units core requirements |  |
| 16-18 units electives, selected from comparative, |  |
| sociological, psychological, and methodology |  |
| categories | 40 |
| Electives | 29 |
| Total units needed for graduation | 120 |

* This is the minimum number of units; more units may be required for certain course choices.


## Major Core Requirements (22-24 units)

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 408 Adult Development ..... 4
HD 391 Seminar in Human Development (Taken In the Junior Year) ..... 2
HD 490 Senior Project ..... 1
KIN 410 Lifespan Motor Dev ..... 3
PSY 410 Child Development or
PSY 412 Adolescent orEDMS 420 Child Development in Family, School, and Community (GE-E)3-4

## Major Electives

Students choose a minimum of 16 units from among the following groups of courses, taking one or two courses from each category for a total of 40 upper division units (core + electives $=40$ units). In addition, service learning and internship courses are strongly recommended. Classes in foreign languages spoken in California are strongly recommended.

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

## Comparative Perspectives

AMCS 435 Ethnicity and the Life Cycle (3)
ANTH 302 Biological Basis of Sex Differences (4)
ANTH 340 Living in a Pluralistic World (GE-E) (3)
ANTH 372 Illness Narratives (4)
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)
LING 432 Language in a Sociopolitical Context (3)
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)
SOCl 326/PSY 326 Social Psychology (GE D1) (3-4)
SOCI 445 Sociology of Childhood and Adolescence
WGS 440/SOC 440 Sociology of Reproduction (3)
WGS 390 Gender and Work (4)

## Psychological Perspectives

EDMS 420 Child Development in Family, School, and Community (GE-E) (3)
PSY 302 Psychology of the Person (GE-E) (3)
PSY 411 Behavioral and Emotional Problems of Children (3-4)
PSY 412 Adolescent Psychology (3-4)
PSY 418 The Psychology of the Family (3-4)
PSY 447 Learning and Behavior (4)
PSY 448 Cognitive Development (4)
PSY/GERN 422 Seminar in Living and Dying (3-4)
PSY 461 Personality Development (4)

## Methodology

Choose one of the following:
ANTH 451 Applied Ethnographic Methods (4)
ANTH 480 Studies of Language Use (4)
EDUC 331 Practicum in Child Study (3)
PSY/GERN 493 Narrative Methods (4)
PSY 380 Introduction to Psychological Research Methods (4)
PSY 441 Qualitative Methods (4)
SOCI 300 Sociological Research Methods (4)
WGS 425 Feminist Research Methods (4)

## HUTCHINS SCHOOL OF LIBERAL STUDIES

DIRECTOR
Eric McGuckin
SUBJECT MATTER PREPARATION COORDINATOR
Ben Frymer
ADMINISTRATIVE COORDINATOR
Sue Foley
PROGRAM ADVISOR
Donna Garbesi

## Faculty

*Les Adler
Stephanie Dyer
Ben Frymer
Ajay Gehlawat
Debora Hammond
Janet Hess
Nelson Kellogg
Heidi LaMoreaux
*Barbara Lesch McCaffry
Eric McGuckin
*Anthony Mountain
Mutombo M'Panya
Wendy Ostroff
Francisco H. Vázquez
*Richard Zimmer
*Faculty Early Retirement Program

## Overview

A nationally recognized leader in the movement for reform in higher education, the Hutchins School has maintained its commitment to innovative pedagogy and interdisciplinary inquiry into vital issues of modern concern since its inception in 1969. The program is designed to encourage students to take themselves seriously as readers, writers, and thinkers capable of continuing their own educational process throughout their lives.

The Hutchins School is an interdisciplinary school within Sonoma State University offering lower-division students an alternative General Education program that integrates material from the humanities, the social sciences, and the natural sciences. It offers upper-division students a similarly integrated major in Liberal Studies leading to a B.A. degree. It offers a multiple subject preparation program for pre-credential students, and a blended program leading to a B.A. and multiple subject teaching credential in four years. A minor in integrative studies is also offered.

The Hutchins School has several distinctive features:

- An emphasis on active participation in one's own education, on self-motivation, and on learning to learn;
- Small, seminar-type 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 they prefer an accelerated track, they can enroll in the Track III: Blended Program, which allows them to complete their B.A. degree and complete all requirements for the Multiple Subject Teaching Credential in four years. Students may transfer to another program at the end of any semester without loss of credit successfully completed in the Hutchins program.
Whatever their particular interests, all Hutchins students are challenged to read perceptively; to think both critically and imaginatively; to express their thoughts and feelings in writing, speech, and other media; and to make productive use of dialogue and discussion. By developing these skills, students will be ready to take a position in a democratic society as thoughtful, active citizens conversant in a broad
range of disciplinary perspectives. Through seminar discussions, essays, research, and other assignments, students will be prepared for a wide variety of careers in which creative, independent thinking and effective written and oral communication are the prime requisites.

## Admission

In general, the Hutchins School accepts students at the freshman or junior level for fall admission only, although exceptions are made depending on space availability. When applying to the University, all students seeking admission to the Hutchins School should list Liberal Studies/Hutchins, Hutchins School as their major (select code 49015 on paper application).

Students applying as freshmen must have a grade point average of 3.0. Students seeking admission into the Hutchins Blended Program as freshmen must test into college level English and math (through passage of the ELM and EPT or their equivalent).

Students already at Sonoma State seeking admission into the Hutchins program must file a separate Hutchins application form by February 15 for the fall semester and by October 1 for the spring semester. Application forms are available in the Hutchins School Office or online: http://www.sonoma.edu/hutchins/pages/academic/ admissions/admissions.htm

Students seeking admission to Track II as junior transfers must complete all lower-division general education requirements, with specific requirements in the following areas. Students may take these courses while enrolled in the major.

BIO 110: Biological Inquiry (or equivalent)
CHEM 107: Introduction to Physical Sciences (or equivalent chemistry, physics, or astronomy course)

GEOL 107: Introduction to Earth Science (or equivalent course)
Geology or physical geography
MATH 150: Geometry (Statistics or Math for Elementary Teachers fulfills this requirement for off-campus transfers)

A course in the history of the visual arts
A course in the performing arts: dance, music, or theatre
Whether transferring into the Track III Blended Program as freshmen or juniors, students must file a separate application available at: http:// www.sonoma.edu/hutchins/pages/academic/forms/_applying.htm.

| Degree Requirements | Units |
| :---: | :---: |
| General Education Lower-Division (May include 48 units in LIBS Integrative GE) | 51 |
| Major Requirements (up to 3 units may be applied to upper GE Area E) | 40 |
| General Education Upper-Division (Waived upon completion of Tracks II or III) | 9 |
| SSU Electives (Track I) or Subject Matter Preparation (Track II) | 20 |
| Total units needed for graduation | 120 |

## Interdisciplinary General Education Program Lower Division

The lower-division program of the Hutchins School fulfills, with the exception of mathematics, all of the Sonoma State University lowerdivision general education requirements. Upon completion of the lower-division General Education program in Hutchins, students may elect to continue in the program as a Liberal Studies major, or they may transfer into another major at any point in the program. The program consists of four interdisciplinary seminars of 12 units each, taken successively as follows:
LIBS 101: the Human Enigma (Fall)
LIBS 102: In Search of Self (Spring)
LIBS 201: Exploring the Unknown (Fall)
LIBS 202: Challenge and Response (Spring)
Each of these seminars is made up of 10 to 15 students and a professor. Learning proceeds by a process of reading, writing, and discussion, in which all students are urged to take an active part. There are generally four to six sections of each seminar offered simultaneously, so that each seminar is part of a larger learning community that meets together once a week for lectures, field trips, labs, and other group projects. The curriculum for these seminars is developed collaboratively by the faculty facilitating each seminar section, thus drawing on a wide range of disciplinary expertise.
Strongly emphasizing excellence in written communication, the program includes extensive writing projects and regular tutorials. Several of the small seminar sections come together once a week for group activities, including field trips, labs, lectures, films, group presentations, and other hands-on learning experiences. The emphasis throughout is on the critical examination of contemporary problems in their historical contexts. Each student is expected to arrive at conclusions that result from personal reflection and exploration of the ideas of major thinkers in diverse fields.
At mid-semester, students meet individually with the professor to discuss their progress. At this point, they have an opportunity to reflect on and assess their own learning, a key ingredient in developing the skill of lifelong learning. At the end of every semester, the student receives an official grade of credit or no credit. The student also is given a copy of a detailed evaluation of his or her work, which is placed in the student's Hutchins file but not entered on the official University record or used to compute a grade point average. This evaluation assesses the student's cognitive skills, seminar participation, understanding of the course content, writing skills, independent project, and special course assignments. A written commentary addresses each student's particular strengths and indicates the way in which the student should improve in order to become an effective, lifelong learner. Thus, the evaluation conveys a great deal more information than does a single letter grade. Unofficial grades can, at the student's request, be made available to other schools, agencies, or prospective employers who need a quantitative measure of performance.

A student who does not work well within the Hutchins program may receive credit with a probationary or terminal qualification, or a terminal no credit. If the student's enrollment remains probationary for two semesters, or is terminated, he or she must transfer out of the Hutchins program. Application for readmission may be made after the student has successfully completed at least one semester in the traditional general education program.

## Bachelor of Arts in Liberal Studies Upper-Division

Options for the bachelor's degree include: Track I, the General Liberal Studies Major plan; Track II, the Subject Matter Preparation (pre-credential) plan; and Track III, the Blended Program/B.A. plus Multiple Subject Credential.

The general pattern for the major in all three tracks is outlined in the table below. During their first semester in the upper-division, all transfer students are required to take LIBS 302. In this course, students work on the skills required in the major, develop their own learning plans, and begin the portfolio, a document the student expands throughout the upper-division and brings to a close in LIBS 402 Senior Synthesis. LIBS 302 is a prerequisite for all upperdivision Hutchins courses. Students continuing from Hutchins lowerdivision, however, are exempt from LIBS 302. Any student earning a grade lower than a C in LIBS 302 will not be allowed to continue in the Hutchins program.

Also, in each of their first two semesters, students will take a key course designed to involve them in a discussion and critique of some of our most fundamental beliefs and values, viewed in a worldwide context. (Please see LIBS 304 and 308.)

## Requirements for the Major

## First Semester

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

## Subsequent Semesters

LIBS 304 or 308 (to complete sequence)
One course from each of 4 core areas:
LIBS 320/321A Society and Self
LIBS 320/321B Individual and the Material World
LIBS 320/321C The Arts and Human Experience
LIBS 320/321D Consciousness and Reality
Additional requirements and electives (per track described below)

## Final Semester

LIBS 402 Senior Synthesis
Total units Hutchins Major

## 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. (Please see general description of core areas below, as well as descriptions of individual offerings in course listings that follow the general discussion of programs offered.)

## 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 the Interdisciplinary Studies. Track I students may use up to 9 units from other majors or 12 units from approved study abroad program as part of their emphasis in the Hutchins major, and we strongly encourage these students to consider doing a minor in another field. Alternatively, students majoring in Interdisciplinary Studies will complete the 17 additional units by choosing from a wide variety of courses which include elective seminars, workshops, independent and directed studies, internships, and Study Away opportunities.
LIBS 310/315/410/415 Directed or Independent Study
LIBS 396 Field Study
LIBS 397 Study Away
LIBS 399 Student Instructed Course
LIBS 499 Internship
Students in Track I may organize an area of emphasis within the 40 units required for the major which reflects their career plans and/ or intellectual interests. Track I students may use up to 9 units from other majors as part of their emphasis in the Hutchins major, and we strongly encourage these students to consider doing a minor in another field. Alternatively, students may engage in artistic and creative activities, research and scholarly investigations, Hutchins community projects, social and community action opportunities, or gather together a variety of experiences that they find intellectually satisfying. Many Track I students have found the Internship or Study Away program (one of which is required for the major) valuable.

The Study Away/Internship requirement, often preceded by a semester of independent study related to the placement, allows students to include, as part of their major, experiences as diverse as (1) a period of domestic or international study and travel; (2) an independent project in a nearby community; (3) an internship with a local arts organization, business, school, or social service agency; (4) substantial involvement in a program with another department on this or some other campus; or (5) other options and activities created by the student in consultation with an advisor. Whether
close at hand or far away, the Study Away/Internship experience can help students relate their education to specific career choices, greater intellectual understanding, and their place in an ever-larger world.

## Sample Four-year Plan for Bachelor of Arts in Liberal Studies, Track I

## FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| ENGL 101 (A2) (3) | BIOL 110 (B2) (4) |
| Math GE (B4) (3) | Ethnic Studies (D1) (3) |
| Humanities GE (C1) (3) | PHIL 101 or 102 (A3) (3) |
| Physical Science GE (B1) (3) | World History GE (D2) (3) |
| Elective (3) | Elective (2) |
| SOPHOMORE YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| Written and Oral GE (A1) (3) | Humanities GE (C3) (3) |
| Humanities GE (C2) (3) | Humanities GE (C4) (3) |
| POLS 200 (D4) (3) | Specific Emphasis Science (B3) (3) |
| Physical Science GE (B1) (3) | U.S. History GE (D3) (3) |
| Elective (3) | Elective (3) |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| LIBS 302 (3) | LIBS 308 (3) |
| LIBS 304 (3) | LIBS $320 / 321$ (3) |
| Upper-Division GE Course (D5) (3) | LIBS 310 (3) |
| Elective or Emphasis (6) | Electives or Emphasis (6) |

## SENIOR YEAR:: 30 Units

Fall Semester (15 Units)
LIBS 320/321 (3)
LIBS 499 (3)
Upper-Division GE Elective (3)
Electives or Emphasis (6)

Spring Semester (15 Units)
LIBS 320/321 (3)
LIBS 320/321 (3)
LIBS 402 (4)
Electives (5)

TOTAL UNITS:: 120

## LIBS/MBA Advising Pathway

The flexibility of the Track I program in Liberal Studies lends itself to a broad variety learning experiences and careers. For example, by following the pathway below, a Liberal Studies major may complete the requirements to enter a Master of Business Administration program upon graduation. Those interested should consult with Stephanie Dyer in the Hutchins School and with the MBA coordinator in the Department of Business Administration.

## Sample Four-year MBA Prep Advising Path

FRESHMAN YEAR:: 31 Units

| Fall Semester (15 units) | Spring Semester (16 units) |
| :--- | ---: |
| LIBS 101 (12) | LIBS 102 (12) |
| Elective Units (3) | Math 165 (4) |
|  |  |
|  |  |
|  |  |
|  | SOPHOMORE YEAR:: $\mathbf{3 2}$ Units |


| Fall Semester (16 units) | Spring Semester (16 units) |
| :--- | ---: |
| LIBS 201 (12) | LIBS 202 (12) |
| ECON 201A (4) | ECON 201B (4) |
| Declare Business Minor |  |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 units) | Spring Semester (15 units) |
| :--- | ---: |
| LIBS 304 (3) | LIBS 308 (3) |
| LIBS 320 (3) | LIBS $320(3)$ |
| LIBS 499 (3) | LIBS $410(3)$ |
| BUS 231A (4) | BUS 230B (4) |
| Upper Division GE (3) | BUS 295 (2) |
| Pass PCCR Exam | Take GMAT |
| Take WEPT |  |
|  |  |

Fall Semester (14 units)
LIBS 320 (3)
Spring Semester (14 units)
LIBS 402 (4)
BUS 360 (4)
LIBS Elective (3)
BUS 344 (4)
LIBS 320 (3)
Upper Division GE (3)
BUS 370 (4)
TOTAL UNITS:: 122

## Track II Multiple Subject (Pre-Credential) Preparation

The Hutchins School offers a state-approved subject matter preparation program for students intending to earn a California Elementary Teaching Credential or an Early Childhood Emphasis Credential. While students are no longer allowed to waive the California Subject Exam for Teachers (CSET), the B.A. pre-credential option ensures interdisciplinary subject matter proficiency as well as possession of the high-level analytic, synthetic, creative, and expressive academic skills required of future educators. Course work is carefully planned to meet state-mandated content standards for prospective elementary teachers and provides excellent preparation for the CSET exam, as well as for admission to a professional teacher training program. In addition to the courses described above, students will be required to take the following courses as part of their major. Upper-division GE requirements can be met through the completion of the Multiple Subject program, which includes concentration in a specific subject. (See Hutchins website for details):

LIBS 312: Schools and Society (3)
LIBS 327: Literacy, Language, and Pedagogy or
ENG 379: English Language (3-4)
LIBS 330: The Child in Question (3)
MATH 300A: Elementary Number Systems (3)
MATH 300B: Probability and Statistics (3)

## Sample Four-year Plan for Bachelor of Arts in Liberal Studies, Track II <br> FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)
ENGL 101 (A2) (3)
MATH 150 (B4) (3)
ARTH, THAR, or MUS (C1) (3)
BIOL 110 (B2) (4)
Elective (2)

Spring Semester (15 Units)
CHEM, Physics, or Astronomy (B1) (3)
Ethnic Studies (D1) (3)
PHIL 101 or 102 (A3) (3)
World History GE (D2) (3)
Elective (3)

SOPHOMORE YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| Written and Oral Analysis GE (A1) (3) | Humanities GE (C3) (3) |
| Humanities GE (C2) (3) | Humanities GE (C4) (3) |
| POLS 200 (D4) (3) | GEOL or Physical GEOG (B1 or B3) (3) <br> Concentration Course (3) <br> Elective (3) |
|  | Concentration Course (3) |

SENIOR YEAR:: 30 Units
Fall Semester (15 Units)
Spring Semester (15 Units)
LIBS 320/321 (3)
LIBS 320/321 (3)
LIBS 330 (3)
LIBS 320/321 (3)
LIBS 327 (3)
LIBS 402 (4)
EDMS 470 (3)
Electives (5)
Concentration Course (3)
TOTAL UNITS:: 120

## Track III Blended Program

The Blended Program incorporates the lower-division Hutchins General Education program and the basic course work for Track II with courses from the School of Education beginning in the junior year, allowing students to complete a B.A. in Liberal Studies and a Multiple Subject Teaching Credential as follows:

## Sample Four-year Plan for Bachelor or Arts in Liberal Studies with Teaching Credential, Track III

FRESHMAN YEAR:: 34 Units

| Fall Semester (17 Units) | Spring Semester (17 Units) |
| :--- | ---: |
| LIBS 101 (12) | LIBS 102 (12) |
| EDMS $100(2)$ | EDMS 200 (2) |
| MATH 150 (3) | CHEM, Physics, or Astronomy (3) |
| Take CBESTor CSET: Writing Skills |  |
| Exam Spring/Summer. |  |

## 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
Spring Semester (17-18 Units)
(Nov.- Jan).

JUNIOR YEAR:: 36 Units

| Fall Semester (18 Units) | Spring Semester (18 Units) |
| :---: | :---: |
| LIBS 304 (3) | LIBS 308 (3) |
| LIBS 320 (3) | LIBS 320 (3) |
| LIBS 320 (3) | KIN 400 (3) |
| LIBS 327 (3) | MATH 300A (3) |
| EDMS 470 (3) | EDMS 463 (3) |
| EDMS 411 (3) | EDMS 475 (3) |
| Take the WEPT during academic year. Apply for fall graduation by audit deadline. | Re-apply to SSU as postbaccalaureate student Aug 1 - Aug 31. |

Fall Semester (16 Units)
Spring Semester (14 Units)
LIBS 320 (3)
EDMS 482F: Student Teaching (10)*
LIBS 402 (4)
EDMS 464 (2)
MATH 300B (3)
EDMS 471 (2)
EDMS 474 (3)
EDMS 476F (3)
EDMS 464S (2)*
*Enrollment in EDMS 476S is optional.

* Students will attend EDMS 482S on-site, but are not required to enroll in course, and will complete CWS-2 E-Portfolio.


## TOTAL UNITS:: 135-136

Some courses may be taken during the summer.
In order to continue in the program after the first year, students must have the recommendation of their professors in LIBS 101, LIBS 102, EDMS 100, and EDMS 200.

## 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)
LIBS 308: Practice of Culture (3)
LIBS 320/321 (A, B, C, or D): Core Seminars/Courses (3)
LIBS 310/410: Directed Study (1-4)
LIBS 399: Student-Taught Courses (2)
Total units 20
Students must complete LIBS 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 403 during their final semester, examining the students' major field of study in relation to other disciplinary perspectives.

## Degree Completion Program

The Liberal Studies Degree Completion Program is for those who have completed junior transfer requirements. It offers an alternative route to a bachelor of arts degree for working adults 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 seminars and ongoing reading and writing assignments.

Course work in the program is designed to investigate current issues and to allow students to explore their own interests.

## Requirements for the Major

LIBS 380 Identity and Society
LIBS 381 Technology and the Environment
LIBS 382 Work and the Global Future
LIBS 470 Senior Project (independent study)
General education courses and electives may be required in addition to transfer units to complete University graduation requirements.

Two groups of 15 students are admitted each Fall semester, staying with their cohort throughout the program as different professors guide the seminars each semester. For individual preadmissions counseling, call Beth Warner, Administrative Coordinator, at 707 664-3977, e-mail beth.warner@sonoma.edu. website: www. sonoma.edu/exed under "Our Programs."

## M.A. Program in Interdisciplinary Studies (Action for a Viable Future)

As people become aware of the magnitude of dilemmas and issues in the world they inhabit, they often express the desire and need to
go beyond studying these problems; they want to know what they can do about them. This program is a response to that question.
We emphasize the interrelationship among three themes: the psychological and moral dimensions of change; economic, and social justice issues; and ecological issues. These three are inextricably linked: economic practices and concerns about social justice must involve considerations of environmental sustainability, and changes in the environmental and economic spheres necessarily imply personal change. All must be understood on a global scale.

This program provides a framework for understanding the roots of contemporary problems and the processes of change, within which each student chooses courses across the University that illuminate their area of interest. For their culminating experience, students will choose an issue that inspires them to create and execute an action plan to make an impact on the community.

For further information, contact Beth Warner, Administrative Coordinator, at 707 664-3977, e-mail beth.warner@sonoma.edu. website: www.sonoma.edu/exed under "Our Programs."

## Requirements for Admission

1. Bachelor's degree from an accredited institution;
2. Grade point average of 2.5 or above for the last 60 units of coursework;
3. A personal narrative describing your goals and three letters of recommendation;
4. Completion of a graduate studies application to the University;
5. Satisfactory participation in a seminar interview; and
6. Favorable recommendation by the departmental graduate studies coordinator.

## Requirements for the M.A.

1. Advancement to candidacy form signed and submitted to Graduate Studies Office;
2. With the approval of the student's committee chair and the graduate advisor, a maximum of 9 units of transfer credit may be included as part of the student's specific pattern of study. All courses are to be taken for a letter grade. Students must maintain a GPA of 3.0 or above in all courses to be counted toward the degree;
3. All requirements for the M.A. degree in Interdisciplinary Studies stipulated at the time of admission to candidacy must be satisfactorily completed within 7 years from the time the first course is completed. A completion of requirements form must be signed and submitted to the Graduate Studies Office; and
4. Completion of required courses and individual study plan course work as outlined below:

ITDS 510A Critical Inquiry: A Preparation for Action and Change 6
ITDS 510B Case Study
ITDS 599 Project Planning and Implementation
Approved Individual Study Plan (300, 400, or 500 level courses)
Total units required for the M.A.

## INTERDISCIPLINARY STUDIES

DEPARTMENT OFFICE
Physical Education 25
(707) 664-3918
ellen.carlton@sonoma.edu
www.sonoma.edu/itds
COORDINATOR
Ellen Carlton

## Programs Offered

Bachelor of Arts in the Special Major
Bachelor of Science in the Special Major
Special Minor in Interdisciplinary Studies
Master of Arts in Interdisciplinary Studies
Master of Science in Interdisciplinary Studies
Students interested in designing an interdisciplinary program can pursue a bachelor's degree in the special major and a master's degree in interdisciplinary studies. The undergraduate special major and the graduate major in interdisciplinary studies are designed for students whose particular interests, backgrounds, or professional objectives are not served by a traditional degree program. The purpose of these majors is to provide a carefully controlled opportunity for qualified students to design, with faculty approval, a flexible interdisciplinary course of study that leads to a bachelor's or master's degree. Admission is limited to those whose individualized programs can be organized around a special topic or a crossdisciplinary inquiry that is original and involves work in more than one department. Interested students should contact the coordinator of interdisciplinary studies (ITDS), who initiates the application and screening process.

The special and interdisciplinary studies majors are not intended to bypass normal graduation requirements and may not be used to duplicate formally structured programs at Sonoma State University or other service-area institutions. The reason for this restriction is that these programs should be reserved for students whose special interests cross disciplinary lines and who find appropriate faculty expertise here.

## Application requirements for all programs

1. All students must apply for admission to the special major or the major in interdisciplinary studies. Before developing a program proposal, the student must consult with the interdisciplinary studies coordinator, who will initiate the application and screening process and will help identify faculty advisors to serve as an academic advisory committee.
2. There must be at least two faculty members for the special major and three faculty members for the major in interdisciplinary studies who agree to constitute the advisory
committee and act as advisors for each student's program of study. It is the student's responsibility to contact these advisors to plan with them a coherent, original, and feasible course of study. One committee member must agree to be the committee's chair and to be the student's principal advisor on matters related to the major course of study and all other graduation requirements.
3. In consultation with the ITDS coordinator and the academic advisory committee, each student must complete a program proposal and submit it in duplicate to the ITDS coordinator by an application deadline. There are three proposal deadlines each semester.
4. Filing a proposal application with the ITDS coordinator does not ensure acceptance in the special major or interdisciplinary studies program. Each proposal must be evaluated by the ITDS committee. The committee may recommend approval or conditional approval of the application, may request that the application be reworked and resubmitted, or may reject the application. Approved programs must then be approved by the Associate Vice Provost of Academic Programs. If the application is approved at both levels of review, the student may register as a special major or as a major in interdisciplinary studies.

## Bachelor of Arts or Science in the Special Major

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements (Core and Supporting) | 45 |
| General electives | 24 |
| Total units needed for graduation | 120 |

## Requirements for the Special Major

A 3.00 grade point average is a prerequisite to application. The special major is a unique major that suits individual goals and is personally valuable, but may pose professional obstacles. Career goals and prerequisites for higher degrees should be reviewed before proceeding with this major.

The special major consists of 45 units of course work in two or more disciplines; 24-26 upper-division units constitute the core courses, while the remaining units may include lower-division courses.

To be considered for the special major, the student must have more than one full year ( 31 units or more) of course work in the major still to be completed after approval by the ITDS committee and the filing of the Change of Major form. Work in progress during the semester of the proposal's approval will count toward the 31 units.

Contact the ITDS coordinator for the detailed guidelines and the application form for the special major. At the time you apply for a special major, you should have completed at least half of your GE requirements and should be in your junior year.

## Special Minor in Interdisciplinary Studies

The special minor has the following features and requirements:

1. The minor consists of 21-24 units of coursework from two or more departments;
2. Two-thirds of these units must be in upper-division course work;
3. Two-thirds of the minor must remain to be completed at the time the minor is approved. Work in progress during the semester of the minor's approval counts toward the two-thirds requirement;
4. The student must have a minimum GPA of 3.00 in order to apply;
5. A student will not be considered for a special minor before the student's junior year; and
6. A special minor must have the same coherence and academic integrity as are demanded of a special major and is subject to the same application process.

Contact the ITDS coordinator for the detailed guidelines and the application form for the special minor.

## Master of Arts or Science in Interdisciplinary Studies

| Degree Requirements | Units |
| :--- | ---: |
| Major requirements | $30-32$ |
| Total units needed for graduation | $30-32$ |

## Requirements for the M.A. or M.S. in Interdisciplinary Studies

## Prerequisites To Application

- Admission to the University in conditionally classified graduate status; and
- A grade point average of at least 3.00 for the last 60 units of college work attempted.


## Prerequisite To Acceptance

- Passage of the Written English Proficiency Test (WEPT). Graduate Record Examination (GRE) Aptitude Test scores are not required, but may be submitted in support of the application; and
- The candidate for this degree must comply with the normal regulations governing graduate study at Sonoma State as described in this catalog.


## Course Requirements

General course and unit requirements:

- The major in interdisciplinary studies consists of a minimum of 30 units to a maximum of 32 units in two or more disciplines.
- At least 20 units must be graded (A-F); the remainder (up to one-third of the total number of units of the major) may be taken in a nontraditional grading mode. (In order to receive a Credit (Cr) grade in a graduate level class, the student must earn the equivalent of B - or better.)
- The student must have at least 15 units of the major still to be completed after approval of the proposal by the Associate Vice Provost of Academic Programs. Units completed during the semester of the proposal's approval count toward these 15 units.
- At least 21 semester units shall be completed in residence.
- At least 15 of the 21 in-residence units shall be in graduate ( 500 -level) courses. The remaining units may be in 300 - or 400 -level courses.

Contact the ITDS coordinator for the detailed guidelines and the application form for the master's degree in interdisciplinary studies.

## KINESIOLOGY

DEPARTMENT OFFICE
PE14
(707) 664-2357
www.sonoma.edu/kinesiology
DEPARTMENT CHAIR
Steven V. Winter

DEPARTMENT COORDINATOR
Dawn Owens
EQUIPMENT TECHNICIAN
Gloria Allen

## Faculty

Wanda Boda
Ellen Carlton
C. Douglas Earl
*James Gale
Elaine McHugh
Steven V. Winter
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Science in Kinesiology
Master of Arts in Kinesiology
Minor in Kinesiology
Single Subject Teaching Credential Preparation
Adapted Physical Education Specialist Credential Integrated Degree and Credential Program

Kinesiology, as the study of human movement, utilizes a comprehensive and integrative approach to examine phenomena related to all aspects of physical activity. The curriculum offered by the Department of Kinesiology prepares graduates who can apply kinesiological principles to the acquisition, performance, and refinement of motor skills and to the use of physical activity as an educative tool and a medium for health promotion, personal well-being, and participation in an active lifestyle. The curriculum addresses human movement across the life span from biological/physical, behavioral, sociocultural, and humanistic perspectives, with attention given to the unique and common needs of all people in a wide variety of contexts and conditions.

In conjunction with the broader educational mission of the University, the kinesiology major program prepares students to lead and participate in a modern complex society and to assume multiple roles throughout their lifetimes. Graduates have acquired knowledge and experiences that prepare them to pursue lifelong learning, advanced study, and/or careers in such areas as teaching, coaching,
adapted physical education, allied health fields, health and fitness industries, sport industries, or exercise and movement science. To achieve this mission the kinesiology major provides students with a well-structured set of curricular and cocurricular experiences and the mentorship to derive a sound education from the University experience.
The Department of Kinesiology programs lead to the B.S. or M.A. degrees. In both programs a core of courses is required. Beyond this core, the kinesiology student chooses a concentration of courses with a specific focus. The undergraduate may select physical education, adapted physical education, exercise science, lifetime fitness, or interdisciplinary studies in kinesiology. Theoretical and practical learning experiences are an important part of all concentrations. Students are required to participate in a variety of field experiences, working as coaching assistants, teacher's aides, exercise/recreation leaders, and instructors for disabled students.
Prior to beginning upper-division studies in Kinesiology, students should have acquired the knowledge and skills necessary for success. Courses with specific application to the kinesiology degree are included as support courses for the major. All students entering the upper-division kinesiology degree should

- Be able to utilize computing technology in support of inquiry;
- Demonstrate knowledge of a broad range of concepts, issues, facts, and theories derived from the biological, physical, behavioral, social sciences, and from the humanities;
- Demonstrate critical thinking, writing, reading, oral communication, quantitative and qualitative analysis, and information management skills; and
- Document experience in a variety of movement forms and fitness activities.

At the completion of the undergraduate degree all graduates should

- Demonstrate knowledge and skill in a broad variety of movement and fitness activities;
- Understand the biological/physical and behavioral bases of movement and the changes that occur across the life span, within diverse populations, and under a variety of environmental conditions;
- Understand the sociocultural and humanistic bases of movement with diverse cultures, historical periods, and social settings;
- Understand how motor skills are acquired and fitness achieved and maintained across the life span and within diverse populations;
- Understand the relationship among movement, conditioning and training, well-being, and skill across the life span and under a variety of environmental and personally unique conditions;
- Know how to apply kinesiological knowledge to enhance motor skill and fitness with a variety of populations and conditions;
- Apply critical thinking, writing, reading, oral communication, quantitative and qualitative analysis, and information management skills to movement-related questions;
- Demonstrate knowledge of the conditions of safe practice in movement-related contexts across the life span and within diverse populations, and respond appropriately to common injuries occurring during physical activity;
- Be able to use and apply kinesiological data collection techniques and measurement theory to assess, analyze, and evaluate human performance;
- Understand the scientific method and other systematic ways of knowing relative to research and scholarship in human movement;
- Demonstrate ability to integrate multidisciplinary knowledge bases of kinesiology in an applied, problem-solving context;
- Be familiar with standards, ethics, and expectations of professional communities related to human movement;
- Be prepared to engage in professionally related community activities;
- Be prepared to engage in informed dialogue with diverse professional and lay communities regarding kinesiological principles and practices; and
- Demonstrate additional in-depth knowledge and skills associated with study in any one of the concentrations, specializations, or emphases that are associated with kinesiology degrees.


## Bachelor of Science in Kinesiology

All majors in the Department of Kinesiology must complete the support courses and the major core courses. Each major selects a concentration in which to complete the major.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | $50-52$ |
| Support courses (maximum outside GE) | 18 |
| General electives | $3-5$ |
| Total units needed for graduation | 124 |

All courses fulfilling either major or minor requirements in kinesiology must be graded A-F, except for courses not available in the A-F mode or courses that are challenged.

## Physical Therapy Program Prerequisites

| Courses | SSU Course | UCSF | Samuel <br> Merritt | UOP | Chapman | West Univ. of H.S. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Physics | PHYS 209AB/210AB | R-8 | R-8 | R-8 | R-8 | R-8 |
| General Chemistry | CHEM 115AB/116AB | R-10 | R-8 | R-8 | F-8 | F-8 |
| Organic Chemistry | CHEM 335A | r-3 |  |  |  |  |
| H. Anatomy w/lab | BIOL 220 | R-3 | R-4 | R-4 | R-4 | R-4 |
| H. Physiology | BIOL 224 |  | R-4 | R-4 | R-4 | R-4 |
| Bio Elective | BIOL 307, 318 |  | R-3 | R-4 | R-6 |  |
| Microbiology/Cell Biology | BIOL 218/344 | R-4 |  | R-4 |  |  |
| Neuro Anatomy | PSY 451 | r-4 |  |  |  |  |
| Ab Psych/Psych Dis | PSY 425/438 | R-3 |  |  |  |  |
| General Psych | PSY 250, 302 |  | R-3 |  |  |  |
| Psych Elective |  |  | R-3 | R-3 | R-6 |  |
| Sociology Elective |  |  | R-3 |  |  |  |
| Biomechanics | KIN 350 | R-3 | R-3 |  |  |  |
| Exercise Physiology | KIN 360 | r-3 | R-3 |  |  |  |
| Motor Learning/ |  |  |  |  |  |  |
| Motor Development | KIN 305/410 | r-3 |  |  |  |  |
| Statistics | MATH 165 | R-3 | R-3 |  | R-4 | R-4 |
| English Composition | ENGL 101 | r-3 |  | R-3 |  |  |
| Written/Oral Comm | HUM 200/ENGL 201 |  | R-3 |  |  |  |
| Field Experience | KIN 430D | R-150 | R |  |  |  |
| GRE | R 1500/500R 1700/540 |  |  |  |  |  |
| $R=$ REQUIRED, $r=$ recommended |  |  |  |  |  |  |

## 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)*
Human Physiology (BIOL 224)*
Nutrition
Introduction to Computing (CS 101)*+
Foundations of Kinesiology (KIN 201)
Total supporting units

* GE courses
+ Students in physical education concentration may take KIN 307 instead.
Major Core Requirements (all concentrations)
KIN 301 Philosophy/History of Human Movement
KIN 305 Psychological Bases of Human Movement 4
KIN 315 Sociology of Sport 3
KIN 330A Measurement and Evaluation or MATH 165 (4) 1
KIN 350 Biomechanics
KIN 360 Physiology of Exercise
KIN 410 Life Span Motor Development
KIN 460 Conditioning for Health and Performance
Total units in the major core
26-29


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

## LOWER-DIVISION PREPARATION

FRESHMAN YEAR:: 32 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| GE (B2) BIOL 110 (4) | Chem 115A (B1) (5) |
| GE (C1) (3) | GE (A3) (3) |
| CS 101 (3) | GE (B4) (MATH 165/161) (4) |
| GE (A2) (3) | GE (D2) (3) |
| GE (D4) (3) |  |
| SOPHOMORE YEAR:: 29 Units |  |
| Fall Semester (15 Units) | Spring Semester (17 Units) |
| GE (A1) (3) | GE (D5) (3) |
| BIOL 220 (B3) (4) | GE (C4) (3) |
| CHEM 115B (5) | GE (D3) (3) |
| BIOL 307 (3) | BIO 224 (4) |
|  | PHYS 209A/210A (4) |

## UPPER-DIVISION SPECIALIZATION

JUNIOR YEAR:: 33 Units

| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| KIN 340/342 (3) | KIN $360(4)$ |
| KIN 301 (4) | KIN 315 (3) |
| GE (C2) (3) | GE UD (C3) (3) |
| GE UD (D1) (3) | KIN 410 (3) |
| PHYS 209B/210B (4) |  |
|  |  |
|  |  |


| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| KIN 305 (4) | GE UD (E) (3) |
| KIN 350 (4) | KIN $460(3)$ |
| Elective (3) | Nutrition |
| Elective (3) |  |

## Summer Session Option

KIN 410 (3)
In addition to the upper-division specialization, choose one of the following options:

## - Pre-Physical Therapy •

JUNIOR YEAR:: 33 Units
Fall Semester (17 Units) Spring Semester (16 Units)
PSY 425 Elective (4)

SENIOR YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| KIN 430D (1-3) |  |
| TOTAL UNITS:: 124 |  |
| - Biomechanics - |  |
| JUNIOR YEAR |  |
| Fall Semester (17 Units) | Spring Semester (16 Units) |
| KIN 300 (2) | Elective (3) |
| SENIOR YEAR |  |
| Fall Semester (16 Units) | Spring Semester (14 Units) |
| KIN 430/495 (1-4) |  |

## Sample Four-year Program for Bachelor of Science in Kinesiology

## Physical Education, Adapted Physical Education,

 Lifetime Fitness ConcentrationsLOWER-DIVISION PREPARATION

FRESHMAN YEAR:: 32 Units

| Fall Semester (17 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| GE (A2) (3) | CHEM 105/115 (3) |
| GE (B2) BIOL 115 (3) | GE (A3) (3) |
| GE (B4) (4) | GE (C4) (3) |
| CS 101 (3) | GE (D2) (3) |
| GE (B1) (4) | GE (C2) (3) |


| SOPHOMORE YEAR:: 31-32 Units |  |
| :--- | ---: |
| Fall Semester (16 Units) | Spring Semester (14-16 Units) |
| GE (A1) (3) | GE (D5) (3) |
| GE (D3) (3) | Biol 224 (4) |
| Biol 220 (B3) (4) | GE (C1) (3) |
| GE (D4) (3) | KIN 201 (3) |
| Elective (3) | PE: KIN 300 Aquatics (1) |
|  |  |
|  | APE: KIN 325 (3) |
|  |  |
|  |  |
|  |  |
|  | UF: KIN 342 (3) |


| JUNIOR YEAR:: 33 Units |  |
| :--- | ---: |
| Fall Semester (17 Units) | Spring Semester (16 Units) |
| KIN 330A (1) | KIN 360 (4) |
| KIN 301 (4) | KIN 410 (3) |
| KIN 315 (3) |  |
| GE UD (D1) (3) |  |

SENIOR YEAR:: 29 Units
Fall Semester (15 Units)
Spring Semester (14 Units)

| KIN 305 (4) | GE UD (E) (3) |
| :--- | ---: |
| KIN 350 (4) | KIN 460 (3) |
| GE UD (C3) (3) | Nutrition (3) |
| BIOL 307 (3 |  |

Inadditiontotheupper-divisionspecialization, chooseoneofthefollowing options:

- Physical Education •

JUNIOR YEAR:: 33 Units

| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| KIN 400 (3) | KIN 325 (3) |
| KIN 300 (2) | KIN 300 (1) |
| KIN 307 (3) | KIN 342 (3) |
| KIN 320 (3) |  |
| SENIOR YEAR:: 29 Units |  |
| Fall Semester (15 Units) | Spring Semester (14 Units) |
| KIN 300 (2) | KIN 300 (1) |
| KIN 404 (2) | KIN 430 (1) |
|  | Combatives |
| SUMMER SESSION OPTIONS |  |

KIN 307 (3)
KIN 400 (3)
KIN 410 (3)

- Adapted Physical Education -

JUNIOR YEAR:: 33 Units

| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| Elective (3) | KIN 340/342 (3) |
| KIN 426 (4) | KIN 300 Aquatics (1) |
| Elective (3) | KIN 427 (3) |
|  |  |
|  | SENIOR YEAR:: 29 Units |
| Fall Semester (17 Units) | Spring Semester (14 Units) |
| EDSP 430/433 (3-4) |  |
| KIN 425 (3) | KIN 430C (1) |
| KIN 430C (1) | Elective (3) |

- Lifetime Fitness •

JUNIOR YEAR:: 33 Units

| Fall Semester (17 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| KIN 426 (4) | KIN 340 (3) |
| LTF Elective (3) | KIN 442 (4) |

SENIOR YEAR:: 29 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| NURS 473 (3) | KIN $430 \mathrm{E}(3)$ |
| LTF Elective (3) | KIN 446 (3) |

## Major Concentrations

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

I. Adapted Physical Education Concentration (25-26)
II. Physical Education Concentration (26)
III. Exercise Science Concentration (24-26)
IV. Lifetime Fitness Concentration (25-28)
V. Interdisciplinary Concentration (24)

Total units in a concentration 24-28
Total units in the major 50-52

Specific content of concentrations is detailed below.

## Specific Content of Concentrations

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

## I. Adapted Physical Education Concentration

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

EDSP 433 or 430 Teaching Adolescents with Special Needs/Special Education for Teachers 3-4
KIN 340/342 Emergency Response/Principles of Musculoskeletal Injuries
KIN 300 Aquatics
KIN 325 Introduction to Adapted Physical Education
KIN 425 Seminar in Adapted PE
KIN 426 Individualized Assessment and Program Design
KIN 427 Individuals with Disabilities in Educational/Recreational Setting
KIN 430C Field Experience
Additional approved elective
Total units in the concentration
Total units in the B.S.

## II. Physical Education Concentration

The Kinesiology Department offers a Subject Matter Program in Physical Education. Students who are interested in teaching physical education and coaching in the schools may select this option. Completion of the program certifies the subject matter competence required for entry into a teaching credential program in physical education and exempts the student from taking the Praxis II Subject Assessment Examination. Kinesiology majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact the department office.

KIN 300 Analysis of Motor Performance: Aquatics
Skills and Fitness Performance
Dance and Rhythms ..... 1
Educational Gymnastics ..... 1
Racquet Sports ..... 1
Team Sports ..... 1
Contemporary Activities ..... 1
KIN 101 Combatives ..... 1
KIN 307 Computer Applications in Physical Education ..... 3
KIN 320 Curriculum, Pedagogy, and Assessment ..... 3
KIN 325 Introduction to Adapted Physical Education ..... 3
KIN 342 Principles of Musculoskeletal Injuries ..... 3
KIN 400 Elementary School Physical Education ..... 3
KIN 404 Theory of Coaching ..... 2
KIN 430 Field Experience ..... 1
Total units in the concentration ..... 26
Total units in the major52

For information on credentials and professional education requirements, please see the Education section in this catalog, which describes programs in education, and also the University's special bulletin on Programs in Teacher Education.

## Integrated Degree and Credential Program

Students in their freshmen year who are interested in becoming public school physical education teachers can enroll in a program of study that integrates a B.S. in kinesiology with a concentration in physical education, with the requirements necessary to obtain a teaching credential. This plan of study merges the degree and credential courses, subsequently exposing students to public school teaching experiences from their freshman through senior years. In addition, if students follow the designed advising plan, they have the potential of completing their course of study in less time than if the degree and credential programs were taken back to back. This program may necessitate students taking one or two summer school sessions.

## FRESHMAN YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| GE (B1) (3-4) | POLS 200 (D4) (3) |
| ENGL 101 (A2) (3) | GE (D2) (3) |
| Foreign Language (C4) (3) (if needed) | PHIL 101 or 102 (A3) (3) |
| MATH 165 (B2) (4) | BIOL 115 w/out lab (B2) (3) |
| KIN 120 (2) | Combatives |
|  | GE (C3) (3) |
|  |  |
|  |  |

## SUMMER SESSION:: 9 Units

EDUC 417 (3)
Foreign Language (if needed) (3)
KIN 307 (3)

## JUNIOR YEAR:: 34 Units

Fall Semester (18 Units)
Spring Semester (16 Units)
KIN 301 (4)
KIN 300 (2)
KIN 300 (1)
KIN 325 (3)
KIN 350 (4)
KIN 360 (4)
KIN 410 (3)
Nutrition (3)
GE (C1, E) (6)
EDSS 442 (4)

SUMMER SESSION:: 9 Units
KIN 400 (3)
EDSS 418 (3)
EDSP 433 (3)

SENIOR YEAR:: 35 Units
Fall Semester (18 Units) Spring Semester (17 Units)
KIN 300 (1)
EDSS 458 (12)
KIN 305 (4) EDSS 459 (3)
KIN 460 (3)
KIN 404 (2)
EDSS 443A (1)
EDSS 443B (2)
EDSS 444 (3)
EDSS 446 (4)

## III. Exercise Science Concentration

Students who have an interest in biomechanics or pre-physical therapy may select this concentration. It contains lower-division and upper-division courses beyond the core required of all majors and a set of courses specific to the subspeciality within the concentration.
Lower-Division Exercise Science Core
CHEM 115AB/116AB General Chemistry*
PHYS 209/210 General Physics*
Upper-Division Exercise Science Core
KIN 340/342 Emergency Response or Principles of Musculoskeletal Injuries
KIN 430/495 Field Experience/Special Studies
Total in the Exercise Science core

* GE courses.
** Students planning to enter a master's degree program in physical therapy may need
to take additional units or courses to satisfy admission requirements to the programs.
Check with the academic schools to which you plan to apply for specific requirements.


## Areas of Emphasis in Exercise Science

Choose one of the following areas of emphasis to complete the exercise science concentration:

Pre-Physical Therapy
Biomechanics

Specific content of areas of emphasis is detailed below.
Pre-Physical Therapy Emphasis

PSY 425 Abnormal Behavior
BIOL Elective related to physical therapy

Total units in the concentration

Total units in the major 52
Biomechanics
MATH 161 Calculus $4^{*}$
KIN 300 Analysis of Motor Performance 2
Total units in the concentration 24
Total units in the major 52

* GE courses


## IV. Lifetime Fitness Concentration

Prepares individuals for careers in the allied fields of fitness, health, wellness, and paramedical occupations. Those who work with exercise must have an understanding of intra-and interpersonal aspects of exercise adherence, as well as knowledge of the structure and function of the human body. They must know exercise physiology and the mechanics of human motion; and they must possess skills in planning and carrying out appropriate exercise programs and treatment regimes for the healthy individual who desires lifetime fitness goals, as well as for the individual with unique needs due to a developmental concern or musculoskeletal injury. This concentration incorporates coursework in exercise history, philosophy, sociology, and psychology; exercise physiology and biomechanics of movement; adapted physical education and emergency / sports medicine; and health education, while providing opportunities for internships \& field experiences.
KIN 340 Emergency Response 3
KIN 342 Principles of Musculoskeletal Injuries 3
KIN 426 Individualized Assessment and Program Design 4
KIN 430/495 Field Experience/Internship 3
KIN 442 Musculoskeletal Evaluation, Training, and Treatment 4
KIN 446 Exercise Instruction 3
Electives * Choose a minimum of 2 courses (below)
KIN 404 Theory of Coaching (2)
KIN 427 Individuals with Disabilities in Education and Recreation (3)
BIO 318 Biology of Aging (3)*
BUS 150 Business and Society (3)
GERN 300 Basic Gerontology (3)*
NURS 473 Health Education and Drug Abuse (3)
PSY 201 Human Potential (3)
PSY 408 Transitions in Adult Development (4)
PSY 421 Psychology of Aging (4)
SOC 317 Emotions and Adult Life (3) ${ }^{\star}$
Total units in the concentration

Total units in the major

25-28

$$
4
$$

[^4]
## 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 preOccupational Therapy, pre-Physician's Assistant, pre-Chiropractic, sports management, community recreation, and others.
Students, in consultation with their advisors, shall define and describe in writing the specific theme they would like their Interdisciplinary Concentration to be in and select a minimum of 24 units of coursework to fulfill program requirements. Courses in kinesiology and those offered by other departments are appropriate and may be applied to this track. A minimum of 3 units, and not more than 6 units, in Field Experience (KIN 430) and/or Special Studies (KIN 495) must be taken. The proposed study list must be signed by the student and advisor and submitted to the department chair for approval. A copy of the signed, approved study list is placed in the student's advising folder.

| Total units in the concentration | $25-28$ |
| ---: | ---: |
| Total units in the major | $51-54$ |

## Careers

Lifetime Fitness
The Lifetime Fitness concentration prepares students for admittance into professional degree programs

- Athletic Trainer
- Others

Or certifications that require a baccalaureate degree

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

And advanced professional preparation for careers

- Emergency Medicine EMT/Paramedic
- Fitness
- Massage Therapy
- Wellness

Physical Education

- Teaching middle school and high school (B.S. degree leads into the Single Subject Credential Program which certifies graduates to teach in public schools).
- Coaching in public schools and at the collegiate level.
- Graduate Programs in
- Physical Education (M.A., M.Sc.)
- Adapted Physical Education
- Curriculum and Instruction
- Education Administration
- Teach/coach at a community college (M.A. required).

Adapted Physical Education - Physical Education For Individuals With Disabilities

- Work in public schools, community recreation centers, hospitals and other clinical settings, junior colleges, colleges, and universities;
- Work with infants, children, and adults with all kinds of disabilities;
- Teach adapted physical education to students and also mentor classroom and general physical education teachers (requires Single Subject Credential); and
- Graduate Programs in
- Adapted physical education
- Special education

Students planning to apply to a graduate program in physical therapy Completing the Kinesiology degree with the Exercise Science concentration, pre-physical therapy option, will satisfy many of the course requirements (or recommendations) which are prerequisites for admission to a physical therapy program. While there are similarities across physical therapy programs, there are also differences from one graduate program to another. Students are urged to contact personally any graduate school they may wish to consider and request admission requirements. Information can be obtained from the American Physical Therapy Associate website: http://www. apta.org.
No single list of prerequisites can be totally complete and accurate. The list on the previous page summarizes current requirements for some programs in California, and the requirements are similar to other programs. It is suggested that you use the attached list as general guidelines until a specific school or schools are selected.

## Additional Considerations

- Plan on a minimum of two years beyond the bachelor's degree to complete a physical therapy program. Actual time varies by program.
- Find out if the Graduate Record Examination (GRE) is required and what minimum score is accepted.
- Strengthen your oral and written communication skills.
- Apply to several programs.
- Usually a 3.0 GPA is required; however, many schools actually use a 3.3 or higher GPA.
- Get extensive field experience, have excellent letters of recommendation, prepare a strong portfolio, and be prepared for a good interview.
- Some programs may not take less than a "B" in a prerequisite course; some will not accept a repeat grade if the original grade was a "C" or better.
- Many programs require that prerequisites be taken in the last 5-10 years; this varies from school to school.
- DO NOT take prerequisite courses for CR/NC.
- Take elective courses in related fields, especially the biological sciences.
- Talk to physical therapists and other pre-pt students, and be active in the pre-health professions clubs on campus.


## Minor in Kinesiology

Students majoring in other disciplines may complete a minor in kinesiology to further their career goals. The minor requires a minimum of 22 units and includes a core of 12 to 13 units (required of all students) and a minimum of 9 to 10 units of electives. The minor in kinesiology may be desirable for credential candidates pursuing a second teaching area or a career in coaching; for management students entering sport/fitness businesses; for those involved in outdoor recreation programs; for students in performing arts desiring a physical education/dance background. Students pursuing a kinesiology minor must consult with a departmental advisor for program requirements. A copy of a signed approved study list is placed in the student's advising folder.

## Minor Core Requirements

KIN 330A Measurement and Evaluation
Choose one course from the following:
KIN 301 History and Philosophy of Human Movement (4) or
KIN 315 Sociology of Sport (3) or
KIN 410 Lifespan Motor Development (3)
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) and BIOL 224, Human Physiology (4) ]

Total units in the minor core

## 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

## 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, athletic training, 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

## M.A. Electives

In consultation with and receiving approval from an advisor, select an additional 9 -unit study plan. For example, a student who wishes to pursue an emphasis in sport pedagogy will select from the following list of electives:

KIN 521 Curriculum Design \& Analysis in Physical Education (3)
KIN 522 Research and Issues in Physical Education Teacher Education (3) EDSS 444 Teaching in the Content Area (Physical Education) (3) EDCT 558 Educational Technology and Classroom (3) EDCT 560 Instructional Design and Technology (3)

Total units in M.A. electives

Total units in the M.A. degree

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;
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 admissions to the Master's Degree Program in Kinesiology. This application must include:
a. Two letters of recommendation from individuals familiar with the candidate's academic work;
b. A written personal statement indicating the applicant's academic and professional interests and goals.

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

## Conditionally Classified Graduate

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

## Classified Graduate

Classified graduate students are those who have completed all admissions requirements and undergraduate course work and have been admitted to the University and the master's degree program in the Department of Kinesiology.
Please see the Degree Requirements section in this catalog for postbaccalaureate degree requirements. The graduate coordinator serves as advisor to all conditionally classified graduate students until the students select a major advisor and advance to classified graduate status.

## Advancement to Candidacy for the M.A. Degree

The Advancements to Candidacy form (GSO1) describes the culminating project and verifies that the student has met the Writing Proficiency Requirement. This form must be approved by all members of the student's project committee and the department graduate coordinator before being forwarded to the Associate Vice President for final review and approval prior to granting of the M.A. degree.

## LATIN AMERICAN STUDIES

ADVISORS
Robert McNamara / Political Science (707) 664-2676
Elizabeth Martinez / CALS, Modern Languages (707) 664-3161
Theresa Alfaro-Velcamp / History (707) 664-2278

## 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 a foreign language is not required, the study of Spanish, Portuguese, or indigenous languages 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 category, and not more than three courses from any one discipline. Classes used for general education may not be applied toward the minor. Students interested in the minor can contact one of three advisors, Robert McNamara in Political Science, Elizabeth C. Martinez in two departments, Chicano and Latino Studies and Modern Languages and Literatures, or Theresa Alfaro-Velcamp in History.

## Regional Courses

GEOG 392 Latin America: Culture and Environment (3-4)
HIST 339 Ancient and Colonial Latin America (4)
HIST 342 Modern Latin America (4)
POLS 453 Politics of Latin America (4)
SPAN 307 Latin American Cultures (4)
CALS 480 Latin American Migration to the United States

## Specialized Courses

ECON 403 Seminar in International Development (4) GEOG 318 Field Experience, Baja California (3)

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)

## Supporting Electives

Any courses focusing on Latin America in art, literature, philosophy, music, economics, Chicano and Latino studies, Native American studies, or liberal studies approved by the advisor for the minor in Latin American Studies.

## LIBERAL STUDIES UKIAH

UKIAH RESIDENT PROGRAM DEPARTMENT OFFICE
Nichols Hall 220
(707) 664-2029
www.sonoma.edu/socsci/ukiah.html
PROGRAM COORDINATOR
Sandra Harrison Feldman
Stevenson Hall 3004
(707) 664-2437

## Program Offered

Bachelor of Arts in Liberal Studies
School of Social Sciences

## Ukiah Resident Program

Sonoma State University offers an upper-division program in Ukiah leading to a Bachelor of Arts in Liberal Studies, with an emphasis on international 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

$$
\left.\begin{array}{ll}
\text { Requirements for the Major (all upper division) } \\
\text { Humanities (American multicultural studies, theater arts, } \\
\text { art history, anthropology, English, philosophy) } \\
\text { Behavioral sciences (economics, geography, } \\
\text { political science, psychology, sociology, } \\
\text { women's and gender studies, history) }
\end{array}\right) 16
$$

## 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 56 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 and Critical Thinking.
4. Students must have completed both the science laboratory requirement and the mathematics requirement in General Education, Category B - Natural Sciences and Mathematics.
5. Students must have been admitted to Sonoma State University and declared a major in Liberal Studies Ukiah.

## Application to the Program

Students should follow the application procedures described in the application section of this catalog, being sure to list the major as Liberal Studies Ukiah, and the major code as 49016. More information about the program may be obtained by calling the Liberal Studies Ukiah program office, (707) 664-2029.

## Sample Four-Semester Plan for Bachelor of Arts in Liberal Studies Ukiah Program

This plan assumes the student:

1. Has completed 66 transferable units, including all lowerdivision GE courses; and
2. Is attending full time. Since fields, rather than courses, are required for the major, the plan shows the way that the student would complete course work in each of the required fields, as well as the elective units within the major.

JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| Natural Science (3) | Natural Science (3) |
| Humanities (3) | Humanities (3) |
| Behavioral Science (3) | Behavioral Science (3) |
| Humanities (3) | Humanities (3) |
| Behavioral Science (3) | Behavioral Science (3) |
| SENIOR YEAR:: 24 Units |  |
| Fall Semester (12 Units) | Spring Semester (12 Units) |
| Behavioral Science (3) | Major Elective (3) |
| Humanities (3) | Major Elective (3) |
| Behavioral Science (3) | Major Elective (3) |
| Humanities (3) | Major Elective (3) |

## LINGUISTICS

PROGRAM OFFICE
Stevenson 2070
(707) 664-2419

LINGUISTICS PROGRAM COORDINATOR
Richard J. Senghas, Department of Anthropology/Linguistics
LINGUISTICS PROGRAM ADVISORS
Richard J. Senghas, Professor, Anthropology/Linguistics
Greta Vollmer, Assoc. Professor, English
Mira Katz, Asst. Professor, English
Jeffrey Reeder, Assoc. Professor, Modern Languages (Spanish)
Jorge Porras, Assoc. Professor, Modern Languages (Spanish)
Robert Train, Asst. Professor English
Hee-won Kang, Professor, Education
Karen Grady, Assoc. Professor, Education
Kelly Estrada, Asst. Professor, Education
TESL CERTIFICATE PROGRAM COORDINATOR
Richard J. Senghas

## Faculty

Richard J. Senghas

## Programs Offered

Minor in Linguistics
Supplementary English Language Development (SELD)
The fundamental concern of linguistics is with description and explanation of the interrelatedness of thinking and using language. This concern takes many forms: among others, inquiry into the nature of language as speech or signing, as knowledge, and as communication; inquiry into the history of languages and how languages change; inquiry into how language is acquired, and into the nature of language learning and teaching.

The linguistics minor offers grounding in general linguistic principles, together with the widest possible selection of elective courses. Through this study plan, students are able to develop interests in particular areas of linguistics as strong complements to majors in related disciplines.

As of Spring 2008, the TESL certificate within the Linguistics Program has been discontinued in order to facilitate the development of a more comprehensive program to be offered by the SSU School of Education. Students who were enrolled in the TESL Certificate Program prior to Spring 2008 should consult the TESL program coordinator for details regarding completing the program. Students not enrolled in the TESL Certificate Program prior to Spring 2008 who are interested in TESL training, please contact Prof. Karen Grady in the School of Education.

The TESL course of study meets 23 of the 30 units required for
alternatives in the fifth-year program in education (please see the Education section in this catalog) and combined with the LING 200 prerequisite, also fulfills the requirements for a linguistics minor. Interested persons should contact the Linguistics Program coordinator and the coordinator of fifth-year programs in education.

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

One of the following introductory courses:
LING200 Intro to Linguistic Studies (3)
ENGL341 Exploration in Language (4)
SPAN304 Introduction to Spanish Linguistics (4)
The core course in descriptive linguistics:
LING400 Linguistic Analysis (4)
One of the following courses in linguistic methods:
ANTH480 Methods in the Study of Language Use (4)
ENGL489 Topics in Linguistics (4)*
ENGL588 Seminar: Study of Language (4)*
SPAN400 Special Topics in Linguistics (4)*
SPAN490 Seminar in Linguistics (4) ${ }^{\star}$

* Course counts toward linguistics methodology requirement if course topic is methodological.

Total Units in the Minor Core

## 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;
- All course mentioned above as transition courses satisfying the TESL certificate requirements (see Program Coordinator for current list); and
- Pre-approved elective courses:

AMCS355 Language \& Ethnicity (4)
ANTH380 Language, Culture \& Society (4)
ANTH382 Language Change (4)
ANTH383 Language in Sociopolitical Context (4)
ANTH386 Sign Languages and Signing Communities (4)
ENGL379 Pedagogical Grammar (4)
PHIL383 Philosophy of Language (3)
Total elective units in the minor
Total units in the minor

## MATHEMATICS

DEPARTMENT OF MATHEMATICS AND STATISTICS
Darwin Hall 114
phone: (707) 664-2368
fax: (707) 664-3535
www.sonoma.edu/math
DEPARTMENT CHAIR
Ben Ford
ADMINISTRATIVE COORDINATOR
Marybeth Hull

## Faculty

William Barnier
Sam Brannen
Sharon Cabaniss
Jean Bee Chan
Ben Ford
Susan Herring
Izabela Kanaana
Brigitte Lahme
*Rick Luttmann
Elaine McDonald-Newman
Edith Prentice Mendez
Jerry Morris
Cora Neal
Scott Nickleach
Sunil Tiwari
*Faculty Early Retirement Program

## Programs Offered

## Mathematics

Bachelor of Arts in Mathematics
Bachelor of Science in Mathematics
Cooperative Master of Arts in Mathematics (with San
Francisco State University)
Minor in Mathematics
Minor in Math for Teachers
Preparation For Teaching
Statistics - See the Statistics portion of this Catalog
Bachelor of Arts in Applied Statistics (pending CSU approval expected Spring 2008)

Bachelor of Science in Statistics (pending CSU approval expected Spring 2008)

Minor in Applied Statistics
Preparation for Actuarial Exams
MATH 320 Modern Algebra I ..... 4
MATH 322 Linear Algebra ..... 3
MATH 360 Complex Variables ..... 3
MATH 418 Topology orMATH 440 Real Analysis II

\section*{About Mathematics <br> Mathematics is a rapidly growing discipline whose concepts and applications play an ever-increasing part in modern life. Mathematics has always been an essential tool in the physical sciences, and has more recently been applied extensively in such diverse areas as medical and biological research, environmental studies, management science, behavioral and social sciences, statistics, and, of course, computer science. <br> 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. <br> The B.A. in Mathematics provides preparation for teaching, general application of mathematics, and graduate study in mathematics. <br> The B.S. in Mathematics offers concentrations in applied mathematics and computer science. These programs prepare students for graduate study in mathematics and for work in a variety of other fields: computer science, work in government and industry, biostatistics, actuarial work, and consultative problem solving in modern industry. <br> | Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major | $45-55$ |
| Electives | $14-24$ |
| Total units needed for graduation | 120 |}

## Core Curriculum

MATH 161 Differential and Integral Calculus I (3 units in GE) ..... 4
MATH 211 Differential and Integral Calculus II4
MATH 220 Higher Mathematics: An Introduction ..... 3
MATH 261 Multivariable Calculus ..... 4
MATH 340 Real Analysis I ..... 4
Total units in core curriculum ..... 19
B.A. Program (Pure Mathematics)
Core Curriculum ..... 19 Plus
MATH 241 Differential Equations with Linear Algebra ..... 4
MATH 306 Number Theory or MATH 308 Geometry ..... 3

## Supporting Courses

MATH 180 Computing for Math/Science or
CS115 Programming I (3 units in GE)
2-4
PHYS 114 Intro to Physics (3 units in GE)

## B.A. Program (Secondary Teaching)

This B.A. program satisfies state requirements for subject matter preparation in mathematics for the Single Subject Teaching Credential.

## Core Curriculum

MATH 222 Elementary Applied Linear Algebra or
MATH 322 Linear Algebra
19 Plus

MATH 250 Probability and Statistics
MATH 306 Number Theory
MATH 308 College Geometry
MATH 310 History of Mathematics
3

MATH 316 Graph Theory and Combinatorics or
MATH 416 Graph Theory and Combinatorics
MATH 320 Modern Algebra I
4
MATH 345 Probability Theory or
MATH 470 Mathematical Modeling
MATH 390 Fieldwork and Seminar:
Secondary Mathematics Teaching
MATH 490 Capstone Seminar:
Secondary Mathematics Teaching

## Supporting Courses

MATH 180 Computing for Math/Science or
CS 115 Programming I (3 units in GE)
PHYS 114 Intro to Physics (3 units in GE)
Total units in secondary teaching program
Note: Students considering graduate school in mathematics are advised to choose MATH 322 as an additional course. MATH 241 is highly recommended.

## B.S. Program (Applied Mathematics)

This B.S. concentration prepares students for employment in industry and graduate schools in scientific fields.
Core Curriculum 19 Plus
MATH 241 Differential Equations with Linear Algebra ..... 4
MATH 316 Graph Theory and Combinatorics or
MATH 416 Graph Theory and Combinatorics ..... 3
MATH 322 Linear Algebra ..... 3
MATH 331 Differential Equations II ..... 3
MATH 345 Probability Theory ..... 4
MATH 352 Numerical Analysis ..... 3
MATH 360 Complex Variables or
MATH 431 Partial Differential Equations ..... 3
MATH 441 Operations Research ..... 3
MATH 470 Mathematical Modeling ..... 3

## Supporting Courses

MATH 180 Computing for Math/Science 2
PHYS 114 Intro to Physics (3 units in GE) 4
Total units in applied mathematics program

## B.S. Program (Computer Science Option)

This B.S. concentration prepares students for computer industry employment and graduate schools in computer-science-related fields. Students who are interested in the mathematical foundations of computer science generally opt for this major.
Core Curriculum ..... 19 Plus
MATH 241 Differential Equations with Linear Algebra ..... 4
MATH 316 Graph Theory and Combinatorics or
MATH 416 Graph Theory and Combinatorics ..... 3
MATH 322 Linear Algebra ..... 3
MATH 345 Probability Theory ..... 4
MATH 352 Numerical Analysis ..... 3
CS 110 UNIX ..... 1
CS 115 Programming I ..... 4
CS 215 Programming II ..... 4
CS 315 Data Structures ..... 4CS 415 Algorithm Analysis (4) orCS 355 Database Management Systems Design (4)* orCS 375 Computer Graphics (4)* orCS 454 Theory of Computation*3-4* Course may be substituted by arrangement with the math advisor.
Supporting Course
PHYS 114 Intro to Physics (3 units in GE) ..... 4
Total units in computer science program ..... 55-57

## Sample Four-year Program for Bachelor of Arts in Mathematics

## FRESHMAN YEAR:: 30 Units

Fall Semester (16 Units)
MATH 161 (GE) (4) Spring Semester (14 Units)

GE (3) PHYS 114 (GE) (4)
ENGL 101 (3) MATH 180 (2)
GE (3) GE (3)
Freshman Seminar (3) MATH 175 (elective) (1)

MATH 211 (4)
PHYS 114 (GE) (4)

| SOPHOMORE YEAR:: 29 Units |  |
| :---: | :---: |
| Fall Semester (13 Units) | Spring Semester (16 Units) |
| MATH 241 (4) | MATH 261 (4) |
| MATH 220 (3) | MATH 322 (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
|  | GE (3) |
| JUNIOR YEAR:: 32 Units |  |
| Fall Semester (16 Units) | Spring Semester (16 Units) |
| MATH 308 or Elective (3) | MATH 340 (4) |
| MATH 320 (4) | Elective or MATH 306 (3) |
| GE (3) | GE (3) |
| GE (3) | UD GE (3) |
| UD GE (3) | GE (3) |
| SENIOR YEAR:: 29 Units |  |
| Fall Semester (16 Units) | Spring Semester (13 Units) |
| MATH 418 or 440 or Elective (3) | MATH 360 (3) |
| UD GE (3) | MATH 420 or Elective (3) |
| Elective (3) | Elective (4) |
| Elective (3) | Elective (3) |
| Elective (4) |  |

TOTAL UNITS:: 120

## Statistics

For the Department's Statistics offerings (majors, minor, and actuarial science preparation), see the Statistics section of this Catalog.

## Cooperative Master of Arts in Mathematics

The Department of Mathematics participates in a cooperative Master of Arts in Mathematics with San Francisco State University. Through this program, students who have been accepted into the master's degree program at San Francisco State may complete up to 12 units of course work in residence at Sonoma State University. Students interested in this cooperative program should contact the chair of the Mathematics Department for further information.

## Minor in Mathematics

Twenty units of mathematics are required. These must include MATH 161 (or its equivalent) and at least 6 units of upper-division mathematics courses, not including MATH 300A, MATH 300B, MATH 390, MATH 395, MATH 399, or MATH 490. Approval of the Mathematics Department should be obtained by the junior year in order to plan the minor properly.

## Minor in Math for Teachers

This program provides the Mathematical background to teach effectively at the elementary, middle school, and early high school levels. Twenty-two units are required. These must include MATH 300A, MATH 103 or 150 , MATH 142 or 200 or 220, MATH 107 or 161, MATH 250 or 300B, and two courses chosen from MATH 306, MATH 310, MATH 316, and MATH 470. Additional recommendations for students pursuing this minor are MATH 390, and MATH 222 for those who intend to take the Mathematics CSET exam.

## Preparation for Teaching

## Secondary

The B.A. Program for secondary teaching is designed for students planning to teach mathematics in middle, junior high, and high schools. This program is fully accredited by the California Commission on Teacher Credentialing and satisfies the subject matter competency requirement for a Single Subject Teaching Credential. (An alternative route for demonstrating subject matter competence is passing a battery of commercial exams.) Most students complete the B.A. program, then a one-year teaching credential program to earn the Single Subject Credential. Any student interested in teaching mathematics at the secondary level should consult a Mathematics Department education advisor as early as possible in his or her college career. The advisor can provide information about Sonoma State's Single Subject Credential Program and can help the student design a plan for taking the required mathematics and education courses to complete both degree and credentialing requirements efficiently.

## Elementary

The Department of Mathematics also offers course work for students planning to teach in elementary schools or preschools. The minimal college-level mathematics preparation recommended for elementary teachers is three courses: MATH 150, MATH 300A, and MATH 300B. Particular subject matter preparation programs for elementary teachers may have additional requirements or may offer the option of a mathematics concentration; consult advisors in the program for additional details.

## Middle School or Elementary Mathematics Specialist

Students interested in teaching Mathematics in middle school, or in specializing in Mathematics at the elementary level, should consider the Math Minor for Teachers. This minor also helps students who wish to prepare for the CSET (California Subject Examination for Teachers) exam in Mathematics, especially at the Foundational level. The Foundational level credential in Mathematics is appropriate for elementary, middle, and early high school teaching.

## Entry-Level Mathematics (ELM) Requirement

Unless exempted, the Entry-Level Mathematics Examination must be taken within the past two years before enrollment in any general education course or developmental mathematics course (MATH 35 or 45 ). The ELM results will place the student in the appropriate level of mathematics courses. Note that if placement in the developmental mathematics sequence is necessary, satisfactory completion of MATH 45 is required for placement in MATH 103, 104, $105,107,111,131,141,150$, and 165 . Please consult the Schedule of Classes or telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

## Grading Policy in the Mathematics Department

## Nonmajors

All mathematics courses except MATH 35, 45, 103, 104, 105, 107, $111,131,141,150,161$, and 165 are available in the $\mathrm{Cr} / \mathrm{NC}$ grading mode to nonmathematics majors.

## All Students

MATH 175, 210, 295, 330, 390, 395, and 499 are available only as Cr/NC.

## Mathematics and Statistics Majors

A mathematics major must take all mathematics courses used to meet major requirements in the traditional grading mode, with the exceptions of courses offered only in the Cr/NC modes: MATH 107W, 161W, 175, 210, 211W, 295, 330, 390, 395, and 499, and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog). A maximum of 6 units total credit in MATH 330, 375, 395, and 499 may be applied toward any mathematics degree.
Majors are advised to take PHIL 102 for the GE category A3 (Critical Thinking).

## MODERN LANGUAGES AND LITERATURES

DEPARTMENT OFFICE
Stevenson Hall 3016
(707) 664-2351

DEPARTMENT CHAIR
Jeffrey T. Reeder
ADMINISTRATIVE COORDINATOR
Dolores Bainter

## Faculty

Tania de Miguel Magro / Spanish, Golden Age, Peninsular Literature, Cultures of Spain
Michaela Grobbel / German, Literature and Culture of the GermanSpeaking World, Ethnic Minority Studies, Feminist Studies, World Literature
Elizabeth Coonrod Martinez / Spanish, Research Skills, Latin American Literature, Culture, Research
Jorge Porras / Spanish, Theoretical Linguistics
Jeffrey Reeder / Spanish, Applied Linguistics, Portuguese
Christine Renaudin / French, French Literature, Culture, Francophone Studies
Suzanne Toczyski / French, French Literature, Culture, Francophone Studies
Robert Train/ Spanish, Sociolinguistics, Language \& Culture Learning Center Director

## Programs Offered

Bachelor of Arts in French
Bachelor of Arts in Spanish
Minor in French
Minor in German
Minor in Spanish
Courses in World Literatures in English
Students can also take advantage of programs offered by International Programs.

The programs and courses of the Department of Modern Languages and Literatures make accessible to students the languages, literatures, and cultures of France and the Francophone world, Germany and Europe, and Spain and Latin America. We recognize students' need for linguistic competency and cultural sensitivity in the multilingual, multicultural world in which they will live and work. Thus, language is taught as an integral part of its cultural context. Programs and courses are designed to complement academic work in many other fields.

For further information please consult the department's website at http://www.sonoma.edu/forlang/.

The Department of Modern Languages and Literatures offers major and minor programs in French and Spanish, and a minor program in German. (Students interested in German should also consider a major B.A. in Global Studies, Europe concentration.) Modern language courses are taught in the target language; functional control of all language skills (reading, writing, listening comprehension, and speaking) is a primary goal.

It is highly advisable that students combine a major or minor in modern languages with a major or minor in another discipline. Course work, minors, and majors in modern languages complement specialized knowledge and expertise in other academic areas. The structure of the modern languages major programs facilitates the planning of double majors and minors. In addition to majors and minors offered by other departments, interdisciplinary and career minor programs of special interest to modern languages students include the international studies minor and the minor in linguistics.

## Careers in Modern Languages and Literatures

Through careful academic planning, the study of modern languages and literatures can open a wide range of career options in such fields as international business, government service, domestic and international human services, travel, librarianship, translating and interpreting, and journalism. Many department alumni have pursued work in the Peace Corps and various other nonprofit entities; others have earned teaching credentials or advanced degrees in their discipline and teach at the elementary, secondary, or post-secondary levels. A degree in a second language is also an excellent preparation for a career teaching English as a second language (TESL). The Department of Modern Languages and Literatures successfully prepares students for graduate study in a wide variety of fields, particularly in combination with a second major or a minor. The importance of early and frequent consultation with departmental advisors cannot be overstressed. It is the key to meaningful access to academic and career opportunities, including internships both at home and abroad.

## International Programs

Through the International Programs of the California State University, Sonoma State University students may spend an academic year in residence at a university abroad. Courses taken abroad through the International Programs count as residence units in all University programs and can be integrated into an overall academic plan. For further information, contact the International Services Office, (707) 664-2582.

## Language and Culture Learning Center

The Language and Culture Learning Center is dedicated to enhancing the educational experience of students at Sonoma State University through the use of technology in learning modern languages and exploring world cultures. In keeping with Sonoma State's focus on liberal arts education, the Center strives to integrate learning technologies into students' educational experience in meaningful, personal, and individual ways.
The audio facility in 1028 Stevenson provides students with weekday access to language and culture learning materials representative of the courses taught in the Department of Modern Languages and Literatures. In addition to opportunities for listening, responding, recording, and playback of language tapes, the 1028 Stevenson facility also provides students with audio recordings of poetry, music, and other cultural materials, as well as viewing stations for videotapes. The Center's multimedia computer facility in 1040 Stevenson offers students the chance to participate in wholeclass activities and to independently supplement their classroom work through access to digital language learning materials available on CDs and the Internet. The Center's language mentoring program provides individual instruction and assistance to students enrolled in lower-division courses within the Department of Modern Languages and Literatures. For further information on the Language and Culture Learning Center at Sonoma State, please consult our website at www.sonoma.edu/forlang/lc2/.

## 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 $\quad 201$ or any other 200 course except 202
Four years 202 or any other 200 course except 201
Students who have taken an Advanced Placement (AP) exam and scored 3,4 , or 5 should contact an advisor in that language for specific information regarding placement and credit.
Please note that placement can be very individual, particularly for heritage speakers of a language. Any students who have reason to believe that their language skills are more advanced than this table would imply should consult with the instructor of the course in which they think they would benefit most.

Transfer students with college credit in a modern language may not receive credit for SSU courses in the same language that duplicates previous work. Exceptions may be made by the chair of the department when the following conditions are met:

1. The courses involved are lower-division; and
2. The original study was accomplished three or more years prior to enrollment in the equivalent course at Sonoma State University.

In addition to the four-year graduation plans detailed below, students pursuing the Bachelor of Arts in French or Spanish may also elect a five- or six-year plan. Please see an advisor for details.

## Course Challenges

Students may challenge courses, as provided in University procedures (please see more information in the Admissions section of this catalog). It is essential that students interested in this possibility consult instructors of the courses they wish to challenge at the start of the semester.

## Grade Requirements

## Undergraduate Progression and Retention in French and

 Spanish Majors: Students must maintain a minimum grade of C- in each course required for the major in French or Spanish; otherwise, the student will not be permitted to graduate in the major. The student may repeat the course if $s / h e$ does not earn the minimum grade. The student must receive a grade of C - or better when the course is repeated. This policy also applies to courses taken at other institutions, abroad or in the United States.
## Bachelor of Arts in French

The purpose of the French major is to enable students to attain an advanced level of competency in speaking, listening, reading, and writing, and to provide them with a comprehensive knowledge of the historic and contemporary culture and institutions of France and the Francophone world. The French language is studied not as an end in itself, but as a vehicle for students' broader and more informed participation in their chosen fields. Students who study French at SSU also have the option of completing a portion of the course work in France (Paris or Aix-en-Provence) or in Canada, and should visit the International Programs Office for details.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 32 |
| General electives | 37 |
| Total units needed for graduation | 120 |

[^5]
## Requirements for the Major

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

## Sample Four-year Program for Bachelor of Arts in French

Variations are easily accommodated in the sequencing of GE requirements, but should be made in consultation with an advisor. Note that courses designated as elective or minor total 37 units and could easily accommodate a second major (depending on the selected double major, which might require one or two additional courses). Careful planning and early identification of a second major make this feasible. A variation would be to complete the junior or senior year in the CSU International Program, meeting many upper-division French requirements in a single year, and completing the second major in the other upper-division year at SSU.

FRESHMAN YEAR:: 30 Units

| Fall Semester (14 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| FREN 101 (4) | FREN 102 (4) |
| FREN 101L (1) | FREN 102L (1) |
| GE A2 (3) | GE C1 (3) |
| GE A3 (3) | GE B1 (*1) (3) |
| GE B4 (3) | GE A1 (3) |
|  | Elective or Minor (2) |

SOPHOMORE YEAR:: 30 Units

Fall Semester (14 Units)
FREN 201 (*2) (4)
Spring Semester (16 Units)

FREN 201L (1)
FREN 202(*2) (4)

GE B3(*1) (3)
GE D3(*5) (3)

GE D2(*3) (3)
GE D4(*5) (3)
GE B2 (3)
GE C2 (3)

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)
FREN 300 (C4)(UD)(4)
FREN 321 (C4)(UD)(4)
GE D1 (UD) (3)
Elective or Minor (4)

Spring Semester (15 Units)
FREN 411 (C4)(UD)(4) FREN 415 (C4)(UD)(4)

GE E1 (UD) (3)
Elective or Minor (4)

4

Fall Semester (16 Units)
FREN 320 (C4) (UD) (4)
Elective or Minor (3)
Elective or Minor (3)
Elective or Minor (3)
Elective or Minor (3)

Spring Semester (14 Units)
FREN 410 (C4)(UD) (4)
FREN 475 (C4)(UD) (4)
Elective or Minor (3)
Elective or Minor (3)
(*1) One of B1 or B3 must have lab.
(*2) Counts as C4.
(*3) Important to take World History before upper-division French.
(*4) Can be an early prerequisite for business majors or minors, and might be taken earlier, or later, for those who decide at a later date on an internationally oriented career other than business.
(*5) Advantage of taking D3 and D4 together: understanding the U.S. Constitution in connection with U.S. history.

## Minor in French

## Requirements for the Minor

The French minor presupposes 15 units or the equivalent of FREN $101,102,201$, 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:
FREN 202 Oral French
FREN 300 Introduction to Literary Analysis \& Critical Writing
and one of the following pair of courses:
FREN 320 France Yesterday (4) and
FREN 410 French Literature (4); or
FREN 320 France Yesterday (4) and
FREN 321 France Today (4); or
FREN 321 France Today (4) and
FREN 411 French Literature (4)
and either FREN 415 Special Topics in French Culture (4); or FREN 475 Senior Seminar (4)

Total units in the minor

## 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 to understand US 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, such as in international business, economics, science, history, global stud-
ies, 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.

## Requirements for the Minor

The German minor program consists of a minimum of 20 units of college course work in German, of which 8 units must be in upperdivision courses. Additionally, German minor students must attain the "Zertifikat Deutsch," the internationally recognized proficiency certificate offered annually under the auspices of the Goethe Institute. Students who have successfully completed SSU's 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 courses:
GER 102 (4 Units)-Fall, Spring
Second Semester: Contemporary Germany
Prerequisite: GER 101 or consent of instructor.
Requires concurrent enrollment in GER 102L (1 Unit)
GER 200 (4 Units)-Fall
Intermediate German: The German-Speaking World Today
Prerequisite: GER 102 or consent of instructor.
Requires concurrent enrollment in GER 200 L (1 Unit)
GER 210 (4 Units)—Spring
Intermediate German through Film
Prerequisite: GER 102 or consent of instructor.
Requires concurrent enrollment in GER 210L
GER 314 (3 Units)-Fall
Literature and Culture of the German-Speaking World
Note: Requires concurrent enrollment for German Minor students in GER 399 L
Prerequisite for German minor students: GER 102 or consent of instructor.
Course may be repeated for credit if topic changes.
GER 300 (4 Units)—Spring
Advanced German Studies
Prerequisites: GER 200 and GER 210, or consent of instructor. Course may be repeated for credit if topic changes.

## Bachelor of Arts in Spanish

The culture and literary traditions of Spain, the growing interest in the politics, culture, and commerce of Latin America, the proximity of Mexico, and the presence of a large Spanish-speaking population in California and the University's service area all contribute to shape the curriculum of the Spanish program and provide excellent reasons for the study of Spanish. The Spanish program offers a full range of courses in language, literature, and culture, as well as interdisciplinary concentrations. Courses taken abroad in the CSU International Programs, with the exception of Span 490 and 491 (at least one of which must be taken in residence at SSU), may be counted toward the major or minor.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | $36-56$ |
| Electives/Other | $13-33$ |
| Total units needed for graduation | 120 |

## Spanish Placement Test

A free placement test is offered by the department. Students who have a background in Spanish, whether through study in high school or informal exposure, and have not previously taken a college Spanish course are strongly advised to take the placement test. The test takes approximately one hour. Information is available in the departmental office.

## Lower-Division Spanish Courses

These courses are prerequisites for the upper-division courses in the major and minor. Some or all of these courses or their equivalents may be waived by virtue of prior language study, courses in transfer, or placement in higher level courses.
SPAN 101 Basic Spanish, 1st Semester 4
SPAN 101L Language Laboratory 1
SPAN 102 Basic Spanish, 2nd Semester 4
SPAN 102L Language Laboratory 1
SPAN 201 Intermediate Spanish, 1st Semester 4
SPAN 201L Language Laboratory 1
SPAN 202 Intermediate Spanish, 2nd Semester 4
SPAN 202L Language Laboratory 1

## Electives

SPAN 150 Elementary Conversation 2
SPAN 250 Intermediate Conversation 2
Total units
20-24

## Spanish Minor

For a minor, students must complete $300,301,304$, and 305 , and either 306 or 307.
SPAN 300 Advanced Spanish Language
SPAN 301 Advanced Composition and Conversation
SPAN 304 Introduction to Spanish Linguistics
SPAN 305 Introduction to Literature and Research

Plus, either:
SPAN 306 Cultures of Spain or
SPAN 307 Cultures of Latin America

Total minor units

## Spanish Major

For the major, students must complete Spanish $300,301,304,305$, 306,307 , and three classes at the 400 -level, at least one of which must be Spanish 490 or Spanish 491 ( 490 or 491 must be taken in residence at SSU):
SPAN 300 Advanced Spanish Language
SPAN 301 Advanced Composition and Conversation
SPAN 304 Introduction to Spanish Linguistics
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,
SPAN 401 Peninsular Literature,
SPAN 402 Latin American Literature
SPAN 410 Spanish Translation, or
SPAN 427 Spanish Teaching Methodologies
Plus, either
SPAN 490 Seminar in Linguistics or
SPAN 491 Seminar in Literature
SPAN total units in the major

## 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

| Fall Semester (14 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| SPAN 101 (4) | SPAN 102 (4) |
| SPAN 101L (1) | SPAN 102L (1) |
| GE Electives (A2,A3,B4) (9) | SPAN 150 (2)) |
| GE Electives (C1,B1,A1) (9) |  |
| SOPHOMORE YEAR:: 30 Units |  |


| Fall Semester (14 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| SPAN 201 (4) | SPAN 202 (4) |
| SPAN 201 L (1) | SPAN 202 L (1) |
| GE Electives (B3,D2,C2,D5) (9) | SPAN 250 (2) |
|  | GE Electives (D3,D4,B2) (9) |
| JUNIOR YEAR:: 36 Units |  |
| Fall Semester (18 Units) | Spring Semester (18 Units) |
| SPAN 300 (4) | SPAN 301 (4) |
| SPAN 305 (4) | SPAN 304 (4) |
| SPAN 306 (4) | SPAN 307 (4) |
| GE UD (E1 and other) (6) | GE UD (C3, D1) (6) |
| SENIOR YEAR:: 19-28 Units |  |
| Fall Semester (11-16 Units) | Spring Semester (8-12 Units) |
| 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

DIRECTOR, CENTER FOR PERFORMING ARTS
Jeff Langley
DEPARTMENT OFFICE
Ives Hall 206
(707) 664-2324
www.sonoma.edu/performingarts
DEPARTMENT CHAIR
Brian S. Wilson
PROGRAM SPECIALIST
Mary Rogers

## Faculty

## Brass and Percussion

Pete Estabrook, trumpet
Ruth Wilson, horn
Michael Mendelson, trombone
Gary Meierhenry, tuba
Jennifer Wilsey, timpani, percussion

## Jazz

Mel Graves, program director, bass
Miles Ellis, vibes
Pete Estabrook, improv, jazz history, trumpet
Charlie McCarthy, saxophone
George Marsh, drum set
John Simon, jazz piano
Randy Vincent, guitar

## Keyboard

Marilyn Thompson, piano, chamber music, classical repertoire
John Simon, jazz piano
Yvonne Wormer, staff accompanist
Robert Young, staff accompanist

## Music Education

Brian S. Wilson, program director, instrumental conducting and methods
John Stanley, elementary and secondary methods
Lynne Morrow, vocal pedagogy
Roy Zajac, woodwind pedagogy
Ruth Wilson, brass pedagogy
Richard Loheyde, string pedagogy
Jennifer Wilsey, percussion pedagogy
Eric Cabalo, guitar pedagogy
Musicology And Ethnomusicology
Laxmi G. Tewari, ethnomusicology

John Palmer, musicology
Jeff Langley American, music history
Performing Ensembles - Instrumental
Brian Wilson, symphonic wind ensemble, jazz big band, brass ensemble, chamber wind ensemble
Marilyn Thompson, chamber music (chamber orchestra)
Mel Graves, concert jazz ensemble
Bob Affifi, Latin, jazz band
Jennifer Wilsey, percussion ensemble

## Performing Ensembles - Vocal

Bob Worth, chamber singers, Bach choir Laxmi G. Tewari, Indian singing ensemble
Lynne Morrow, opera and music theatre
Jenny Bent, SSU chorus

## Strings

Richard Loheyde, violin
Wayne Roden, viola
Judiyaba, cello
Mel Graves, bass
Eric Cabalo, classical guitar
Michael Rado, harp

## Theory/Composition \& Musicianship

Brian Wilson, theory, analysis, and composition
William Johnson, composition, analysis
Jeff Langley, composition, theory
John Palmer, aural skills and ear training
Mel Graves, jazz theory and composition
Jesus Contreras, music technology

## Voice

Lynne Morrow, mezzo-soprano, music theatre
Karen Clark, soprano, diction
Christopher Fritzsche, tenor, early music
Susan Witt-Butler, soprano

## Woodwinds

Kathleen Reynolds, flute
Daniel Celidore, oboe
Roy Zajac, clarinet
Rufus Olivier, bassoon
Charlie McCarthy, saxophone

## Programs Offered

Bachelor of Arts in Music
Applied Music Concentration
Jazz Studies Concentration
Liberal Arts Music Concentration
Bachelor of Arts in Music Education
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 both in music and related to music.

Three concentrations exist within the Bachelor of Arts in Music. The Liberal Arts Music Concentration provides a broad basis from which a student may pursue graduate studies or a variety of careers. The Jazz Studies Concentration trains the student in the techniques and practices of contemporary jazz styles. The Applied Music Concentration is intended for those having a special interest and promise in the following areas:

- Vocal/Choral Performance
- Instrumental Performance
- Opera/Music Theatre
- Composition and Music Technology
- World Music Studies

The Bachelor of Arts in Music Education prepares students to enter the teaching credential program in the School of Education.

All students are expected to consult with a music advisor prior to registering each semester; students in the Applied Music concentration should consult an advisor to plan appropriate electives for the specific area of study selected. Any student planning to do graduate work in music should consult a music advisor in time to plan a program that will support the intended graduate specialty. Students planning careers in business or in 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 $4 / 4,3 / 4$, and Latin tempos. They may submit a tape of a band in which they are featured. Music Education students shall write a one-paragraph statement on why they wish to teach.

Music Theatre students are encouraged to submit a DVD of themselves performing (singing and acting) in a musical.

Students may include more than one instrument/voice or musical style on their audition.

Please use the Audition Request Form to schedule auditions.
Send recorded auditions along with a cover letter to:
Music Department (Audition Materials)
Sonoma State University
1801 E. Cotati Ave.
Rohnert Park, CA 94928

## Scholarships

All music majors may also audition for a variety of scholarships. Scholarship audition information and application can be found on the department website. The scholarship audition can also serve as the program audition. Students living more than 250 miles from campus may send recorded auditions (CD or DVD).
Fill out the Scholarship Application and send all required materials to:

Music Department Scholarship Committee
Sonoma State University
1801 E. Cotati Avenue
Rohnert Park, CA 94928

## Proficiency Expectations

Basic keyboard skills and the ability to read standard musical notation are prerequisites to the music major curriculum. All entering and transfer students will be given placement examinations in piano, music theory, and aural skills (sight-singing and dictation) during orientation. Students with inadequate preparation in keyboard will be expected to take MUS 109 Intensive Keyboard Lab I. Students without background in any of these areas will also be expected to take MUS 106 Fundamentals.

Jazz Studies majors, whether continuing or transfer students, must complete MUS 320, Ear Training IV; MUS 212, Jazz Theory II; MUS 489, Jazz Improvisation III; MUS 317, Small Band Arranging; MUS 392, Jazz Piano II; and MUS 412, Jazz Composition in residence. Applied Music majors may elect to pass or successfully challenge two semesters of MUS 321 Aural Skills Practicum in place of MUS 320.

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.

## Capstone Experience

Liberal Arts Music majors and students in Jazz Studies and Music Education 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, a music education portfolio, an extended composition, a student instructed course, the preparation of a performing edition, or another project of substantial effort. Student performers enrolled in the Applied Music Concentration 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.

## Specific ensemble requirements for students in applied, liberal arts, and music education

The following are the major ensembles for vocalists in Applied, Liberal Arts, and Music Education:

SSU Chorus
Sonoma County Bach Choir
Musical Theatre Production
Musical Theatre Scenes Workshop
Indian Singing Ensemble
The major ensemble for woodwind, brass, and percussionists in Applied, Liberal Arts, and Music Education is the following:

Symphonic Wind Ensemble
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. In some instances, permission will be granted to substitute a minor ensemble for a major ensemble. This should not exceed two semesters. Minor ensembles for vocalists in Applied, Liberal Arts, and Music Education are Chamber Singers and Chamber Music. 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:

Contemporary Jazz Ensembles
Latin Jazz Ensemble
Jazz Big Band (at least one semester)
Symphonic Wind Ensemble (at least one semester)
Students are highly encouraged to also include minor ensembles in their course of study. In some instances, permission will be granted to substitute a minor ensemble for a major ensemble. This should not exceed two semesters. Minor ensembles for instrumentalists in the Jazz Studies Concentration are Chamber Music, Chamber Wind Ensemble, Brass Ensemble, Percussion Ensemble, and Guitar 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 Bachelor of Arts students and hour lessons for Bachelor of Arts in Music Education 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.

Students taking private lessons in the applied concentration in voice, classical instruments, percussion, and composition are required to register for the corresponding Repertoire Class. Music Education majors must complete two semesters of repertoire classes.

## Jury

Before the end of the sophomore year, the student must successfully complete a Junior Qualifying Jury in order to officially continue as a major. Incoming transfer students entering as juniors, will be required to pass a Junior Qualifying Jury prior to the end of their first semester in residence.

## Bachelor of Arts in Music

## Applied Music Concentration

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 51 |
| General electives | 18 |
| 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
MUS 109 Intensive Keyboard Lab I ..... 2
MUS 209 Intensive Keyboard Lab II ..... 2
Theory/Musicianship (23)
MUS 110 Theory I: Diatonicsm ..... 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
MUS420 Ear Training IV ..... 2
MUS 321 Aural Skills Practicum 3 semesters (1,1,1)
History/Literature (15)
MUS 150 Survey of U.S. Music ..... 3
MUS 251 History of Western Music - Ancient World to 1750 ..... 3
MUS 252 Historyof Western Music - 1750 to the Present ..... 3
MUS 300 Seminar (various topics) ..... 3
MUS 350 Survey of World Music ..... 3
Applied Skills (5)2
MUS 292 Jazz Piano I
MUS 392 Jazz Piano II
MUS 309A Keyboard Proficiency Lab
MUS 309B Keyboard Proficiency Lab
MUS 491 Senior Recital3
Private instruction (each semester in residence) ..... 8Transfer students must take lessons for every semester in residence.
Music Electives (minimum of 2 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

(Credit applicable toward graduation, but not the major.)
Students enrolled in private instruction in voice, composition, classical instruments, or percussion must enroll concurrently in MUS 151/451 - Repertory Class or MUS 425-Composers Forum for that area of specialty.

> Total units in the major

## Sample Four-year Program for Bachelor of Arts in

 Music - Applied Music Concentration
## FRESHMAN YEAR:: 29 Units

Fall Semester (15 Units)
Spring Semester (14 Units)
ENGL 101 (GE area A2) (3)
GE Mathematics (GE area B4) (3)
MUS 106 (3)
PHIL 101 (GE area A3) (3)
MUS 110 (3)
MUS 120 (2)
Music 209 (2)
MUS Elective (1)
Major Performing Ensemble (1)
Private Instructions (1)
Repertory Class (1)
Major Performing Ensemble (1)
Repertory Class (1)

SOPHOMORE YEAR:: 33 Units
Fall Semester (18 Units)
HUMS 200 (GE area A1) (3)
GE (area D3) (3)
MUS 210 (3), MUS 220 (2)
MUS 251 (3)
MUS 309A (1)
Major Performing Ensemble (1)
Private Instructions (1)
Repertory Class (1)

## JUNIOR YEAR:: 30 Units

Fall Semester (17 Units)
GE (area E) (3)
GE (area D4) (3)
MUS 150 (GE area C1) (3)
MUS 410 (3)
MUS 420 (2)
Major Performing Ensemble (1)
Private Instructions (1)
Repertory Class (1)

Fall Semester (15 Units)
GE (area B2) (3)
GE (area D5) (3)
GE (area C3) (3)
Major Performing Ensemble (1)
Private Instruction (1)
MUS 350 (area C4) (3)
MUS 321 (1)
Repertory Class (1)

SENIOR YEAR:: 28 Units
Spring Semester (13 Units)
GE (area D1) (3)
GE (area B1) (3)
MUS 300 (3)
Major Performing Ensemble (1)
Private Instruction (1)
MUS 321 (1)
Repertory Class (1)

Spring Semester (13 Units)
GE (area B3) (3)
GE (area C2) (3)
MUS 491 (3)
Major Performing Ensemble (1) Private Instruction (1)

MUS 321 (1)
Repertory Class (1)

TOTAL UNITS:: 120

## Jazz Studies Concentration

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 46 |
| Electives | 23 |
| Total units needed for graduation | 120 |

## Requirements For the Major

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

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

Complete all the following:

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

MUS 106 Fundamentals of Music Theory 3
MUS 109 Intensive Keyboard Lab I 2
MUS 120 Ear Training I 2
MUS 189 Jazz Improvisation I 1
MUS 209 Intensive Keyboard Lab II 2

## Theory/Musicianship (15)

MUS 112 Jazz Theory I 3
MUS 212 Jazz Theory II 3
MUS 220 Ear Training II 2
MUS 320 Ear Training III 2
MUS 420 Ear Training IV 2
MUS 321 Aural Skills Practicum (3 semesters) 1,1,1

## History/Literature (12)

MUS 252 History of Western Music - 1750 to the Present 3
MUS 342 History of Jazz 3
And two of the following four courses: ( 6 units) 6
MUS 150 Survey of U.S. Music
MUS 251 History of Western Music - Ancient World to 1750
MUS 300 Seminar (various topics)
MUS 350 Survey of World Music

## Applied Skills (16)

MUS 292 Jazz Piano I 1
MUS 317 Small Jazz Band Arranging 3
MUS 389 Jazz Improvisation II 3
MUS 392 Jazz Piano II 1
MUS 412 Jazz Composition 3
MUS 489 Jazz Improvisation III 3
MUS 490 Senior Project 2

## Music Electives (minimum of 3 units)

Courses will vary according to area(s) of interest-seedepartmentadvisor.

## Private Instruction (each semester in residence)

Transfer students must take lessons for every semester in residence.
(Credit applicable toward graduation, but not the major.)

## Ensembles (each semester in residence)

(See section on performance ensemble requirement. Credit applicable toward graduation, but not the major.)

## Sample Four-year Program for Bachelor of Arts in Music - Jazz Studies Concentration

## FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)
ENGL 101 (GE area A2) (3)
GE Math (GE area B4) (3)
Major Performing Ensemble (1)
Music Elective (1)
MUS 109 (2)
MUS 342 (3)
Elective (1)
Private Instruction (1)

SOPHOMORE YEAR:: 32 Units

Fall Semester (18 Units)
GE (area D2) (3)
HUMS 200 (GE area A1) (3)
MUS 212 (3)
MUS 220 (2)
MUS 292 (1)
Major Performing Ensemble (1)
MUS 489 (3)
Private Instruction (1)
Music Elective (1)

Fall Semester (17 Units)
GE (area E) (3)
GE (area D4) (3)
MUS 150 (GE area C1) (3)
MUS 412 (3)
Major Performing Ensemble (1)
Private Instruction (1)
MUS 420 (2)
Elective (1)

Spring Semester (14 Units)
GE (area D3) (3)
GE (area C2) (3)
MUS320 (2)
MUS 392 (1)
Major Performing Ensemble (1)
Private Instruction (1)
Music Elective (1)
Elective (2)

## JUNIOR YEAR:: 33 Units

Spring Semester (16 Units)
GE (area D1) (3)
GE (area B1) (3)
MUS 300 (3)
MUS 317 (3)
Major Performing Ensemble (1) Private Instruction (1)

MUS 321 (1)
Elective (1)

Spring Semester (15 Units)
PHIL 101 (GE area A3) (3) Music elective (1)
Private Instruction (1)
MUS 112 (3)
MUS 389 (3)
MUS 209 (2)
Elective (1)
Major Performing Ensemble (1)

Fall Semester (13 Units)
GE (area B2) (3)
GE (area D5) (3)
MUS 350 (GE area C4) (3)
Major Performing Ensemble (1)
Private Instruction (1)
MUS 321 (1)
Elective (1)

| SENIOR YEAR:: $\mathbf{2 5}$ Units |  |
| :--- | ---: |
| Fall Semester (13 Units) | Spring Semester (12 Units) |
| GE (area B2) (3) | GE (area B3) (3) |
| GE (area D5) (3) | GE (area C3) (3) |
| MUS 350 (GE area C4) (3) | MUS 321 (1) |
| Major Performing Ensemble (1) | MUS 490 (2) |
| Private Instruction (1) | Major Performing Ensemble (1) |
| MUS 321 (1) | Private Instruction (1) |
| Elective (1) | Elective (1) |

TOTAL UNITS:: 120

## Bachelor of Arts in Music Education

Degree Requirements

Units

General education (including 6 units in Music) 51
Major requirements ( 75 units minus 6 units) 69
Total units needed for graduation 120

## Requirements for the major

The Music Education concentration is a B.A. program that provides the skills necessary for teaching music in public or private schools in California. It is recommended for anyone planning a teaching career in music.
The program consists of a core of basic music major requirements, plus specialized courses for prospective teachers of vocal, instrumental, and general music in elementary, junior high, and senior high schools.

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

MUS 106 Fundamentals of Music Theory 3

MUS 109 Intensive Keyboard Lab I 2

MUS 209 Intensive Keyboard Lab II

## Theory/Musicianship (15)

MUS 110 Theory I: Diatonicism 3
MUS 210 Theory II: Chromaticism 3
MUS 310 Theory III: Form and Analysis 3
MUS 120 Ear Training I 2
MUS 220 Ear Training II 2
MUS 320 Ear Training III 2
History/Literature (12)
MUS 150 Survey of U.S. Music 3
MUS 251 History of Western Music:
Ancient World to 1750
MUS 252 History of Western Music: 1750 to Present 3
MUS 350 Survey of World Music 3

## Applied Skills (20)

MUS 259 Music Technology: Tools and Applications 3
MUS 289 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 490 Senior Project 1
And two of the following four courses (2 units) 2
MUS 292 Jazz Piano I
MUS 392 Jazz Piano II
MUS 309A Keyboard Proficiency
MUS 309B Keyboard Proficiency
Methods Courses (7)
MUS 415 Vocal Methods
MUS 418 Guitar Methods
MUS 422 Strings Methods
MUS 423 Woodwinds Methods
MUS 424 Brass Methods
MUS 429 Percussion Methods
MUS 440 Vocal Instrumental Proficiency Jury
Music Electives (minimum of 5 units)
Courses vary according to area of interest. Consult advisor.
Private Instruction (each semester in residence)
Transfer students must take lessons for every semester in residence

## Major Ensembles

Each semester in residence

## Repertory Class

(Credit applicable toward graduation, but not the major.)
Students enrolled in private instruction in voice, percussion, or classical instrumentals must enroll concurrently in MUS 151/451 Repertory Class for that area of specialty for a minimum of 2 semesters.

Total units in the major (6 included in GE)

## Sample Four-year Program for Bachelor of Arts in Music Education

FRESHMAN YEAR:: 30 Units

Fall Semester (15 Units)
ENGL 101 (GE area A2) (3)
GE Mathematics (GE area B4) (3)
MUS 150 (GE area C1) (3)
MUS 289 (2)
MUS 115 (1)
Private Lessons (1)
Major Performing Ensemble (1)
Repertory Class (1)

Spring Semester (15 Units)
PHIL 101 (GE area A3) (3)
GE (area D2) (3) MUS 118 (1) MUS 110 (3) MUS 120 (2)
Private Lessons (1)
Major Performing Ensemble (1)
Repertory Class (1)

Fall Semester (18 Units)
GE (area D3) (3)
MUS 210 (3)
MUS 220 (2)
MUS 251 (3)
MUS 259 (3)
Spring Semester (15 Units)
HUMS 200 (GE area A1) (3)

MUS 424 (1)
Private Lessons (1)
Major Performing Ensemble (1)
MUS 309A (1)
JUNIOR YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :---: | :---: |
| GE (area E) (3), GE (area D4) (3) | *EDUC 417 (GE area D1) (3) |
| MUS 350 (GE area C4) (3) | GE (area B1) (3) |
| MUS 400 (2), MUS 422 (1) | MUS 300 (3) |
| Private Lessons (1) | MUS 314 (2), MUS 401 (2), MUS 429 (1) |
| Major Performing Ensemble (1) | Private Lessons (1) |
| MUS 420 (2) | Major Performing Ensemble (1) |
| SENIOR YEAR:: 33 Units |  |
| Fall Semester (17 Units) | Spring Semester (16 Units) |
| GE (area B2) (3), GE (area D5) (3) | GE (area B3) (3), GE (area C2) (3) |
| GE (area C3) (3) | MUS 403 (3), MUS 490 (1) |
| MUS 402 (3) | Private Lessons (1) |
| Private Lessons (1) | Major Performing Ensemble (1) |
| Major Performing Ensemble (1) | MUS 440 (1) |
| *EDSS 418 (3) | *EDSP 433 (3) |

TOTAL UNITS:: 128

* 9 Units are Prerequisites for Admission to the Single Subject Program, not counted in major


## Teaching Credential Preparation In Music

The music education curriculum stated above is identical to the subject matter competency portion of the teaching credential.

In order to acquire the music teaching credential, the student must complete this concentration, a B.A., and a two-semester program in the School of Education. The music education advisor will guide the student through the program.
Nine units of prerequisites are needed to enter the Credential Program: EDSS 417, EDSS 418, EDSP 433.
The Integrated Program is available to freshmen. This program prepares students to teach music in the elementary schools, middle schools, junior high schools, and high schools in California. Students in this program take course work 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.

## Sample Four-year Integrated Program for Bachelor of Arts in Music Education and Teaching Credential

FRESHMAN YEAR:: 32 Units

Fall Semester (16 Units)
ENGL 101 (GE area A2) (3)
GE Mathematics (GE area B4) (3)
MUS 150 (GE Area C1) (3)
MUS 289 (2), MUS 115 (1), MUS 118 (1)
Private Lessons (1)
Major Performing Ensemble (1)
Repertory Class (1)

SOPHOMORE YEAR:: 36 Units
Fall Semester (19 Units)
GE (area D3) (3)
MUS 210 (3), MUS 121 (2)
MUS 251 (3)
MUS 259 (3), MUS 424 (1), MUS 422 (1)
Private Lessons (1)
Major Performing Ensemble (1)
MUS 309A (1)

SUMMER SESSION:: 6 Units
HUMS 200 (GE area A1) (3)
EDSS 418 (3)

## JUNIOR YEAR:: 34 Units

Fall Semester (18 Units)
GE (area E) (3), GE (area D4) (3)
MUS 350 (GE area C4) (3)
MUS 400 (2), MUS 402 (3)
Private Lessons (1)
Major Performing Ensemble (1)
MUS 420 (2)
Spring Semester (16 Units) GE (area B1) (3), EDSP 433 (3) MUS 403 (3)
MUS 300 (3)
MUS 314 (2)
Private Lessons (1)
Major Performing Ensemble (1)

SUMMER SESSION:: 6 Units
GE (area B3) (3)
GE (area C2) (3)

SENIOR YEAR:: 35 Units

Fall Semester (17 Units)
GE (area B2) (3), GE (area D5) (3)
GE (area C3) (3)
EDSS 444 (3)
EDSS 443A/B (3)
Private Lessons (1)
Major Performing Ensemble (1)

Spring Semester (18 Units)
EDSS 458 (12), EDSS 459 (3)
MUS 490 (1)
Private Lessons (1)
Major Performing Ensemble (1)

## Liberal Arts Music Concentration

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 43 |
| Remaining requirements | 26 |
| Total units needed for graduation | 120 |

## Requirements for the Major

The courses listed below constitute the Liberal Arts Concentration in Music. A student satisfactorily completing these courses, along with other University requirements, will earn a B.A. with a major in music. All students are encouraged to consult an advisor about arranging individually tailored programs of study.

Complete all the following:

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

MUS 106 Fundamentals ..... 3
MUS 109 Intensive Keyboard Lab I ..... 2
MUS 209 Intensive Keyboard Lab II
Theory/Musicianship (15)
MUS 110 Theory I: Diatonicism ..... 3
MUS 210 Theory II: Chromaticism ..... 3
MUS 310 Theory III: Form and Analysis ..... 3
MUS 120 Ear Training I ..... 2
MUS 220 Ear Training II ..... 2
MUS 320 Ear Training III ..... 2
History/Literature (15)
MUS 150 Survey of U.S. Music ..... 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 ..... 3
Applied Skills (4)And 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 LabMUS 490 Senior Project2
Private Instruction (each semester in residence)Transfer students must take lessons for every semester in residence.(Credit applicable toward graduation, but not the major.)
Music Electives (minimum of 9 units)

## Ensembles (each semester in residence)

(See section on Performance Ensemble Requirement.
Credit applicable toward graduation, but not the major.)
Total units in the major

## Sample Four-year Program for Bachelor of Arts in Music - Liberal Arts Music Concentration

## FRESHMAN YEAR:: 28 Units

| Fall Semester (13 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| ENGL 101 (GE area A2) (3) | PHIL 101 (GE area A3) (3) |
| GE MATH (GE area B4) (3) | HUMS 200 (GE area A1) (3) |
| MUS 106 (3) | MUS 110 (3) |
| MUS 109 (2) | MUS 120 (2) |
| Major Performing Ensemble (1) | Major Performing Ensemble (1) |
| MUS 209 (2) |  |
| Private Instruction (1) | Private Lesson (1) |
| SOPHOMORE YEAR:: 31 Units |  |
| Fall Semester (17 Units) | Spring Semester (14 Units) |
| 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 250 (GE area C1) (3) |
| MUS 309A (1) | Major Performing Ensemble (1) |
| Major Performing Ensemble (1) |  |
| MUS 250A (3) | MUS 309B (1) |
| Private Instruction (1) | Private Instruction (1) |
| JUNIOR YEAR:: 27 Units |  |

Fall Semester (12 Units)
GE (area E) (3)
GE (area D4) (3)
MUS 350 (GE area C4) (3)
Major Performing Ensemble (1)
MUS 321 (1)
MUS 321 (1)
Private Instruction (1)
Spring Semester (15 Units)
GE (area D1) (3)
GE (area B1) (3)
MUS 300 (3)
Music Elective (3)
Major Performing Ensemble (1)
Private Instruction (1)

Private Instruction (1)

## SENIOR YEAR:: 30 Units

Fall Semester (14 Units)
GE (area B2) (3)
GE (area D5) (3)
GE (area C3) (3)
Major Performing Ensemble (1)
MUS 321 (1)
Music Elective (3)
Spring Semester (16 Units)

Music Elective (3)

TOTAL UNITS:: 116

## 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 <br> Complete all the following: <br> MUS 105 Music Theory for Non-Majors <br> or MUS 106 Fundamentals of Music Theory 3 <br> MUS 110 Theory I: Diatoncism 3 <br> MUS 120 Ear Training I 2 <br> Ensemble courses 4 <br> Elective in music 2 <br> Upper-division lecture course 3 <br> And one of the following courses: (3 units) 3 <br> MUS 150 Survey of U.S. Music <br> MUS 250 Survey of European Music (3) <br> Ancient World to 1750 <br> Total units in the minor

Jazz Studies Concentration
Complete all the following:
MUS 110 Theory I: Diatonicism ..... 3
MUS 120 Ear Training | ..... 2
MUS 112 Jazz Theory I ..... 3
MUS 212 Jazz Theory II ..... 3
MUS 292 Jazz Piano I ..... 1
MUS 342 History of Jazz ..... 3
MUS 389 Jazz Improvisation II ..... 3
Performing Ensemble ..... 2
Total units in the minor ..... 20
World Music (Ethnomusicology) Concentration
One of the following courses: ..... 3MUS 150 Survey of US MusicMUS 250 Survey of European MusicCALS 368 Chicano Latino MusicAll of the following:
MUS105 Music Theory for Non-Majors ..... 3
MUS 321 Aural Skills Practicum $(1,1)$ ..... 2
MUS 350 Survey of World Music ..... 3
MUS 120 Ear Traininig I ..... 2
MUS 370 Music \& Dance in the World Religion ..... 3
THAR 373 Dances of the World ..... 3
MUS 353 Indian Singing Ensemble ..... 1
Recommended but not required:
MUS 300 Seminar* ..... 3*
MUS 480 Special Topics ..... 1
20

## NATIVE AMERICAN STUDIES

PROGRAM OFFICE
Nichols Hall 214
(707) 664-2458

COORDINATOR
Michael Ezra
ADMINISTRATIVE COORDINATOR
Perce Smith

## Faculty

Edward D. Castillo / California Indian Culture and History, American Indian Religion \& Philosophy, Native American Education and North American History
Duane BigEagle / Native American Religion, Literature, and Art Gregory Sarris / Native American Literature

## Program Offered

Minor in Native American Studies
The Native American Studies program is designed to provide a minor with a multidisciplinary approach to Native Americans through ethnography, history, sociology, and the humanities. By approaching the multiplicity of Indian cultures from a variety of academic perspectives, a deeper understanding of native societies past and present, will emerge. The program is designed to present a variety of American Indian experiences and issues within the wider context of human history and evolution. The program is especially interested in providing teachers, community service personnel, tribal administrators, and other interested persons with useful skills in dealing with this unique community. Special emphasis will be placed on assisting educators with practical and theoretical approaches to Indian education. Students in Native American studies are encouraged to apply toward the NAMS minor selected courses from history, anthropology, art, CALS, AMCS, and Education.

Students may develop a special major in Native American studies; those interested should review the guidelines for special majors and consult the program coordinator.

## Minor in Native American Studies

The suggested pattern for completing the minor is:

## Minor Core Requirements

NAMS 200 Introduction to Native Americans (3) or NAMS 205 Introduction to Native American Arts (3)

NAMS 346 Philosophic Systems and Sacred Movements in Native North Americans

Total units in minor core

## Minor Electives

Select 10 Units From the Following Courses:
NAMS 300 Experimental (1-5)
NAMS 354 Native American Literature (3)
NAMS 338 Native Americans and the Cinema (3)
NAMS 400 Special Topics in Native American Studies (1-4)
NAMS 410 Seminar in an Individual Native American Culture (4)
NAMS 412 Native California History and Culture (4)
NAMS 414 Native American Cultures of the Southwest (4)
NAMS 418 Regional Historical Studies (4)
NAMS 420 Fundamentals of Native American Education (1-4)
NAMS 430 Advanced Native American Workshop (4)
NAMS 442 Contemporary Affairs of Native Americans of California (4) NAMS 495 Special Studies (1-4)

Total units in minor electives
(707) 664-2465
www.sonoma.edu/nursing
DEPARTMENT CHAIR
Liz Close
ADMINISTRATIVE STAFF
Ana Munoz
Eileen O'Brien

## Faculty

Anita Catlin
Liz Close
Carole Heath
Deborah Kindy
Jeanette Koshar
Deborah A. Roberts
Wendy Smith
Melissa Vandeveer
Mary Ellen Wilkosz

## Programs Offered

## (Fully Accredited by the NLNAC)

Bachelor of Science in Nursing Prelicensure B.S.N. R.N. to B.S.N.

Master of Science in Nursing Family Nurse Practitioner Leadership and Management (concentration in Nursing Administration, Clinical Nurse Leader, or Nursing Education) Direct Entry Master of Science in Nursing (Entry Level Master's Program)
Post-Master's Certificate, Family Nurse Practitioner
Sonoma State University's mission is reflected in the Department of Nursing's commitment to provide a foundation for lifelong learning and graduate nurses who practice within a broad cultural perspective, affirm intellectual and aesthetic achievements as a part of the human experience, develop professional leadership, foster flexibility and resilience, and contribute to the health and well-being of the world at large. The Department of Nursing recognizes nursing as a nurturing response, based upon a blend of art and science, occurring within a subjective and objective environment with the aim of developing the well-being of both nurse and client (client as individuals, families, communities, and organizations). Consistent with the philosophy and objectives is the consideration of students as unique individuals with varied ethnic and cultural backgrounds, learning styles, and goals.

The Department of Nursing provides opportunities for learning using a variety of traditional and technology mediated strategies. Courses may be taught using televideo conferencing technology, interactive and real-time electronic communications via computer for lecture, small-group and seminar discussions, self-paced and self-directed independent study, and Internet tools that support lifelong intellectual and professional development.
The Department of Nursing enjoys a collaborative relationship with the health care delivery community within its service area and beyond. Consequently there are many clinical opportunities available. Students are placed in a variety of community-based hospitals and health care agencies. Graduates of both the baccalaureate and master's programs are well prepared for careers in a variety of health care settings and roles in the community.
Sonoma State University's nursing programs are approved by the California State Board of Registered Nursing and accredited by the National League for Nursing Accrediting Commission, from which information about tuition, fees, and length of program may be obtained, either in writing or by telephone at National League for Nursing, 350 Hudson Street, New York, NY, 10014, (212) 989-9393.

## Bachelor of Science in Nursing

The undergraduate nursing program provides two entry options to obtain a baccalaureate degree in nursing:

1. A prelicensure program option that prepares the student to become a licensed Registered Nurse (R.N.); and
2. An R.N.-B.S.N. program option for the licensed R.N. with an Associate Degree or the equivalent.

All graduates of the baccalaureate program are prepared to plan and provide patient care; to teach patients, families, and staff; and to provide leadership in the delivery of health care services. The Bachelor of Science in nursing program offers students an opportunity to become a liberally educated professional, qualified for certification as a public health nurse, and completely prepared for graduate education in nursing. The prelicensure option also prepares the graduate for the R.N. licensure examination.
Eligible applicants should visit the website, www.sonoma.edu/ nursing, for further information.

## Prelicensure B.S.N. Option

The prelicensure option consists of two components: the prenursing curriculum in which the student enrolls in the prerequisite courses for the nursing program; and the prelicensure curriculum, in which the student is admitted on a competitive basis to take the courses required for R.N. licensure and complete requirements for the Bachelor of Science in nursing degree.
The prerequisite courses may be taken at either Sonoma State University or another university or community college. For admission
to the Prelicensure Option of the B.S.N. program, SSU students must submit a supplemental application to the Nursing Department between November 1 and February 28. Transfer students must submit an application to SSU and a supplemental application to the Nursing Department. Applications are available on the department's website at www.sonoma.edu/Nursing.

## Admission to Pre-Nursing Status

 (for the Prelicensure Option)Students applying directly from high school must meet the following criteria:

1. Standard SSU admission criteria.
2. High school chemistry and biology with a GPA of 3.00 (B) or better.
3. Overall high school GPA of 3.0 or better.
4. Eligibility Index of 3700 or higher

Community college transfer students must meet the following criteria:

1. Standard SSU transfer criteria.
2. B average in nursing prerequisite science courses.
3. Overall college GPA of 3.0 or higher.

## Admission to the Prelicensure Option

(final three years of degree program)
Nursing is an impacted program and therefore requires a supplemental application to the Nursing Department in addition to the application to Sonoma State University. Students applying for admission to the prelicensure option in the B.S.N. program must submit:

1. Transcript verification of completion of GE categories A (Written and Oral Analysis, Fundamentals of Communication, and Critical Thinking) and B (Natural Sciences and Mathematics [Statistics required for Nursing]);
2. Overall GPA of 3.00 or higher;
3. GPA of 3.00 or higher in prerequisite science courses: BIOL $220,218,224$, and CHEM 105 or equivalent;
4. Results of the Test of Essential Academic Skills (TEAS);
5. Health care experience (written verification of at least 50 hours of volunteer or paid work in a setting where the role of Registered Nurses can be readily observed);
6. Essay (criteria are included in the application packet); and
7. Recommendations (forms included in the application packet).

Requirements for the Prelicensure B.S.N. OptionUnits

| General education | $* 48$ |
| :--- | ---: |
| Major requirements | 58 |
| Support courses | 14 |
| General electives | 4 |
| Total units needed for graduation | 124 |

[^6]
## Required Courses for the Prelicensure Option Bachelor of Science in Nursing

YEAR 1 (Pre-Nursing)

| Fall Semester | Spring Semester |
| :--- | ---: |
| BIO 115 (3) | BIO 218 (4) |
| CHEM 105 (5) | BIO 224 (4) |
| BIO 220 (4) | Written \& Oral Analysis (Speech) GE (3) |
| ENGL 101 (3) | MATH GE (Math 165 Statistics required) (4) |

## YEAR 2

$\overline{\text { (Admission to the prelicensure option of the B.S.N. program is required from this }}$ point forward)

Fall Semester Spring Semester

| NURS 200 (3) | NURS 206 (3) |
| :--- | ---: |
| NURS 203 (2) | NURS 208 (3) |
| NURS 205 (3) | NURS 210B (4) |
| NURS 210A (4) | NURS 300 (3) |

YEAR 3

| Fall Semester | Spring Semester |
| :--- | ---: |
| NURS $340(3)$ | NURS $380(3)$ |
| NURS 342 (3) | NURS $385(3)$ |
| NURS $345(4)$ | GE and other degree requirements |
| PSY $302(3)$ |  |
| GE and other degree requirements |  |

YEAR 4

| Fall Semester | Spring Semester |
| :--- | ---: |
| NURS $404(3)$ | NURS $425(4)$ |
| NURS $405(3)$ | NURS $450(3)$ |
| NURS $415(1)$ | Elective (3) |
| NURS $440(3)$ | GE and other degree requirements |
| GE and other degree requirements |  |

## R.N. to B.S.N. Option

Sonoma State University's baccalaureate program also offers an upper-division option designed to articulate with community college Associate Degree Nursing (ADN) programs. The SSU program provides upper-division education for Registered Nurses fostering expanded practice and function with increased independence in a variety of settings.
R.N.s who have attended a hospital (diploma) program should contact a community college with 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. degree.

## Admission to the R.N.-B.S.N. Option

1. Current California licensure as a Registered Nurse. (Recent ADN graduates who have not yet received California R.N. licensure but who otherwise meet admission requirements will be accepted on a conditional basis pending 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 course work. Applicants may be admitted to SSU and the Nursing program without having yet completed Critical Thinking and/or Statistics, but must complete these requirements in their first semester at SSU;
3. Minimum of 3 semester units of college-transferable credit in general chemistry with a grade of C or better; and
4. Human anatomy and physiology within the past 10 years or direct clinical nursing experience within the past two years.

## Requirements for the R.N.-B.S.N. Option

General Education (39 units may be transferred*
from a community college or university)
Upper Division GE at SSU

## Major Requirements

Lower division nursing at community college or university ( 13 of the 44 units of Upper Division Nursing course work below may also be awarded for community college nursing course work)
Upper division at SSU
General electives and prereq sciences
Total units needed for graduation
*3 units of Area E will be satisfied upon completion of the nursing major to meet the 48-unit GE requirement (for transfer students).

Required Nursing Major Courses for the R.N.-B.S.N. Option and Sample Two-Year Program

The sequence below is for full-time students. A part-time sequence that can be completed in six semesters is also available from the Nursing Department and on the website.

YEAR 1

| Fall Semester | Spring Semester |
| :--- | :---: |
| NURS $305(3)$ | NURS $300(3)$ |
| NURS $312(4)$ | NURS $313(4)$ |
| NURS $404(3)$ | NURS $348(6)$ |
| PSY $302(3)$ | NURS $405(3)$ |
|  | NURS $415(1)$ |
|  | NURS $440(3)$ |


#### Abstract

Fall Semester NURS 425 (4) NURS 450 (3) NURS 388 (7) Upper Division GE in residence (3)


## L.V.N. 30-Unit Option

LVNs interested in an LVN-BSN program are encouraged to contact the Indiana State University LVN-BSN program offered in California through a state approved partnership with SSU. Students will be graduates of Indiana State University.
Contact Millie Adkins, ISU-California LVN-BSN Program Coordinator, for more information, 800/496-9613, madkins5@isugw.indstate.edu
The LVN 30-Unit Option includes only those nursing courses required for R.N. licensure and qualifies L.V.N.s to take the NCLEX-RN, but does not earn a B.S.N. To be admitted to the,LVN 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 $\mathrm{C}(\mathrm{a} \mathrm{C}$ - is not acceptable) in a required nursing course, the student will not be permitted to continue in the nursing major. The student may petition the faculty to repeat the course. If approval is granted, the student must receive a grade of C or better in the course when repeated. If a minimum grade of $C$ is not attained, the student will not be eligible to continue in, or graduate from, the B.S.N. program.

## Master of Science in Nursing

The goal of the graduate curriculum is to provide advanced professional education to nurses with a B.S.N. or equivalent. The graduate degree in nursing is designed to respond to society's needs for professional nurses who influence the structure of emerging patterns of health care practice and delivery. Specialization in an area of nursing practice or function enables graduates to effectively address current and future societal health needs. Graduates support the development and refinement of nursing science by assuming advanced clinical and leadership roles within the profession and by participating in research and other scholarly activities.
The curriculum includes a core of instruction with an emphasis on theoretical and conceptual foundations of nursing practice, research, professional issues, and leadership. One option offers specialization as a Family Nurse Practitioner (FNP), with emphasis on advanced clinical primary care practice. A second option, nursing leadership and management ( $\mathrm{L} \& \mathrm{M}$ ), prepares nurses for executive leadership functions and responsibilities in current and emerging health care systems and offers concentrations in nursing administration, clinical nurse leader, or education.

The Department of Nursing also offers a Direct Entry Master of Science in Nursing program designed specifically for the student with a baccalaureate degree in a discipline other than nursing who wishes to become a Registered Nurse with a graduate focus in the Clinical Nurse Leader concentration of the Leadership and Management option. The department website (www.sonoma.edu/ nursing) contains in-depth information about this program.

## Application Procedures

The standard CSU application form must be submitted (available from the SSU Office of Admissions and Records). In addition, applicants must:

1. Meet the minimum admissions requirements for the chosen option (FNP or L\&M);
2. Submit a supplemental Nursing Department application form; and
3. Submit three letters of recommendation (on departmental forms).

Application packets are available on the Nursing Department website, www.sonoma.edu/nursing. Applicants who have received their B.S.N. from SSU also need to submit a standard CSU application and supplemental nursing application to apply for graduate standing at SSU.

## M.S.N. Pathways option (for Registered Nurses with a Bachelor's Degree in a discipline other than nursing)

Admission to the Department of Nursing's Master of Science program requires the foundation and skills equivalent to a Bachelor of Science degree in nursing. For those Registered Nurses who hold a baccalaureate degree in a field other than nursing, the department offers a Pathways Option in preparation for admission to the master's program. This option provides an individualized plan of study considering the student's background and chosen master's option (Family Nurse Practitioner or Leadership and Management)

Pathways Program Admissions Procedure: In addition to the standard California State University application, an MSN Pathways application must be submitted. Applications are available on the department website, www.sonoma.edu/nursing.
Admission Status: Initial status will be "conditionally classified" while the student is fulfilling requirements for B.S.N. equivalency and other graduate admissions criteria. Completion of the Pathways option permits the student to be considered in the applicant pool but does not guarantee admission to the graduate nursing program.

## Culminating Experience

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

## Family Nurse Practitioner Specialty Option

The purpose of the Family Nurse Practitioner specialty option is to prepare Registered Nurses with a bachelor's degree in nursing for
advanced clinical practice with an emphasis on promoting individual and family wellness. The FNP specialty focuses upon the theoretical and scientific bases for the diagnosis and management of common illness as well as health teaching, counseling, and preventive services. Emphasis is placed upon advanced clinical skills that include history-taking, physical examination, health screening, management of common illnesses, and techniques of prevention and risk reduction. Graduates may work in clinics, health maintenance organizations, schools, and medical practices as primary health care providers.

## Admissions Requirements

1. B.S.N. degree (RNs with a bachelor's in an area other than nursing, please see previous section on MSN Pathways option);
2. GPA of 3.00 in the last two years ( 60 units) of undergraduate or post-graduate study;
3. Current California licensure as a Registered Nurse;
4. Completion of a course in statistics; completion of a course in physiology/pathophysiology within the last seven years; completion of a physical assessment course in the summer prior to beginning the FNP specialty courses (Students may challenge the physiology requirement by taking the NLN test. See the department website at www.sonoma.edu/nursing for details.);
5. Completion of courses(s) in community health nursing required for Public Health Nursing Certificate; and
6. Full-time experience as an R.N. preferred.

## Curriculum Features

Students have a three-semester clinical preceptorship with a primary care provider. Students and faculty share responsibility for finding an acceptable preceptor. Content includes health needs and risks of all family members, family theories, and legal and professional issues pertinent to nurse practitioners. Content taken concurrently with the clinical sequences includes health risk assessment of individuals and families, pathophysiological concepts in diagnosis and treatment of common illness, pharmacology, and practice issues pertinent to nurse practitioners.
Students complete a comprehensive exam for the culminating experience that serves as evidence of successful integration of the diverse content areas in the curriculum.
The SSU family nurse practitioner specialty option meets criteria specified in Section 1484, Title 16, of the California Administrative Code and is approved by the California State Board of Registered Nursing.

## Accelerated FNP Option

Registered Nurses with a B.S. who are nurse practitioners may progress more rapidly through the program using a series of challenge examinations. A maximum of 12 semester units from prior course work and challenge examinations may be counted toward the MSN degree. A total of 28 units must be taken in residence
at SSU. Students are evaluated individually to determine which courses have been met by prior course work and which courses may be challenged. By using this option, it is possible for eligible students to receive credit for some of the didactic courses and for most of the clinical experience required for FNP preparation.

## Post-Master's Family Nurse Practitioner Certificate Option

The Certificate Option is a 31-unit course of study designed for Registered Nurses who hold a master's degree in nursing who wish to become family nurse practitioners. Application is through the Department of Nursing (no university application is required).

## Curriculum for Full-time Progression for Master of Science in Nursing - Family Nurse Practitioner

The sequence below is for full-time students. A part-time sequence that can be completed in six semesters is also available from the Nursing Department and on the website.

YEAR 1

| Fall Semester (13 Units) | Spring Semester (12 Units) |
| :--- | ---: |
| NURS $501(3)$ | NURS 540B (4) |
| NURS $540(2)$ | NURS 550B (5) |
| NURS $549(3)$ | NURS 505 (3) |
| NURS 550A (2) |  |
| NURS 552 (3) |  |

YEAR 2

| Fall Semester (9 Units) | Spring Semester (6 Units) |
| :--- | ---: |
| NURS 500A (3) | NURS 500B (3) |
| NURS $504(2)$ | NURS $510(3)$ |
| NURS 550C (4) | Culminating Experience |

TOTAL UNITS:: 40

## Leadership and Management Specialty Option: Nursing Administration, Clinical Nurse Leader, and Nursing Education Concentrations

The Nursing Leadership and Management Specialty Option includes the core graduate nursing curriculum and selection of one of three areas of concentration: Nursing Administration, Nursing Education, or Clinical Nurse Leader. The core curriculum grounds the master's prepared nurse in research and evidence based practice, health policy, health care organization and financing, ethics, professional role development, and the theoretical foundations of nursing practice. The selected area of concentration builds on the core curriculum as follows:

- Nursing Administration: This concentration emphasizes systems analysis, organizational development, leadership, continuous quality improvement, economics and financial management, information systems, human resource/outcomes management, managed care and integrated delivery systems, marketing and sales strategies, and negotiation
strategy. Graduates are prepared to assume nursing leadership positions in a variety of health care services delivery venues.
- Nursing Education: Competencies highlighted in this concentration include facilitating learner development and socialization, assessment and evaluation in didactic and clinical environments, curriculum development, instructional design and delivery in higher education, and educational program evaluation. Graduates are prepared to teach in community college or university nursing programs or provide professional education in health care organizations.
- Clinical Nurse Leader: The Clinical Nurse Leader concentration prepares students with advanced clinical skills in physical assessment, pathophysiology and pharmacology, outcomes management, patient advocacy, education, information management, microsysystems analysis, and team management. Graduates are prepared at an advanced generalist level in patient care delivery and the associated environment and improving patient care from a systems perspective.


## Admission Requirements

1. B.S.N. degree (R.N.s with a baccalaureate degree in an area other than nursing, please see section on MSN Pathways program);
2. GPA of 3.00 in the last two years ( 60 units) of undergraduate or post-graduate study;
3. Current California licensure as a Registered Nurse;
4. Completion of a course in statistics; and
5. Completion of courses(s) in community health nursing.

## Curriculum

The Nursing Administration, Nursing Education, and Clinical Nurse Leader concentrations are managed in class cohorts and admission may not be made to each concentration every year. Check with the department on the status of admissions to your desired concentration. Students enroll in an average of 8 units per semester. Courses are taught in a variety of formats including the traditional classroom, teleconference, and Internet.

The first year of study focuses on the acquisition of a theoretical base in nursing, the health care delivery system, advanced practice issues, and ethics. The second year incorporates nursing administration, clinical nursing leadership, nursing education theories, financial management, quality management, and human resources. Students analyze and evaluate organizational and management theories in relation to the provision of health care and nursing care delivery systems. A final semester residency program provides for application of theoretical knowledge with a mentor in a health care agency selected by the student in consultation with faculty. Students tailor their plan of study and select the focus for their residency based on their professional background and career goals. Students complete a culminating experience that serves as evidence of successful integration of the diverse content areas in the curriculum.

## MSN - Leadership and Management Curriculum

Core courses required for all students
Course \# Course Title Units
NURS 500A Scholarly Inquiry I ..... 3
NURS 500B Scholarly Inquiry II ..... 3
NURS 504 Policy \& Politics of Health Care ..... 2
NURS 505 Ethics in Healthcare ..... 3
NURS 506 Systems Management in Health Care ..... 4
NURS 515A Financial Management in Health Care Organization ..... 4
Total units ..... 19
Concentrations
Students take 13 units in their concentration
Administration Concentration (13 units) ..... Units
NURS 515B Financial Management II ..... 4
NURS 530 Nursing Leadership Theory ..... 4
NURS 535 Residency ..... 5
Education Concentration (13 units)
NURS 522A Instructional Process inHigher Education I4
NURS 522B Instructional Process inHigher Education II4
NURS 535 Residency ..... 5
Clinical Nurse Leader Concentration (13 units)
NURS 509 Adv. Assess. \& Clinical Decision-Making ..... 3
NURS 516 Pathophys \& Pharm Issues in Nursing ..... 3
NURS 535 Residency ..... 5
NURS 536 CNL Professional Role Development ..... 2
Total units in L\&M concentration courses ..... 13
Total units for the degree ..... 32

## Direct Entry Master of Science in Nursing Program

The Department of Nursing also offers an Entry Level Master of Science in Nursing Program titled "Direct Entry Master of Science in Nursing" (DEMSN) designed specifically for the student with a baccalaureate degree in a discipline other than nursing who wishes to become a Registered Nurse with a graduate focus as a Clinical Nurse Leader. The Clinical Nurse Leader is a generalist clinician, systems analyst, outcomes manager, information manager, educator, advocate, and team manager. For additional information about the role see the American Association of Colleges of Nursing web site http://www.aacn.nche.edu/CNL/. The SSU program is an intensive five semester program during which pre-licensure and graduate courses are taught concurrently each semester. Important features of the program are:

1. Eighteen continuous months of study;
2. Extensive use of online education strategies;
3. Simultaneous integration of undergraduate and graduate nursing curricula; and
4. Curriculum designed to prepare Clinical Nurse Leaders.

DEMSN graduates are awarded a Master of Science degree in Nursing and are eligible for the R.N. licensing exam (NCLEX) at the end of the program. Graduates are immediately employable as staff nurses and have the opportunity to continue a variety of educational pursuits of individual interest as well as market opportunity.

## Admission Requirements

Baccalaureate or higher degree in a discipline other than nursing. Minimum 3.0 GPA in the last 60 units of undergraduate or postgraduate study.
Minimum 3.0 GPA in college level, nursing major prerequisite courses:

- Integrated chemistry (5 units)
- Human Anatomy (4 units, lab)
- Human Physiology (4 units, lab)
- Microbiology (4 units, lab)
- Statistics (3 units)
- Human Growth and Development [across the lifespan] (3 units)

Students are also required to have completed a certified nursing assistant (CNA) course prior to beginning the program.

## DEMSN Clinical Nurse Leader Curriculum

The DEMSN curriculum is presented in five continuous semesters/ sessions. Each semester consists of course work and clinical experience. The didactic portion of the curriculum is delivered primarily online through the Internet using up-to-date distributive education strategies and technology. Clinical experiences occur in a variety of local hospitals, clinics, and other health care delivery systems.
The highly motivated, flexible, self-directed learner is likely to be successful in this program.

## Curriculum for Direct Entry <br> Master of Science in Nursing - Clinical Nurse Leader

Course \# Course Title Units

YEAR 1

Spring Semester
NURS 200 Nursing in Health and Illness 3
NURS 203 Basic Pharmacology for Nurses 2
NURS 208 Nursing Applications of Pathophysiology 3
NURS 210A Clinical Practicum I 4
NURS 506 Systems Management in Health Care 4
Total 16

Summer Session
NURS 206 Psychiatric/Mental Health Nursing 3
NURS 210B Clinical Practicum II 4
NURS 502 Pathophysiologic Basis of Nursing Care 3
NURS 509 Advanced Assessment 3
$\begin{array}{lcc} & \text { Total } & 13 \\ \text { Fall Semester } & & \\ \text { NURS } 380 \text { Care of Individuals and Families } & & 3 \\ \text { with Complex Needs } & \end{array}$
NURS 385 Clinical Practicum Care of Individuals
\& Families with Complex Needs
NURS 507 Community Health Nursing Theory 3
NURS 515A Financial Management 3
NURS 500A Scholarly Inquiry I 3
Total
15

## YEAR 2

Spring Semester
NURS 340 Women's Health in the Expanding Family 2
NURS 342 Child Health in the Expanding Family 2
NURS 345 Clinical Practicum with Expanding Families 3
NURS 500B Scholarly Inquiry II 3
NURS 514 Community Health Nursing Practicum 3
Total 13
Summer Session
NURS 504 Policy and Politics of Health Care 2
NURS 505 Ethics in Health Care 3
NURS 525 Clinical Residency 3
NURS 526 CNL Professional Role Development 2
Total 10
Total units required 67

## Graduate Nursing Progression and Retention

Should a graduate nursing student not attain a minimum grade of B- (a $\mathrm{C}+$ 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 MSN program.

DEPARTMENT OFFICE
Nichols Hall 363
(707) 664-2163
www.sonoma.edu/philosophy/
DEPARTMENT CHAIR
John Sullins
ADMINISTRATIVE COORDINATOR
Brenda Cloney

## Faculty

Roger Bell
Ada Jaarsma
Gillian Parker
John Sullins
Andy Wallace

## Programs Offered

Bachelor of Arts in Philosophy
Minor in Philosophy

## The Philosophical Life

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

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

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

## Faculty and Curriculum

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

## Advising

Advising begins with an initial advising interview with the department chair. During the following semester the student will choose a regular faculty advisor.

## Bachelor of Arts in Philosophy

A major in philosophy involves a core of courses required of all majors, one senior seminar, and 18 elective units in philosophy chosen by the student. Core courses provide overviews of the major areas of philosophy, whereas elective courses may be more specialized or experimental in content and method.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements: | 42 |
| Core (24), Electives (18) | 27 |
| General electives | 120 |

## Major Core Requirements

PHIL 101 Critical Thinking (these GE A3 units do not count for the major) (3)
PHIL 102 Introduction to Logic
PHIL 120 Introduction to Philosophy 3
PHIL 202 Proseminar
PHIL 302 Ethics and Value Theory
(these GE C3 units do not count for the major) (3)
PHIL 290 Studies in Ancient Philosophy
PHIL 295 Studies in Modern Philosophy 3
PHIL 305 Truth 3
PHIL 310 Being 3
PHIL 400 Senior Seminar 3
Total units in the major core
Teaching of senior seminars rotates among full-time department members, and at least one is offered each semester. PHIL 400 may be repeated twice for credit when the subject matter and instructor are not repeated.
In exceptional cases, the Philosophy Department permits the design of an individual major. A proposal for an individual major must be approved by three members of the full-time faculty selected by the applicant. These three faculty members shall constitute the student's major committee.

The major requirement is thus 42 units: 24 core units and 18 units of electives. Students may petition for elective units to be transferred in from outside the department.

## Sample Four-year Program for Bachelor of Arts in Philosophy

## FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| PHIL 101 (A3) or | ENGL 101 (3) |
| ENGL 101 (A2) (3) | PHIL 102 or PHIL 101 (3) |
| PHIL 102 (A3) (3) | GE (6) |
| GE (6) | Electives (3) |
| Electives (3) |  |
| SOPHOMORE YEAR:: 30 Units |  |
| Fall Semester (15 Units) | Spring Semester (15 Units) |
| PHIL 202 (3) | PHIL 295 (3) |
| PHIL 290 (3) | GE (6) |
| HUMS 200 (3) | Electives (6) |
| GE (3) |  |
| Electives (3) |  |
| JUNIOR YEAR:: 33 Units |  |
| Fall Semester (15 Units) | Spring Semester (18 Units) |
| PHIL 305 (3) | PHIL 310 (3) |
| PHIL 302 (C3) (3) | Philosophy Electives (6) |
| Philosophy Elective (3) | GE (6) |
| GE (6) | Electives (3) |
| SENIOR YEAR:: 27 Units |  |
| Fall Semester (15 Units) | Spring Semester (12 Units) |
| PHIL 400 (3) | Philosophy Electives (6) |
| Philosophy Elective (3) | Electives (6) |
| GE (3) |  |
| Electives (6) |  |

TOTAL UNITS:: 120

## Minor in Philosophy

The minor in philosophy consists of 18 units chosen by the student in consultation with a department advisor. No more than 6 of these 18 units may be lower-division GE courses. The 12 remaining units must be upper division courses offered by the Philosophy Department. Course substitutions must be approved by the Department Chair. All courses must be taken for a grade to count toward the minor. The minor track in philosophy may be designed to emphasize pre-law, pre-med, pre-business, critical thinking, and other applied areas and/ or pre-professional programs. Consult the department chair for further information.

## PHYSICAL SCIENCES FOR ELEMENTARY SCHOOL TEACHERS

PROGRAM ADVISORS AND OFFICES<br>Meng-Chih Su / Chemistry Department<br>Darwin Hall 312<br>(707) 664-4057, sum@sonoma.edu<br>Dan Karner / Geology Department<br>Darwin Hall 124<br>(707) 664-2854, karner@sonoma.edu<br>Lynn Cominsky / Physics and Astronomy Department<br>Darwin Hall 300M<br>(707) 664-2655, lynnc@universe.sonoma.edu

## Program Offered

Minor in Physical Sciences

The minor in physical sciences for elementary teachers provides an introduction to the physical sciences at a nontechnical (nonmathematical) level. The minor is intended for liberal studies majors who also plan to enter a general elementary school teaching credential program. The minor will provide the background and skills to teach some physical sciences in the elementary and middle schools. This minor is not appropriate for students planning to teach science in the secondary schools; they should study physical science at a more technical level and may choose a minor in astronomy, chemistry, geology, or physics.
Minor in Physical SciencesThe minor consists of the following 22-23 units. Six of these willalso be counted in general education. Students interested in theminor 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) ..... 1-2
Total units in minor core ..... 16-17
Minor Electives
Complete 6 units from the following:
ASTR 305 Frontiers in Astronomy (3)
ASTR 350 Cosmology (3)
GEOG 310 Meteorology (3-4)
GEOL 306 Environmental Geology (3)
GEOL 323 Hydrology (3)
PHYS 342 Light and Color (3)
Total units in the minor electives6
Total units in the minor, including6 units in general education22-23

DEPARTMENT OFFICE
Darwin Hall 300
(707) 664-2119
http://www.phys-astro.sonoma.edu
DEPARTMENT CHAIR
Lynn R. Cominsky
ADMINISTRATIVE COORDINATOR
Cathi Cari-Shudde

## Faculty

Lynn R. Cominsky
*Bryant P. Hichwa
Jeremy S. Qualls
Saeid Rahimi
Scott A. Severson
Hongtao Shi
*Gordon G. Spear
*Joseph S. Tenn
*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, electrical magnetism, and the weak and strong nuclear forces). This quest for the "Theory of Everything" eluded Einstein and is continued today by many physicists, including those who study superstring theory. The ultimate goal is to correctly predict the fundamental forces and the masses and interactions of the elementary particles from which all matter is formed.

The department offers a traditional, mathematically rigorous program leading to a B.S. in physics; a more applied curriculum leading to a B.S. in physics with a concentration in applied physics; and a flexible B.A. program with two advisory plans (algebra and trigonometry or calculus). All programs stress fundamental concepts and techniques, offer an unusually rich laboratory experience and intensive use of computers, and require a capstone course as a culminating experience. Capstone projects may include experimental design, instructional design, or undergraduate research—personalized and unique opportunities to demonstrate the skills and knowledge acquired in the major.

The department is housed in Darwin Hall, which was remodeled in 2006 and is well-equipped with lower-division teaching laboratories and facilities for intermediate and advanced laboratory courses, undergraduate research, special studies and capstone projects. The Darwin facilities include thin film fabrication systems such as sputtering, thermal evaporation, chemical vapor deposition and electrodeposition, a Hall measurement system, a 17-Tesla superconducting magnet system, an adaptive optics and astronomical instrumentation development laboratory, and a nuclear low-level counting laboratory. Physics majors also use the multidisciplinary Keck Microanalysis Laboratory in Salazar Hall which includes a scanning electron microscope, atomic force microscopes, an $x$-ray diffractometer, and a confocal microscope.
A substantial program in undergraduate astronomy includes many courses, listed in this catalog under Astronomy, which may be included in the B.A. or B.S. degree programs in physics. The department operates a teaching observatory on the SSU campus and a NASA-funded remotely operated research observatory at a darker site in northern Sonoma County. The department is also developing a new observatory at the Galbreath Wildlands Preserve in southern Mendocino County. Students are strongly encouraged to use all of the above facilities for special studies, undergraduate research, and capstone projects.

## Careers in Physics

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

## Bachelor of Science in Physics

The B.S. program is a thorough introduction to the principles of physics, providing a strong foundation for graduate study or industrial research. It is also intended for those students who wish to prepare for interdisciplinary studies on the graduate level in fields such as astronomy, atmospheric science, biophysics, environmental science, geophysics, materials science, and physical oceanography.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements (may include 5 units in GE) | 46 |
| Supporting courses (may include 4 units in GE) | 26 |
| Electives | $1-10$ |
| Total units needed for graduation | 124 |

## Major Core Requirements

PHYS 114 Introduction to Physics I
(may be applied to GE)
PHYS 116 Introductory Laboratory Experience
(may be applied to GE)
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 (Advanced)

6 Units selected from the following (must include at least one *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 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 advanced electives
Total units in the major

## Required Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE) 4
MATH 211 Calculus II 4
MATH 241 Differential Equations with Linear Algebra 4
MATH 261 Multivariable Calculus
CHEM 115AB General Chemistry (1 unit may be applied in GE) or CHEM 125 AB Honors General Chemistry

Total units in supporting courses
26
Total units in the major and supporting courses
( 9 may be applied in GE)
72

## Sample Four-year Program for Bachelor of Science in Physics

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| CHEM 115A (5) | CHEM 115B (5) |
| MATH 161 (4) | MATH 211 (4) |
| ENGL 101 (3) (GE A2) | PHYS 114 (4) |
| Elective (2) | PHYS 116 (1) |
| PHYS 494 (1) (Recommended) | Elective (2) |
|  |  |
| SOPHOMORE YEAR:: 31 Units |  |

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

| MATH 261 (4) | MATH 241 (4) |
| :--- | ---: |
| PHYS 214 (4) | PHYS 313 (3) |
| PHYS 216 (1) | PHYS 313L (1) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
|  | Elective (2) |

JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| PHYS $325(3)$ | PHYS $320(3)$ |
| PHYS 314 (4) | PHYS $340(3)$ |
| PHYS 381 (2) | PHYS $366(3)$ |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

SENIOR YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PHYS $450(2)$ | PHYS $430(3)$ |
| PHYS 460 (3) | PHYS Elective (2) |
| PHYS Elective (3) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (2) | Elective (2) |

TOTAL UNITS:: 124
See your advisor to discuss acceptable physics electives and when they will be offered. Twelve of the 51 units of GE are met by required courses listed here (3 each in areas A2, $B 1, B 3$, and B4).

## Applied Physics Concentration

Students may earn a B.S. in physics with a concentration in applied physics. This program is intended for those students who desire an emphasis on laboratory work. It provides a rigorous, yet slightly less theoretical course of study, and a greater selection of hands-on electives. It is a good choice for students who wish to continue their studies in graduate engineering programs, or who wish to work in industry in engineering or computationally oriented positions.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements (may include 5 in GE ) | 48 |
| Supporting courses (may include 4 in GE) | 17 |
| Electives | $8-17$ |
| Total units needed for graduation | 124 |

## Major Core Requirements

PHYS 114 Introduction to Physics I (may be applied to GE) 4
PHYS 116 Introductory Laboratory Experience (may be applied to GE) 1
PHYS 214 Introduction to Physics II 4
PHYS 216 Introductory Laboratory 1
PHYS 313 Electronics I 3
PHYS 313L Electronics I Laboratory 1
PHYS 314 Introduction to Physics III 4
PHYS 325 Introduction to Mathematical Physics 3
PHYS 340 Light and Optics 3
PHYS 366 Intermediate Experimental Physics 3
PHYS 381 Computer Applications for Scientists 2
PHYS 430 Electricity and Magnetism 3
PHYS 450 Statistical Physics 2
PHYS 460 Quantum Physics 3
PHYS 475 Physics of Semiconductor Devices 3

Total units in the major core

## Major Electives (Advanced)

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 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.

$$
\begin{aligned}
& \text { Total units in the major electives } \\
& \text { Total units in the major }
\end{aligned}
$$

## Required Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE) 4
MATH 211 Calculus II 4
MATH 261 Multivariable Calculus 4
CHEM 115A General Chemistry (1 unit may be applied in GE) or CHEM 125A Honors General Chemistry

Total units in supporting courses
Total units in the major and supporting courses
( 9 may be applied in GE)

## 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

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| CHEM 115A (5) | MATH 211 (4) |
| MATH 161 (4) | PHYS 114 (4) |
| ENGL 101 (3) (GE A2) | PHYS 116 (1) |
| Elective (2) | GE (3) |
| PHYS 494 (1) (recommended) | GE (3) |

SOPHOMORE YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| MATH 261 (4) | PHYS $313(3)$ |
| PHYS 214 (4) | PHYS 313L (1) |
| PHYS 216 (1) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
|  |  |
|  | GE (3) |
|  |  |
|  |  |
|  | JUNIOR YEAR:: 31 Units |


| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PHYS $325(3)$ | PHYS $340(3)$ |
| PHYS 314 (4) | PHYS 366 (3) |
| PHYS 381 (2) | PHYS Elective (3) |
| GE (3) | GE (3) |
| Elective (3) | Elective (4) |

SENIOR YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PHYS 450 (2) | PHYS $430(3)$ |
| PHYS 460 (3) | PHYS $475(3)$ |
| PHYS Elective (2) | PHYS Elective (2) |
| GE (3) | GE (3) |
| Elective (3) | GE (3) |
| Elective (3) | Elective (2) |

TOTAL UNITS:: 124
See your advisor to discuss acceptable physics electives and when they will be offered. Twelve of the 51 units of GE are met by required courses listed here, (3 each in areas A2, B1, B3, and B4).

## Bachelor of Arts in Physics

The B.A. program allows considerable flexibility for the student who wishes to study physics as part of a liberal arts education. Two advisory plans are offered:

## Bachelor of Arts in Physics with Advisory Plan C

This plan uses calculus. Students who choose this, the more popular B.A. advisory plan, have the prerequisites to take nearly all of the courses in the department. They find employment in scientific and engineering fields. Some go on to graduate school in interdisciplinary sciences. This degree program is appropriate for those who wish to earn a California Science Teaching Credential with a concentration in Physics.

| Degree Requirements | Units |
| :--- | ---: |
| Major requirements (may include 5-6 in GE) | $34-38$ |
| Required area of concentration | 12 |
| Supporting courses (may include 3 in GE) | 12 |
| General education | 51 |
| General electives | $7-19$ |
| Total units needed for graduation | 120 |

## Major Core Requirements

PHYS 114 Introduction to Physics I (may be applied to GE)
PHYS 116 Introductory Laboratory Experience (may be applied to GE)
PHYS 214 Introduction to Physics II
PHYS 216 Introductory Laboratory
PHYS 314 Introduction to Physics III 4
PHYS 340 Light and Optics
Choose one of the following two programming courses:
PHYS 381 Computer Applications for Scientists (2)
CS 115 Programming I (4)
Capstone course: One of the following
ASTR 492 Instructional Design Project (2)
ASTR 497 Undergraduate Research in Astronomy (2)
PHYS 492 Instructional Design Project (2)
PHYS 493 Senior Design Project (2)
PHYS 497 Undergraduate Research in Physics (2)
The major must include a minimum of 24 upper-division units in physics and astronomy, so, with an advisor, choose 13-15 units in additional upper-division physics and astronomy courses.

Total units in the major core 34-38

## Required Area Of Concentration

Courses in one other field, chosen in consultation with an advisor.
Total units in area of concentration
12

## Supporting Courses

MATH 161 Calculus I (3 units may be applied in GE) 4
MATH 211 Calculus II 4
MATH 261 Multivariable Calculus 4
Total units in supporting courses
Total units in the major and supporting courses
( $8-9$ may be applied in GE)
58-62

## Sample Four-year Program for Bachelor of Arts in Physics with Advisory Plan C

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| MATH 161 (4) | MATH 211 (4) |
| ENGL 101 (3) (GE A2) | PHYS 114 (4) |
| GE (3) | PHYS 116 (1) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
|  |  |
|  |  |
|  |  |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| MATH 261 (4) | PHYS Elective (3) |
| PHYS 214 (4) | Elective (3) |
| PHYS 216 (1) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | Elective (3) |

JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| PHYS 314 (4) | PHYS 340 (3) |
| PHYS 381 (2) | PHYS Elective (3) |
| Area of Concentration $(3)$ | Area of Concentration (3) |
| GE (3) | GE (3) |
| GE (3) | Elective (3) |

SENIOR YEAR:: 29 Units
Fall Semester (15 Units)
Spring Semester (14 Units)
PHYS Elective (3)
Area of Concentration* (3)
GE (4)
Capstone Course (2)
Area of Concentration* (3)

Electives (5)
PHYS Elective (4)
Electives (5)

TOTAL UNITS:: 120
*Area of Concentration $=12$ units in one other subject. Eleven of the 51 units of GE are met by required courses listed here (in areas A2, B1, B3, and B4). (One more can be met with a physics elective.)

## Bachelor of Arts in Physics with Advisory Plan T

This plan uses algebra and trigonometry. Students may select from upper-division courses, appropriate to careers as science or technical writers, scientific sales personnel, technicians, programmers, or other technical specialists. There is opportunity to take courses that lead to careers in the health sciences or environmental fields. This degree program is appropriate for those who wish to earn a California Multiple Subject Teaching Credential. Advisory Plan T is often taken as part of a double major.

| Degree Requirements | Units |
| :--- | ---: |
| Major requirements (may include 6 in GE) | $32-36$ |
| Required area of concentration | 12 |
| Supporting course (may include 3 in GE) | 4 |
| General education | 51 |
| General electives | $17-30$ |
| Total units needed for the degree | 120 |

## Major Core Requirements

PHYS 209AB General Physics Laboratory 2
PHYS 210AB General Physics 6
Choose one of the following two courses in modern physics or astronomy:
ASTR 305 Frontiers in Astronomy (3)
PHYS 314 Introduction to Physics III (4)
Choose one of the following two courses in optics:
PHYS 340 Light and Optics (3)
PHYS 342 Light and Color (3)
An approved course in computer applications, e.g., PHYS 381 (2):

Capstone course: One of the following:
ASTR 492 Instructional Design Project (2)
ASTR 497 Undergraduate Research in Astronomy (2)
PHYS 492 Instructional Design Project (2)
PHYS 493 Senior Design Project (2)
PHYS 497 Undergraduate Research in Physics (2)
The major must include a minimum of 24 upper-division units in physics and astronomy; so, with an advisor, choose 13-16 units in additional upper-division physics and astronomy courses.

Total units in the major core

## Required Area Of Concentration

Courses in one other field chosen in consultation with an advisor.
Total units in area of concentration

## Supporting Course

MATH 107 Pre-calculus Mathematics (3 units may be applied in GE):
Total units in supporting course
4
Total units in the major
48-52

## Sample Four-year Program for Bachelor of Arts in Physics with Advisory Plan T

The sequential nature of the physics curriculum necessitates an early start with major requirements and the distribution of general education courses over four years.

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| MATH 107 (4) | PHYS 209A (1) |
| ENGL 101 (3) (GE A2) | PHYS 210A (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (2) | GE (3) |
|  |  |
|  |  |
|  |  |
|  | Slective (2) |
|  |  |


| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PHYS 209B (1) | PHYS Elective (4) |
| PHYS 210B (3) | Elective (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (2) |  |

JUNIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| ASTR 305 (3) | PHYS $342(3)$ |
| PHYS Elective (3) | PHYS Elective (3) |
| Area of Concentration ${ }^{\star}(3)$ | Area of Concentration $(3)$ |
| GE (3) | GE (3) |
| Elective (3) | Elective (3) |

SENIOR YEAR:: 29 Units

| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| PHYS Elective (3) | PHYS Elective (2) |
| PHYS Elective (3) | Area of Concentration ${ }^{\star}$ (3) |
| Area of Concentration ${ }^{\star}(3)$ | Elective (3) |
| Elective (3) | Elective (3) |
| Elective (3) | Elective (3) |

TOTAL UNITS:: 120
*Area of concentration $=12$ units in one other subject. Twelve of the 51 units of GE are met by required courses listed here (in areas A2, B1, B3, and B4).

## Minor in Physics

Completion of a minimum of 20 units in physics courses, including not more than one first course or more than one second course, constitutes a minor in physics. (First courses are PHYS 100, 210A, and 114 , and their equivalents taught elsewhere. Second courses are PHYS 210B, 214, and their equivalents.) Interested students should consult with the advisor in the Department of Physics and Astronomy.

## Teaching Credential Preparation

See the Teaching Credential Preparation in Science Courses section of this catalog or contact the department advisor.

## DEPARTMENT OFFICE

Stevenson Hall 2070
(707) 664-2179
www.sonoma.edu/polisci
DEPARTMENT CHAIR
Diane L. Parness
ADMINISTRATIVE STAFF
Ashley Wise, Julie Wood

## Faculty

*Anthony Apolloni
Ruben Arminana
*Donald Dixon
*John Kramer
David McCuan
Robert McNamara
Andy Merrifield
Catherine Nelson
Diane Parness
David Ziblatt
*Faculty Early Retirement Program

## Programs Offered

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

The political science program at Sonoma State University offers excellent opportunities for the study of government and politics. More than 40 courses cover all the major aspects of the discipline. Students develop an understanding of human behavior as it relates to politics. They learn to discuss and analyze critically the many current public policy issues facing the United States and the world. They are taught how to analyze and understand world affairs and comparative politics. They are trained in appropriate research techniques for the study of political processes.

The political science major is a relatively open major, allowing students to choose from a wide range of courses and subjects within a general framework. A common core of courses studies the relationship between values, ideology, and politics (POLS 201); fundamental issues in American politics (POLS 202); the logic of research in political science (POLS 302); comparative approaches
and politics (POLS 303); analysis of international politics (POLS 304); and a senior research seminar (POLS 498). Beyond this common core, as part of the additional 20 units required for the major, each student must complete at least one upper-division course in each of the four major fields of political science: political theory, international relations, comparative government, and American government and politics. Since politics and economics are so closely tied together, the department recommends each student complete a basic course in economics. In addition, the department encourages international study for political science students and will arrange for appropriate credits for courses of study at international universities.
A 20-unit minor in political science also is available. Although the minor most often is used in conjunction with such majors as communications, history, economics, and sociology, it can be paired with almost any major offered at the University.

## Features

The political science faculty is an interesting and diverse group of scholars. Several are involved actively in their own research projects and regularly offer the opportunity for students to participate in these projects, often in paid positions. Most of the faculty have also traveled extensively, both in this country and abroad.

Political science majors run an active student club that sponsors talks by leading political figures, candidate debates, and social events throughout the year. In addition, those students enrolled in Model United Nations (POLS 345) travel each spring to another university in the United States or Canada or to the United Nations in New York City for a simulation of the United Nations General Assembly.

## Internships

The department offers several programs through which students may gain practical experience while earning academic credit. A political science internship involves working in the office of a public official or, when possible, in an election campaign. Prior interns have served in responsible positions with state assembly members, state senators, and members of Congress, and in a number of campaigns for local, state, and national office. The comparable program in public administration places students in positions, often paid, with local government offices and agencies where they may be involved with city planning and zoning issues, public relations efforts, special research topics, or budget preparation, to mention several possibilities. In addition, the department regularly sends selected students to the state Capitol to participate in the Sacramento Semester Program under which they work with members of the Legislature, officers of the executive branch, or lobbyists to gain a fuller understanding of the political process firsthand. Finally, special arrangements also may be made for some students to serve as staff to members of Congress in Washington, D.C., for a semester.

## Academic Advising

The department expects students to seek faculty advice every semester when planning their programs. They may ask any faculty member to advise them. As they develop specific interests within the discipline, they are encouraged to select a faculty advisor who shares these interests.

## Preparation

Students are encouraged to take English composition and social science courses, including civics, economics, and history. Experience in journalism and debating activities also can be helpful. A foreign language is highly recommended but not required for the degree. Students who plan further study at the graduate level are strongly encouraged to take courses in an appropriate foreign language, since proficiency in two foreign languages is often required in doctoral programs.

Community college transfer students should contact their counseling office or the Sonoma State University Political Science Office to identify appropriate lower-division major/minor preparatory courses. Typically, these would include a basic course in American political institutions, which would fulfill the state code requirements for U.S. Constitution and California state and local government. Other lower-division courses introducing students to the discipline of political science, the study of international relations, and the study of comparative politics also are highly recommended.

## Teaching Credential Preparation

The Political Science 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. Political science majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact the department office, or Miriam Hutchins, School of Social Sciences, (707) 664-2409.

## Careers in Political Science

## Law and Paralegal Careers

Many political science majors plan to study and practice law as a career. Although it is advisable for pre-law students to have as wide a background as possible, the department offers a number of specialized courses in the field of constitutional law and civil liberties. Generally, it is advisable for the pre-law student to seek advice on appropriate courses from a faculty member.

## Public Administration Careers

Local, state, and federal governments employ one of every six American workers. A major in political science with a public administration or public policy emphasis can prepare students for
civil service careers at national, state, and local levels. While many of these careers require specialized skills (e.g., budgeting and accounting), many require general skills and understanding, with on-the-job training providing the required specialized knowledge.

Political science is also an appropriate major for students seeking training for positions in the overseas agencies of the U.S. government or in international organizations.

## Journalism Careers

A political science major, combined with an ability to analyze and understand current political events and the skills to put that analysis into lucid writing, can prepare the student for an attractive career in journalism. Practical experience offered by the University newspaper is highly recommended.

## Business Careers

A large number of political science graduates have found employment in the world of business. Preparation for this career involves a broad liberal arts background, combined with knowledge of governmental organization, public administration, finance, decisionmaking, organizational behavior, and the process by which political decisions about economic policy are made. Many businesses that recruit liberal arts graduates expect to provide them with special training programs.

## Other Careers

Other enterprising individuals develop unique and interesting careers for themselves in politics by developing skills in campaign management, speech writing, polling, public relations, lobbying, voting analysis, or fundraising. These opportunities result from the initiative of the individual combined with the practical experience gained largely through volunteer service with political campaigns.

## Bachelor of Arts in Political Science

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 40 |
| General electives | 29 |
| Total units needed for graduation | 120 |

## Major Core Requirements

These courses should be taken in this order. Passage of POLS 302 with a grade of ' $C$ ' or better is a prerequisite for POLS 498.
POLS 201 Ideas and Institutions
POLS 202 Issues in Modern American Politics 4
POLS 302 Social Science Research Methods 4
POLS 303 Introduction to Comparative Government 4
POLS 304 Introduction to International Relations 4
POLS 498 Senior Seminar 4
One course must be taken from each of the following areas: Political Theory, International Relations, Comparative Politics, and American Government and Politics

## Political Theory

Choose one of the following six courses:
POLS 310 Classical Political Thought (4)
POLS 311 Development of Modern Political Thought since 1500 (4)
POLS 312 American Political Thought (4)
POLS 313 Critical Theory: Race and Gender (4)
POLS 315 Democracy, Capitalism, and Socialism (4)
POLS 415 Explorations in Political Theory (4)

## International Relations

Choose one of the following three 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 six courses:
POLS 350 European Parliamentary Democracies (4)
POLS 351 Politics of Russia (4)
POLS 352 Politics of Eastern Europe (4)
POLS 354 Comparative Political Parties (4)
POLS 450 Politics of Asia (4)
POLS 452 Third World Political Systems (4)
POLS 453 Politics of Latin America (4)
POLS 458 Comparative Social Policy (4)
POLS 487 Selected Topics in Comparative Politics (4)
American Government And Politics
Choose one of the following sixteen courses:
POLS 320 State, City, and County Government (4)
POLS 330 Race, Ethnicity, and Politics (4)
POLS 391 Gender and Politics (4)
POLS 420 American Political Development (4)
POLS 421 Federalism and Intergovernmental Relations (4)
POLS 423 Intro to Constitutional Law (4)
POLS 424 the Bill of Rights, Civil Liberties, and the Constitution (4)
POLS 425 the American Party System (4)
POLS 426 the Legislative Process (4)
POLS 427 the American Presidency (4)
POLS 428 Seminar in California Politics and Government (4)
POLS 429 Interest Groups (4)
POLS 430 Introduction to Public Administration (4)
POLS 431 Politics and the Media (4)
POLS 466 Political Psychology (4)
POLS 475 Urban Politics and Policy (4)
POLS 481 Politics of Regulation and Land Use (4)
POLS 483 Politics of Wealth and Poverty (4)
POLS 484 Elections and Voter Behavior (4)
POLS 485 Political Power and Social Isolation (4)

## Major Electives

Spring Semester (14 Units)
GE (6)
International Relations (4)
Comparative Politics (4)
American Government (4)
Elective (4)

SENIOR YEAR:: 31 Units
Fall Semester (16 Units)
Political Theory (4)
Spring Semester (15 Units)

Electives (12)
Senior Seminar (4)
Electives (11)

TOTAL UNITS:: 120
Note: Nine units of the GE requisite must be filled with upper-division courses; 40 units are required for the political science major; 120 units are required for graduation.

## 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

## 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 (NASPA).

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

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

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

## Admission Requirements

Students apply to both the University and to the M.P.A. program.
A. A bachelor's degree with a major from an accredited college or university with a grade point average of at least 3.00 for the last 60 units of college-level work attempted;
B. To ensure adequate background, a candidate for admission should have experience or course preparation in the following areas:

1. State and local government,
2. Federalism and intergovernmental relations,
3. Influences on domestic policy making.

- Recommended: One year experience working in a nonprofit organization or a course in introduction to nonprofit organizations (example: through Sonoma County Volunteer Center).
Candidates without such experience or course preparation can be admitted to the program but must make up deficiencies during the first three semesters of study.
Prerequisites do not count toward the 40 -unit degree. Acceptability of experience or previous course work 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 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 course work, 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 Administrative State (4)
POLS 503A Public Finance (2)
POLS 504A Human Resources for the Public Sector (2)
POLS 506 Public Policy Process (4)
POLS 511 Labor Relations (2)
POLS 538 Administrative Law (2)

Nonprofit Concentration Requirements - 16 Units
POLS 503B Fiscal Management NPs (2)
POLS 504B Personnel for NPs (2)
POLS 581 NP Governance and Legal Issues (2)
POLS 582 Planning and NP Agencies (2)
POLS 583 Resource Development (4)
POLS 585 Marketing and PR for NPs (2)
POLS 587 Grants/Contract Management (2)
Electives-4 Units Total can include
POLS 507 Ethics in Administration (4)
POLS 508 Comparative Public Policy (4)
POLS 509 Politics of Health Care and Aging (4)
POLS 512 Organizational Development (4)
POLS 513 Leadership and Supervision (4)
POLS 537 Bargaining, Politics, and Administration (4)
POLS 551 Organizational Computer Usage (4)
POLS 560 Special Issues in Public Policy (4)
POLS 564 Aging Services Administration (4)
POLS 588 Issues in Nonprofit Administration (4)
POLS 597 Internship (max. 4 units) (4)
POLS 599 Thesis (4)

## Culminating Experience

All students in the M.P.A. program are required to complete either a thesis or a comprehensive examination prior to award of the degree. Those opting for a thesis as their culminating experience are required to complete 40 units of coursework, exclusive of prerequisites, and can include 4 units of 599 (Thesis Prep) as their elective. Students electing to take the comprehensive exam must complete 40 units of total course work exclusive of prerequisites and POLS 596 (exam preparation).

## Certificate Program in the Administration of Nonprofit Agencies

The Political Science Department also offers a graduate certificate program in the administration of nonprofit agencies. Oriented to the needs of staff and administrators, this integrated series of courses is grounded in the study of contemporary trends in nonprofit agency administration, development, and fiscal management, and offers intensive exposure to the practical managerial techniques necessary for successful agency operation.

## Coursework for the Certificate Program in the Administration of NP Agencies

The Certificate Program requires 24 units of coursework from the Nonprofit Concentration and Common Core, all of which may be later applied to the Master's degree in Public Administration. Students in the Certificate Program are encouraged to pursue the Master's degree, though there is no requirement to do so. Students enroll in the 16 units in the Nonprofit Concentration, and 8 units of electives chosen from common core courses in consultation with the M.P.A. Program Graduate Coordinator.

DEPARTMENT OFFICE
Stevenson Hall 3092
(707) 664-2411

Fax (707) 664-3113
www.sonoma.edu/psychology/
DEPARTMENT CHAIR
Gerryann Olson
ADMINISTRATIVE ANALYST
Celeste McDonald
DEPARTMENT SUPPORT COORDINATOR
Mary Hanson
GRADUATE ADMINISTRATIVE SPECIALIST
Karen Fischer
GRADUATE PROGRAMS
Stevenson Hall 3092
(707) 664-2682
e-mail psychma@sonoma.edu

## Faculty

Glenn Brassington
*Eleanor Criswell
*Victor Daniels
Mary Gomes
Maria Hess
Susan Hillier
Laurel McCabe
Gerryann Olson
Heather Smith
*Susan Stewart
Elisa Velasquez-Andrade
*Arthur Warmoth
Gisela Wendling
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Arts in Psychology
Minor in Psychology
Minor in Gerontology
Certificate in Gerontology
Master of Arts in Psychology through Special Sessions
Depth Psychology
Organization Development

## What is Psychology?

Psychology is defined as the study of human behavior and experience. According to the American Psychological Association, psychology has three faces: it is a discipline, a science, and a profession. Psychology is a calling that requires one to apply special knowledge, abilities, and skills in order to solve human problems. It is an extremely diverse field that attracts people with a wide variety of backgrounds, interests, and skills.

## Mission of the Psychology Department

Our department is distinguished by its focus on the quality of human experience. Founded in 1960, the department has historically been allied with the humanistic and existential traditions in psychology. This emphasis has expanded to include a diverse array of approaches to studying human experience. We now offer learning experiences in areas ranging from the experiential to the experimental, from graduate school preparation to personal growth, from individual issues to community concerns. We actively encourage the integration of various perspectives, rigorous analysis, respectful debate, and engaged skills-based learning. Our goal is to help students to develop skills in 1) knowing and evaluating their own experience, 2) understanding human experience from a variety of theoretical frameworks, 3) learning and valuing diversity and multiculturalism and 4) applying their knowledge in concrete ways that contribute to people's quality of life. We hope to empower students with psychological skills that will enable them to be effective agents of change in the world.

## About the Psychology Department

The Psychology Department at Sonoma State University is distinguished by its focus on the quality of human experience. The key words here are distinguished, quality, human, and experience. For us, each of these words holds special significance.
Distinguished: This expresses both that the department is unique and that it has achieved recognition for this uniqueness over the years. This department offered the first graduate program in humanistic psychology and also helped to pioneer that field, with four of our members having served as president of the Association for Humanistic Psychology, an international organization. The department also has been distinctive for its pioneering work in such areas as somatics, expressive arts, biofeedback, health psychology, organization development, 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. The department has stood out as a beacon for many students seeking an alternative to traditional psychology.

Quality: This word carries a number of important messages. First of all, we are interested in quality, as in excellence. At the same time, we are struck that the word quality is in ascendance in business, and elsewhere; even as we see ourselves surrounded by the deteriorating quality of our physical, social, and economic environments. We seek to develop a psychology that not only studies but also enhances the quality of life. The word quality also communicates that we value qualitative, as well as quantitative, research methods.

Human: While affirming our interdependence with all creatures, this word communicates our emphasis on studying uniquely human, rather than animal, phenomena.

Experience: We take the subjective realm seriously, rather than focusing exclusively on the objective. Our approach to investigation is often phenomenological, and, when possible, our approach to teaching emphasizes experiential approaches to learning, both inside and outside the classroom.
The origins of the department were closely associated with humanistic and existential psychology. Our current range of interests is reflected in the section on Advising and Interest Areas below. Our teaching-learning model is person-centered. That is, we try to foster the unique intellectual, spiritual, and emotional growth of each student as an individual. Our approach to self-knowledge leads from a concern for a private and inner self to a wider concern for one's relationship with one's community and culture.

## Psychology Department Learning Goals and Objectives

The Sonoma State Psychology Department is one of a handful of humanistically oriented psychology undergraduate departments in the country. We are especially strong in several areas that are not the focus of most psychology departments but are the focus of our graduate and certificate programs: organization development, depth psychology, gerontology, somatics and body-mind approaches, and biofeedback. Our diverse curriculum offers a stimulating and timely liberal arts education that responds to current student needs and supports faculty development and renewal. The department's goals and objectives are designed to support a rich and diverse list of course offerings without compromising students' abilities to learn the skills they need. We also believe that successful teaching and learning extends beyond the classroom to individual advising.

The Psychology Department curriculum is arranged to develop the following skills in each student by graduation time. The courses are designed to enable each student to:

- Be familiar with the major concepts, theories, and perspectives in psychology;
- Be able to apply psychological theories, concepts, and principles to individual experience as well as to broader social issues and social systems;
- Be able to reflect on personal experience in light of psychological knowledge;
- Be able to recognize and understand the complexity of cultural diversity, in light of psychological knowledge;
- Be able to understand and apply basic research methods in psychology and the social sciences; and
- Be able to demonstrate skills that promote behavioral change at the individual, organizational, and community levels.


## Careers in Psychology

A career in psychology opens opportunity - opportunity to break new ground in science, opportunity to better understand yourself and others, opportunity to help people live richer, more productive lives, and the opportunity for ongoing personal and intellectual growth in school and throughout your career.
Some psychologists find it rewarding to work directly with people - for example, helping them to overcome depression, to deal with the problems of aging, or to stop smoking. Others are excited by research questions on topics such as health and well being, deci-sion-making, eating disorders, brain functioning, parenting skills, forensic work, and child development. Still others find statistics and quantitative studies to be the most fascinating areas.
Traditionally, psychologists have been employed in universities, schools, and clinics. Today, more than ever before, they can be found working in businesses, hospitals, private practice, courtrooms, sports competitions, police departments, government agencies, private laboratories, and the military, among other settings.
Psychologists fill many different roles. For example, they work as teachers, teaching the discipline of psychology in universities, fouryear and two-year colleges, and high schools. Psychologists work as researchers employed by universities, government, the military, and business to do basic and applied studies of human behavior. Psychologists also work as psychotherapists, helping people to individuate and resolve conflicts. Psychologists work as counselors in school settings, working with students and their families to provide support for the students' social, cognitive, and emotional development. In addition, psychologists work as administrators, functioning as managers in hospitals, mental health clinics, nonprofit organizations, government agencies, schools, universities, and businesses. Psychologists also work as consultants hired for their special expertise by organizations to advise on the subject or problem in which the consultant is an expert, including such tasks as designing a marketing survey or organizing outpatient mental health services for adolescents.

## Careers: Graduate Work And Further Training

For most professional work in psychology, a minimum of an M.A. degree is necessary. Most of our students who go on to graduate work in psychology enter the clinical/counseling/social work fields at both the master's and the doctoral level. Other popular choices are the fields of education, research psychology, business, organizational development, and criminal justice. A 2006 survey of SSU alumni who graduated as psychology majors found that nearly twothirds of the respondents had gone on to do some sort of graduate work, most at the master's level.

Early in the major, students are encouraged to conduct Web searches on graduate training programs in their fields of interest in order to find out the specific prerequisites required in order to receive training in these areas. Students should consult the Psychology department website which has extensive career information and web links to graduate schools and programs in specific areas. Some of the psychology courses and non-psychology electives should be chosen with regard to career objectives. Students should consult with an advisor to ensure that they are taking appropriate courses.

Most master's and doctoral programs and employers prefer applicants who, in addition to their academic background, have some kind of applied internship or research assistantship that provides hands-on experience in their field.

## Careers: Bachelor's Degree In Psychology

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

- Administration and management
- Aging human services and advocacy
- Behavior change consulting
- Biofeedback consulting
- Child development programs
- Counseling
- Editing
- Employment interviewing
- Environmental advocacy
- Executive coaching
- Health services
- Marketing and public relations
- Organizational consulting
- Personal coaching
- Personnel and human systems
- Probation and parole
- Psychiatric assisting
- Social service casework \& advocacy
- Teaching
- Technical writing


## Bachelor of Arts in Psychology Degree Requirements

| For first-time freshmen | Units |
| :--- | ---: |
| General education | 51 |
| Major requirements | 44 |
| Electives | 25 |
| For transfer students |  |
| General education | 48 |
| Major requirements | 44 |
| Electives | 28 |
| Total units needed for graduation: | 120 |

Students who apply to transfer into the psychology major must have taken the following courses (or the equivalents):

English 101 Expository Writing and Analytical Reading
Philosophy 101 Critical Thinking
Psychology 250 Introduction to Psychology
English 101 and Psychology 250 must be completed with a grade of $B$ or higher. Because psychology is a high-demand major, other prerequisites may be added between the release of one catalog and the next in order to control enrollment. Students considering transferring into the major should contact the department for current information.

## Major Requirements

The major consists of at least 40 units in psychology plus a course in statistics, which may be taken in either a psychology or mathematics department. Of these units, at least 34 must be upper-division units (courses numbered 300 or higher at SSU; numbering at other institutions may differ). Most students take a statistics course that can also be used for the General Education area B requirement. All courses for the major must be passed with a grade of $C$ or better. A maximum of 12 units of Special Studies and Internship may be taken credit/no credit in the major.

## Required Courses For the Major Include:

Psychology 250, Introduction to Psychology (or the equivalent) taken within the past ten years. Students who believe they possess the requisite knowledge may substitute a passing score on the CLEP test in introductory psychology administered by the Educational Testing Service at (510) 653-5400.
Psychology 306, History of Modern Psychology
Psychology 307, Humanistic, Existential, and Transpersonal Psychology Math 165, Elementary Statistics (or equivalent)

## Recommended Courses:

One Research Methods course
One course focusing on psychological issues in diversity and multiculturalism
Each semester, research methods courses are listed at: www. sonoma.edu/users/s/smithh/methods/methods. Psychology is an academic discipline that includes the systematic analysis of human behavior, experience, and consciousness through diverse research methodologies. Students enrolled in research methods courses acquire knowledge of how to critically evaluate information from the social sciences presented in popular publications and the media; and of research skills and experience required for most psychology graduate programs and research-related jobs.

The department strongly recommends that students take courses in psychology and other disciplines that educate them about issues of diversity and multiculturalism, such as culture, race and ethnicity, sexual orientation, disability, age, religion, and social class. Courses in American Multicultural Studies, California Cultural Studies, Chicano and Latino Studies, Foreign Languages, Global Studies, Native American Studies, Cross-Cultural Psychology, and Women's and Gender Studies contribute to students' development of multicultural competence.

Students are asked to consult with an academic advisor early in their major to design a course of study that fulfills major requirements, and that is in line with their interest areas and career goals. When time and interest permit, students are encouraged to consider a minor in another field, or even a double major.

## Advising and Interest Areas

The Psychology Department provides an individualized major that is tailored to meet your personal needs, interests, and directions. You should meet with an advisor no later than the second semester of your sophomore year, or if you are a transfer student, during your first semester at SSU. Your advisor will help you to design a major that will provide you with the background you need to pursue your career objectives. You are encouraged to come in for advising before the scheduled "advising for registration" period; faculty are more likely to be readily available earlier in the semester.

Students may choose an advisor or are assigned an advisor according to the interest areas they indicate on the advising questionnaire. Students may also change advisors at any time. The following interest areas can be used as a guide for designing the major program and for choosing an advisor:

- Adulthood and Later Life Development
- Clinical/Counseling Psychology
- Creative and Expressive Arts
- Cultural Psychology
- Developmental Psychology
- Depth and Jungian Psychology
- Ecopsychology
- Humanistic Psychology
- Research Methods
- Social, Community, and Organizational Psychology
- Somatics/Biofeedback/Health/Performance Psychology
- Teaching Credential Preparation
- Transpersonal Psychology


## Sample Four-year Program for Bachelor of Arts in Psychology

FRESHMAN YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| UNIV 102 (optional) (3) | HUM 200 (3) |
| ENGL 101 (3) | MATH 165 (4) |
| GE (3) | Elective (4) |
| BIOL 110 (4) | PHIL 101 (3) |
| PSY 250 (3) |  |

## SOPHOMORE YEAR:: 32 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PSY Lower-Division Elective (4) | PSY $306(4)$ |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | Elective (3) |

JUNIOR YEAR:: 30 Units
Fall Semester (15 Units)
PSY 307 (4)
Upper-Division GE (3)
PSY Elective (4) PSY Elective (4)
PSY Elective (4) PSY Elective (4)
Upper-Division GE (3)
PSY Elective (4)

SENIOR YEAR:: 28 Units
Fall Semester (14 Units)
Spring Semester (14 Units)
Upper-Division GE (3)
PSY Elective (4)
PSY Elective (4)
PSY Elective (4)
PSY 499,481 (4)
Elective (3)
Elective (3)
Elective (3)

TOTAL UNITS:: 120

## Minor in Psychology

Students seeking a minor in Psychology are encouraged to consult with a psychology faculty advisor to assist them 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 C 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 way the course is offered.

## Minor in Gerontology

The minor in Gerontology provides students with a focused multi-disciplinary program to study the aging process. The minor gives students a solid academic foundation in the field and offers practical applications through the internship. Students receive a strong theoretical orientation based in the liberal arts tradition and practical information about aging. The requirements include 22 units incorporating biology, psychology, and the social aspects of aging, and 6 elective units. Specific courses are listed under Gerontology in the catalog.

## Internships

The Psychology Department strongly recommends community internship experience, particularly for the student going on to counseling or clinical psychology master's and doctoral degrees.

Each semester a number of advanced undergraduate and graduate students participate in field placements and internship work experiences in organizations and agencies throughout the University's six-county service area. These internships involve on-the-job training by the agency, as well as academic work under the supervision of a faculty member. This forms an important base for academic credit and helps the student obtain a range of learning experiences not otherwise found in the department. Applications for internship should be made near the end of the semester preceding the internship semester. A maximum of 8 units of PSY 499 Internship can be applied toward the major. Students planning on graduate work in clinical or counseling psychology are encouraged to gain internship experience well before applying to graduate school.

## Research Assistantships

The Psychology Department strongly recommends research assistantships for those students going on to graduate work in psychology at the master's or doctoral levels. Many university graduate programs require students to have experience in designing and conducting psychological research, as well as in analyzing data and writing up the results. In order to find out more about these research opportunities, students should consult with individual faculty members who are mentoring students in their own research projects.

## Special Studies

Students who wish to carry out independent study and research are encouraged to contact an individual faculty member of their choice.

## Master of Arts in Psychology

The Psychology Department, working in conjunction with the School of Extended Education, offers two areas of study within the master of arts program, depth psychology and organization development. Each program offers its own goals and curricula, and applicants apply to the program of their choice. Prerequisites and fees vary according to program. The M.A. programs are self-support programs

## administered through Special Sessions and funded entirely through student fees.

University policy requires students in master's programs to maintain continuous enrollment until completion of the M.A. program, or pay a continuing enrollment fee of $\$ 250.00$ per semester.

University policy also requires students who take four semesters to complete their thesis/project to re-enroll in PSY 599, Master's Thesis Project (For Organization Development students, PSY 596, Graduate Tutorial). Consult each program's requirements for more information.

For information about individual programs, and for application materials, contact the graduate administrative specialist in psychology, (707) 664-2682, e-mail psychma@sonoma.edu. You may also write to:

Graduate Admissions
Psychology Department
Sonoma State University
Rohnert Park, CA 94928-3609

## Depth Psychology Program

The master's program in depth psychology is an interdisciplinary, cross-cultural 36 -unit two-year curriculum providing education in the theory, practice, methods, and applications of Jungian and archetypal psychology. It uses experiential learning, depth inquiry, and an embodied curriculum to educate its students in a soulful way. Students explore the depth dimensions of human experience in art, dreams, ritual, nature, mythology, storytelling, and sacred practice. Small 10-15-person classes engage the students in experiential work which grounds the learning and provides embodied understanding. In the yearlong passion-of-inquiry thesis process, students use depth inquiry methods involving art, nature, dream work, active imagination, sacred practices, and interviewing to explore their areas of passionate concern.

The first year offers three yearlong foundational courses exploring Jungian and archetypal psychological theory, methods of depth inquiry, and cross-cultural mythology and symbolism. Depth inquiry methods include work in artistic media, dream work, imaginal practices, myth and storytelling, masks and ritual, work with the earth, embodied depth techniques, performance, and work in sound, voice, and movement. Work on mythology and symbolism is woven into work with dreams, artwork, ritual, and imaginal practices, as well as practices involving indigenous wisdom, shamanism, and ecopsychology.
The second year offers seminars in student-chosen topics, interpersonal process, research methods, and guidance in depth inquiry and master's thesis work. The master's thesis provides the opportunity for passionate inquiry into an area of deep interest to the student. The thesis is often a personal process study that symbolically and artistically explores psychological development. The publicly presented Thesis Evening in May completes the yearlong passion-of-inquiry process.

Students may engage in community internships in their second year. They may choose to teach an undergraduate course in their field of expertise in the SSU Psychology Department, such as

Psychology of the Fairy Tale, Psychology of Masculine and Feminine, and Psychology of Myth and Narrative. The program advisor assists students in developing curriculum and supervises the internship teaching experience. Students also have the option, at additional expense, of enrolling in University courses which meet their specific learning needs.
A monthly visiting scholars program invites noted authors, analysts, therapists, and practitioners to a half-day lecture and lunch in the depth community. Recent scholars have presented on the Native American trickster archetype, the sacred feminine in India, the Kabbalah, and creation mythology.

The program in depth psychology is designed to move students to the next step in their personal and professional development. Graduates go on to teach, to work in personal growth facilitation and program design, to pursue clinical training in master's and doctoral programs, and to research and write in the field of depth psychology.
Course prerequisites are required for admission and are designed to give students a foundation in adult development and symbolic expression.

## Program of Study

The program includes the following courses:
PSY 511A,B Theories of Depth Psychology (3,3)
PSY 515 Psychological Writing (1)
PSY 530A,B Seminar in Interpersonal Process $(1,1)$
PSY 542A,B Methods and Applications of Depth Psychology $(3,3)$
PSY 543A,B Cross-Cultural Mythology and Symbolism $(3,3)$
PSY 570 Directed Field Experience (1-3)
PSY 575 Research Methods (2)
PSY 576 Seminar in Depth Psychology (1-5)
PSY 596 Graduate Tutorial (1-4)
PSY 599A,B Master's Thesis: Project and Directed Reading $(3,3)$

## Prerequisites for Admission

The Depth Psychology program has the following prerequisites:

1. B.A. Or B.S. from an accredited institution;
2. Minimum GPA of 3.0 in the last 60 units of course work;
3. An acceptable level of competence in oral and written communication, as demonstrated by the coherence of the personal statement and an oral interview;
4. Emotional maturity, as demonstrated in the applicant's personal written statement, life experiences, and oral interview;
5. Five course prerequisites (a maximum of 9 units may be lower-division courses completed at a community college): child development, adult development, personality, abnormal psychology, and research methods in psychology; and
6. A minimum semester-long experience in symbolic forms (art, dream work, writing, and/or poetry) and reflection on that expression for personal growth.

## Fees

Fees are set in consultation with the School of Extended Education.
Refer to the Depth Psychology website for additional information:www.sonoma.edu/psychology/depth.

## Organization Development Program

The Psychology M.A. 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 scheduled in the evenings to meet the needs of currently employed students. Some courses schedule all-day sessions on Saturdays. 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:
PSY 513 Facilitation and Training (3-4)
PSY 554 Organization Systems Inquiry (3-4)
PSY 533A,B,C Group Dynamics in Organization Development (1-3)
PSY 514 Organization and Team Development (3-4)
PSY 556 Socio-Technic Systems Redesign (3-4)
PSY 557 Human Systems Redesign (2-4)
PSY 572A,B Internship and Professional Practice in OD (2-4)
PSY 544A, B Qualitative Research in Organizations (1-3)
PSY 518A,B Advanced Intervention Methods in OD (2-4)
PSY 598 Culminating Paper Tutorial (2-4)

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;
- A publishable article on a topic relevant to professional practice in organizations; and
- 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 course work in one or more of the following may be used to satisfy these requirements:

- 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 Education.
Refer to the Organization Development website for additional information: www.sonoma.edu/programs/od/.

## SOCIAL SCIENCE SUBJECT MATTER PREPARATION PROGRAM

PRINCIPAL ADVISOR
Miriam Hutchins and faculty from the School of Social Sciences (707) 664-2409

PROGRAM COORDINATOR
Call the History Department, (707) 664-2045
The History/Social Science Subject Matter Preparation Program is a series of courses designed for prospective teaching credential candidates to take while earning their bachelor's degrees in one of the traditional social sciences. Completion of the program will exempt students from taking the CSET Examinations in the Social Sciences.

## Program Core Requirements

The program core requirements consist of the following 47 units:

## I. World History

HIST 201 Foundations of World Civilization
HIST 202 Development of the Modern World
HIST 380 Twentieth Century World

## II. United States History, including California

HIST 251 The United States to 1877
HIST 252 The United States since 1865
HIST 472 California History Part I

## III. Geography

GEOG 302 World Regional Geography
GEOG 330 Historical Geography of North America (4) or
GEOG 391 Geography of North America
GEOG 390 Geography of California

## IV. Political Science

POLS 200 American Political System
POLS 423 American Constitutional System

## V. Economics

ECON 201A Introduction to Macroeconomics
ECON 201B Introduction to Microeconomics

## VI. Behavioral Sciences

One course from the following:
ANTH 318 Human Development: Sex and the Life Cycle
PSY 303 Person in Society
SOCI 431 Sociology of Religion

## VI. Portfolio Evaluation

SSCI 400 Portfolio Evaluation

## Breadth and Perspectives

In addition to the core requirements, students must also complete the following 15-18 units in breadth and perspectives:

## I. Individual and Society

One course from the following:
AMCS 210 Ethnic Groups in America (3)
AMCS 339 Ethnic Minorities and American Social Policy (3)
ANTH 203 Introduction to Cultural Anthropology (3)
PSYC 303 Person in Society (3)
SOCI 201 Introduction to Sociology (3)
WOMS 375 Race, Sex, and Class (3)

## II. Contemporary International Perspectives

One course from the following:
ECON 426 Seminar in the History of Economic Thought (3)
POLS 315 Democracy, Capitalism, and Socialism (3)
III. The Integrated Person

One course from the following:
ANTH 340 Living in a Pluralistic World (3)
GEOG 338 Social Geography (3)
PSY 302 Development of the Person (3)
WOMS 350 Gender, Sexuality, and Family (3)

## IV. Ethical Perspectives, Philosophy, and Values

One course from the following:
ANTH 341 Emergence of Civilization (3)
AMCS 350 Ethics, Values, and Multiculturalism (3)
CALS 352 Chicano/Latino Philosophy (3)
NAMS 346 Philosophic Systems and Sacred Movements in Native North Americans (3)
PHIL 120 Introduction to Philosophy (3)
PHIL 302 Ethics and Value Theory (3)

## V. Ethnic and Gender Studies

One course from the following:
AMCS 210 Ethnic Groups in America (3)
AMCS 255 Ethnicity in the Humanities (3)
AMCS 339 Ethnic Minorities and American Social Policy (3)
AMCS 350 Ethics, Values, and Multiculturalism (3)
AMCS 355 Language and Ethnicity (3)
AMCS 370 Asian Americans (4)
AMCS 400 Pan-African Cultures (4)
AMCS 420 Sexism and Racism in the United States (3-4)
AMCS 455 Civil Rights and Human Rights Law (4)
HIST 446 Women in American History (4)
HIST 447 Women of the Modern World (4)
HIST 468 Blacks in American History (4)
CALS 219 Mexican American Identity and Society (3)
CALS 352 Chicano/Latino Philosophy (3)
CALS 445 Chicano/Latino History (4)

CALS 451 Chicano Humanities (4)
NAMS 200 Introduction to Native Americans (3)
NAMS 305 North American Indian History (4)
NAMS 346 Philosophic Systems and Sacred Movements in Native North Americans (3)
POLS 330 Politics of Race, Ethnicity, and Sex (3)
WGS 350 Gender, Sexuality, and Family (3-4)
WGS 375 Race, Sex, and Class (3)

| Total units in breadth and perspectives | 15-18 |
| :--- | :--- |
| Total units in the preparation program | $61-65$ |

## Sample Four-year Plan for Bachelor of Arts in a social science with Teaching Credential

For history majors completing the Subject Matter Program in History-Social Science for the Single-Subject Credential in Social Science. Other social science majors must consult with their department advisor and SSSMPP advisor.

FRESHMAN YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| PHIL 101 (A3) (3) | HIST 201 (D2) (3) |
| ENGL 101 (A2) (3) | UNIV 200 (A1) (3) |
| GEOL 102 (B1) (3) | BIOL 115 (B2) (3) |
| ART 210 (C1) (3) | MATH 165 (B4) (4) |
| ANTH 203* (D1) (3) | HIST 251 (D3) (3) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (17 Units) | Spring Semester (13 Units) |
| :--- | ---: |
| HIST 202* (3) | POLS 200* (D4) (3) |
| HIST 252 (3) | ECON 201B* (4) |
| FL 214 (C2) (3) | AMCS 350^ (C3) (3) |
| ECON 201A (D5) (4) | WOMS 350* (E) (3) |
| GEOG 204 (B3) (4) |  |

JUNIOR YEAR:: 29 Units

| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| HIST 472* (4) | Elective (4) |
| HIST 391 (4) | Elective (4) |
| GEOG 390 (2) | PHIL 302* (C4) (3) |
| POLS 423* (4) | CALS 451* (C5) (3) |
| Elective (1) |  |

SENIOR YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15-16 Units) |
| :--- | ---: |
| Elective (4) | SSCl 400* (1) |
| HIST 380* (3) | HIST 498 (4) |
| Elective (4) | GEOG 330* (4) |
| GEOG 302* (4) | Elective (2-3) |
| Elective (4) |  |

TOTAL UNITS:: 121

* History-social science subject-matter program course.

For further information about Sonoma State University's requirements for admission to the teaching credential program, contact the Credentials Office, (707) 664-2581.

DEPARTMENT OFFICE
Stevenson Hall 2084
(707) 664-2561
www.sonoma.edu/sociology
DEPARTMENT CHAIR
Myrna Goodman
ADMINISTRATIVE ANALYST
Lisa Kelley
ADMINISTRATIVE COORDINATOR
Katherine Musick

## Faculty

Noel Byrne
Kathleen Charmaz
James Dean
Myrna Goodman
Sheila Katz
Elaine Leeder
Melinda Milligan
Peter Phillips
Cindy Stearns

## Programs Offered

Bachelor of Arts in Sociology
Minor in Sociology
Sociological research attempts to improve the human condition within the context of a strong tradition of social justice and human equality. Society shapes attitudes, goals, hopes and aspirations, and personal preferences. Society affects individuals, groups, and entire nations. Yet at the same time that society is shaping the individual, the individual is shaping society. In order to understand oneself and others, to understand the world, to understand the future, one has to understand society. Sociology is the discipline that studies groups and societies-what they are, how they got that way, and what impact they have.

Sociology is a field with diverse areas of study. These range from the behavior of the individual as a social actor to the structure of entire societies. Key topics include social psychology, socialization, deviant behavior, group behavior, organizations and institutions, power, inequality, and social change. Major social institutions, including the family, education, religion, social welfare, medicine, work, politics, leisure, and the media, are also explored in detail. To develop skills for studying society, students are introduced to valuable techniques such as survey research, sampling, observational methods, content analysis, experimentation, interviewing, and computer applications in research.

Because sociology is a core subject for any liberal arts education, the department offers a variety of courses of interest to non-majors. These concern such current social issues as the problems of 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 course work in preparation for graduate study in law, business, and a variety of human services professions, as well as doctoral programs in sociology and related academic fields. Before graduation, sociology majors can establish internships that lead to valuable professional contacts and provide practical experience in pursuing these and additional career paths.

The department has a chapter of the national sociology honor society, Alpha Kappa Delta, and it awards a C. Wright Mills Award for Sociological Imagination on an annual basis for the best original research paper produced by a student in the department.

Every year the Joseph J. Byrne Memorial Scholarship is awarded to an outstanding student majoring in sociology.

The department also awards the Robert Holzapfel Scholarship to a student majoring in sociology or counseling.

## Bachelor of Arts in Sociology

| Degree Requirements | 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 2006. 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 (which contained a slightly different placement of courses in areas but the same core requirements and units).

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

A student must take Sociology 201 before proceeding to any other required sociology course and take Sociology 300 before taking a methods seminar. Sociology 300, a methods seminar, Sociology 375, and a total of 20 upper-division units of sociology are required before a student will be allowed to enroll in Sociology 498. (Note: Sociology 300, the methods seminar, and Sociology 375 are included as part of the 20 upper-division sociology units.) Sociology 498 is a restricted class, and students will need evidence that they have met the prerequisites for it before the instructor will authorize enrollment.

Students must earn a minimum grade in each of the five required courses. See a faculty advisor in the department for details on these minimum grade requirements.

## Methods Seminar

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

SOCI 414 Methods Seminar: Social Interaction
SOCI 418 Methods Seminar: Social Development of Self
SOCI 425 Methods Seminar: Urban Sociology
SOCI 436 Methods Seminar: Investigative Sociology
SOCI 441 Methods Seminar: U.S. by the Numbers
SOCI 452 Methods Seminar: Health Care and IIIness
SOCl 463 Methods Seminar: Bureaucracies and Institutions
SOCI 470 Methods Seminar: Culture and Identity
SOCI 480 Methods Seminar: Sociology of Work
SOCI 484 Methods Seminar: Sociology of Genocide

## Additional Major Requirements

Substantive areas courses
Upper-division sociology electives
(chosen in consultation with a department advisor) $9-13$

Total Units in the Major
40

## Substantive Areas of Sociology

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

## Microsociology

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

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

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

## Organizations, Occupations, and Work

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

SOCI 306 Career Planning
SOCI 365 Human Services Administration
SOCI 366 Juvenile Justice (cross-listed with CCJS)
SOCI 432 Group Work with Older Adults (cross-listed with GERN and PSYCH)
SOCI 450 Punishments and Corrections (cross-listed with CCJS)
SOCI 451 Sociology of Education
SOCI 461 Social Work and Social Welfare
SOCI 463 Methods Seminar: Bureaucracies and Institutions
SOCI 480 Methods Seminar: Sociology of Work
SOCI 485 Organizations and Everyday Life

## Macrosociology

Courses in this area investigate large social structures, institutions, networks, and processes that define and shape individual and organizational behavior, and that contribute to social and public policy.
This area provides a conceptual overview of diverse social institutions. Macrosociology gives the student new insight into American society and its problems and possibilities from both the personal and professional perspectives.
SOCI 301 Statistics for Sociologists
SOCI 335 American Society
SOCI 340 Drugs and Society (cross-listed with CCJS)
SOCI 343 Women and Social Policy
SOCI 345 Sociology of Families
SOCI 347 American Class Structure
SOCI 363 Sociology of Race and Ethnicity
SOCI 377 Contemporary Sociological Theory
SOCI 383 Social Change
SOCl 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 445 Sociology of Childhood and Adolescence
SOCl 452 Methods Seminar: Health Care and Illness

## Culture

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

SOCI 312 Sociology of Gender
SOCI 330 Sociology of Media
SOCI 331 Mass Communications Theory and Research (cross-listed with COMS)
SOCI 332 Death and American Culture
SOCI 360 Sociology of Sexualities
SOCI 385 Sociology of Culture
SOCI 430 Sociology of Leisure
SOCI 431 Sociology of Religion
SOCI 434 Cinema and Society
SOCI 435 Media Censorship
SOCI 436 Methods Seminar: Investigative Sociology
SOCI 470 Methods Seminar: Culture and Identity

## Transnational Sociology

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

SOCI 305 Perspectives on the Holocaust and Genocide
SOCI 380 Political Sociology
SOCI 381 Population and Society
SOCI 382 Social Movements and Collective Behavior
SOCI 449 Sociology of Power
SOCl 482 Sociology of the Environment
SOCI 484 Methods Seminar: Sociology of Genocide

## Sample Four-year Program for Bachelor of Arts in Sociology

The following is a sample study plan only. The sequence and specific courses given are suggestive; please see an advisor each semester to plan your personal program.

FRESHMAN YEAR:: 31 Units
Fall Semester (16 Units)
ENGL 101 (3)
GE Mathematics (3)
GE BIOL 115 (3)
UNIV 102 First Year Experience (3)
Electives (4)
Spring Semester (15 Units)
PHIL 101 (3)
GE Physical Science (3)
GE World History (3)
SOCI 201 (3)

SOPHOMORE YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| HUM 200 (3) | GE Social Sciences (6) |
| GE History/Political Science (6) | History of the Fine Arts (3) |
| GE Comparative Perspectives \& Foreign Languages (3) | GE World Literature (3) |
| Electives (3) | Electives (3) |

JUNIOR YEAR:: 30 Units

Fall Semester (15 Units)
SOCI 300 (4)
Sociology Organizations Area (4)
Sociology UD Electives (4)
UD GE Philosophy and Values (3)
SENIOR YEAR:: 29 Units
Fall Semester (16 Units)
Spring Semester (13 Units)
Sociology Methods Seminar (4)
Sociology Transnational Area (4)
UD GE Contemporary International Perspectives (3)
SOCI 498 (4)
SOCI 499 (4)
Electives (5)
Electives (5)

TOTAL UNITS:: 120

## Minor in Sociology

SOCI 201 Introduction to Sociology
Upper-division courses in sociology chosen in consultation with an advisor
Total units in the minor

DEPARTMENT OF MATHEMATICS AND STATISTICS
Darwin Hall 114
phone: (707) 664-2368
fax: (707) 664-3535
www.sonoma.edu/math
DEPARTMENT CHAIR
Ben Ford
STATISTICS PROGRAM ADVISORS
Susan Herring
Elaine McDonald-Newman
Cora Neal
Scott Nickleach
ADMINISTRATIVE COORDINATOR
Marybeth Hull

## Faculty

William Barnier
Sam Brannen
Sharon Cabaniss
Jean Bee Chan
Ben Ford
Susan Herring
Izabela Kanaana
Brigitte Lahme
*Rick Luttmann
Elaine McDonald-Newman
Edith Prentice Mendez
Jerry Morris
Cora Neal
Scott Nickleach
Sunil Tiwari
*Faculty Early Retirement Program

## Programs Offered

Bachelor of Science in Statistics (pending CSU approval expected Spring 2008)

Bachelor of Arts in Applied Statistics (pending CSU approval expected Spring 2008)

Minor in Applied Statistics
Preparation for Actuarial Examinations

Mathematics and Statistics are rapidly growing disciplines whose concepts and applications play an ever-increasing part in modern life. Statistics has long been an essential tool in the physical sciences and has more recently been applied extensively in such diverse areas as medical and biological research, environmental studies, management science, behavioral and social sciences, and economics. Our basic
curriculum is designed to give students the skills necessary for success in business, industry, government, and teaching. In addition, these degrees will provide a sound background for continuation of study toward advanced degrees in statistics, or a quantitative foundation for graduate school in disciplines such as business, economics, biology, or other fields.

The B.A. in Applied Statistics is intended for students pursuing a degree in another discipline such as economics, psychology, biology, or others. These students may be interested in taking more statistics classes to prepare themselves for jobs in industry or success in graduate school in another field. The B.A. allows upper division units from another major to count as part of the "area of concentration", and is focused on developing practical skills such as regression analysis and ANOVA, and on gaining proficiency with statistical software packages such as SAS and SPSS. Students are strongly encouraged to earn the B.A. as part of a double major in a complementary field.

The B.S. in Statistics is a rigorous program for students who intend to pursue a career as a statistician or who wish to go to graduate school in Statistics or Mathematics. Students earning the B.S. will learn the same practical skills as those taking the B.A. Additionally, they will take theoretical courses in linear algebra, analysis, mathematical statistics, and stochastic processes. This program follows the guidelines proposed by the American Statistical Association in the Curriculum Guidelines for Undergraduate Programs in Statistical Science.

Both programs will prepare students for work in areas including government and industry, biostatistics, actuarial work, and consultative problem solving in modern industry.

## Careers in Statistics and Actuarial Sciences

According to the American Statistical Association the demand for statisticians in the workforce is dramatically increasing. Statisticians can find employment in a variety of fields. Biomedical, pharmaceutical, engineering and marketing companies, and government agencies seek employees with statistical skills to analyze large data sets. Many students find lucrative jobs as SAS programmers.

In addition, statistics students with an interest in finance or economics will be interested in pursuing a career as an actuary. The courses in both the BA and BS provide a solid preparation for the first actuarial exam and the Applied Statistical Methods educational experience credit. Actuaries have been ranked in the top 5 careers in the US for salary and job satisfaction since 1988.

## Learning Objectives for the B.A. and B.S.

- Describe data sets using appropriate numerical and graphical techniques;
- Develop mathematical tools necessary to perform statistical calculations and to understand distributions and statistical theory;
- Design experiments and survey sampling methods that allow results to be statistically analyzed to test hypotheses of interest;
- Determine which statistical analyses are suitable, perform the analyses using technology, and assess the validity of necessary assumptions and interpret the results;
- Construct and apply probability models for both discrete and continuous random variables; and
- Communicate with non-statisticians in written and oral formats to learn what a client is interested in ascertaining and to present the results from a statistical analysis.
Additionally, for the BS in statistics:
- Construct and verify mathematical proofs;
- Discuss properties of estimators and explain the rationale and assumptions behind statistical procedures; and
- Apply stochastic models to solve real-world problems.


## B.S. in Statistics

| Degree Requirements | Units |
| :--- | ---: |
| General education (51 units, 3 units |  |
| covered by major requirements) | 48 |
| Major (includes 3 units in GE) | 52 |
| Electives | 20 |
| Total units needed for graduation | 120 |

MATH 161 Differential and Integral Calculus I
MATH 165 Elementary Applied Statistics
MATH 211 Differential and Integral Calculus II 4
MATH 220 Higher Mathematics: an Introduction 3
MATH 241 Differential Equations with Linear Algebra 4
MATH 261 Multivariable Calculus 4
MATH 265 Intermediate Applied Statistics with SPSS 4
MATH 322 Linear Algebra
MATH 340 Real Analysis I
3

MATH 345 Probability Theory 4
MATH 367 Statistical Consulting and Communication
MATH 381 Computing for Statistics: SAS Programming Language 2
MATH 445 Mathematical Statistics and Operations Research 4
MATH 465 Experimental Design and Regression Analysis 4
MATH 467 Statistical Consulting, Communication, and Project Management 2
Total units in B.S. program

## Sample Four-year Program for Bachelor of Science in Statistics

FRESHMAN YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| MATH 161 (GE) (4) | MATH 211 (4) |
| MATH 165 (4) | MATH $265(4)$ |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

SOPHOMORE YEAR:: 31 Units

| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| MATH 241 (4) | MATH $261(4)$ |
| MATH 367 (2) | MATH $322(3)$ |
| MATH $220(3)$ | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| MATH 345 (4) | MATH 381 (2) |
| MATH 465 (4) | MATH 445 (4) |
| Elective (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (2) |  |
|  |  |
|  |  |
|  | Slective (3) |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| MATH 467 (2) | MATH $340(4)$ |
| Elective (3) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | Elective (3) |
| Elective (4) | Elective (2) |

TOTAL UNITS:: 120

## B.A. in Applied Statistics

| Degree Requirements | Units |
| :--- | ---: |
| General education (51 units, 3 units |  |
| covered by major requirements) | 48 |
| Major (includes 3 units in GE) | 38 |
| Required Area of Concentration | 12 |
| Electives | 22 |
| Total units needed for graduation | 120 |

MATH 161 Differential and Integral Calculus I 4
MATH 165 Elementary Applied Statistics 4
MATH 211 Differential and Integral Calculus II 4
MATH 241 Differential Equations with Linear Algebra 4
MATH 261 Multivariable Calculus 4
MATH 265 Intermediate Applied Statistics with SPSS 4
MATH 345 Probability Theory 4
MATH 367 Statistical Consulting and Communication 2
MATH 381 Computing for Statistics: SAS Programming Language 2
MATH 465 Experimental Design and Regression Analysis 4
MATH 467 Statistical Consulting, Communication, and Project Management 2
Total units in Applied Statistics program 38

## Required Area of Concentration:

Upper division courses in one other field chosen in consultation with and approved by an advisor in the Department of Mathematics and Statistics

Total units in B.A. program

## Sample Four-year Program for Bachelor of Arts in Applied Statistics

FRESHMAN YEAR:: 28 Units

| Fall Semester (14 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| MATH 161 (GE) (4) | MATH 211 (4) |
| MATH 165 (4) | MATH 265 (4) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| SOPHOMORE YEAR:: 31 Units |  |
| Fall Semester (15 Units) | Spring Semester (16 Units) |
| MATH 241 (4) | MATH 261 (4) |
| MATH 367 (2) | GE (3) |
| GE (3) | GE (3) |
| GE (3) | GE (3) |
| Elective (3) | Elective (3) |

Fall Semester (16 Units)
MATH 345 (4)
MATH 465 (4)
Area of Concentration (3)
GE (3)
Elective (2)

Spring Semester (15 Units)
MATH 381 (2)
Area of Concentration (3)
GE (3)
GE (3)
Elective (4)

SENIOR YEAR:: 30 Units

```
Fall Semester (15 Units)
MATH 467 (2) Area of Concentration (3)
Area of Concentration (3) GE (3)
GE (3)
                                    GE (3)
GE (3)
Elective (4)
                            Elective (3)
                            Elective (3)
```

TOTAL UNITS:: 120

## Minor in Applied Statistics

Twenty units are required. These must include MATH 165, MATH 265, MATH 367, MATH 381, MATH 467, and at least 6 units from statistically relevant courses in the department or elsewhere at Sonoma State University chosen in consultation with and approved by an advisor in the Department of Mathematics and Statistics.

## Actuarial Science Career Preparation

Students interested in a career in Actuarial Science can prepare for the first two actuarial examinations by taking the following courses:

1. For Actuarial Exam 1: MATH 161, MATH 211, MATH 261, and MATH 345.
2. For Actuarial Exam 2: MATH 303, BUS 370, BUS 470, and ECON 375.

## Entry-Level Mathematics (ELM) Requirement

Unless exempted, the Entry-Level Mathematics Examination must be taken within the past two years before enrollment in any general education course or developmental mathematics course (MATH 35 or 45). The ELM results will place the student in the appropriate level of mathematics courses. Note that if placement in the developmental mathematics sequence is necessary, satisfactory completion of MATH 45 is required for placement in MATH 103, 104, $105,107,111,131,141,150$, and 165 . Please consult the Schedule of Classes or telephone the Office of Testing Services for times and places of examination. The examination will be given in conjunction with the English Placement Test. For additional information, please see the Admissions section of this catalog.

## Non majors

All mathematics and statistics courses except MATH 35, 45, 103, $104,105,107,111,131,141,150,161$, and 165 are available in the $\mathrm{Cr} / \mathrm{NC}$ grading mode to non-mathematics majors.

## All Students

MATH 175, 210, 295, 330, 390, 395, and 499 are available only as $\mathrm{Cr} / \mathrm{NC}$.

## Mathematics and Statistics Majors and Minors

A statistics major or minor must take all mathematics and statistics courses in the traditional grading mode, with the exceptions of courses offered only in the Cr/NC modes: MATH 107W, 161W, 175, $210,211 \mathrm{~W}, 295,330,390,395$, and 499 , and any course taken as credit by challenge examination (please see more information on this in the Admissions section of this catalog). Majors are advised to take PHIL 102 for the GE category A3 (Critical Thinking).

## Statistics Courses

Please see course titles and descriptions under the Mathematics section of this catalog.

## THEATRE ARTS AND DANCE

Acting / Dance / Technical Theatre / General Theatre
DEPARTMENT OFFICE
Ives Hall 209
(707) 664-2474
www.sonoma.edu/theatre
DEPARTMENT CHAIR
Paul Draper
PERFORMING ARTS PROGRAM SPECIALIST
Shelley Martin

## Faculty

Drama and Acting: Paul Draper, Judy Navas, Danielle Cain, Stephanie Hunt, Tori Truss, Adrian Elfenbaum, Doyle Ott Dance: Kristen Daley, *Nancy Lyons, Scott Wells, Rebecca Wilson, Justin Fernandez, Sheldon Smith, Stacey Printz, Rachel Young Mawn, Jennifer Jaffe, Corinne Antipa
Technical Theatre: Anthony Bish, Melpomene (Mellie) Katakalos, Joel Eis
*Faculty Early Retirement Program

## Guest Artists

Hector Correa; Joe Goode Performance Group; Rennie Harris; Peggy Hackney; Kathleen Hermesdorf; Claire Porter; Shelley Senter; Leibe Wetzel and "Lunatique Fantastic"; JoAnne Winter/Susan Harlow and "Word for Word Performing Arts Company"; Doug Elkins; Callie Floor; Theo Bridant; Amanda McTigue; Gabriel Francisco; John Sullins; Mikiko Uesugi

## Programs Offered

Bachelor of Arts in Theatre Arts with a Concentration in Acting Concentration in Dance Concentration in Technical Theatre

General Theatre Degree
Minor in Theatre Arts (with acting, dance, drama emphases)
The Department of Theatre Arts and Dance provides a rigorous and nurturing learning context where students explore and share their passions and aptitudes toward the making of theatre and dance. Through a rich set of courses, a wide range of performance styles and opportunities, personal contact with faculty and guest artists, focused and comprehensive individual advising, and a supporting and caring staff, SSU theatre arts and dance majors and minors gain a deep impression of ensemble and individual creativity and a lasting sense of community.

The department is committed to creating, teaching, and learning about theatre that enlightens as well as entertains, that explores the values and ideas of many cultures and times, and that contributes to the artistic and personal growth of our students, faculty, and audiences. Faculty work to create a learning environment that is a
model for the collaborative work of theatre in which student and teacher are equally important and respected.
The department believes that theatre artists - dancers, actors, 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 rendered in performance. 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 also about life, and to express their own beliefs through theatre and dance.
Our theatre and dance faculty cultivate new and innovative approaches to acting, dance, drama, and theatre technology, 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 Department of Theatre Arts and Dance program is closely associated with the Music Department, especially in voice and music theatre. Together these departments offer more than 200 student performances of theatre, dance, and music each year.

## Bachelor of Arts in Theatre Arts with Concentration in Acting

The Acting Concentration offers intensive training in acting, with supporting courses in voice, theatre production, theatre history, dramatic literature, directing, technical theatre, and special topics. We also offer numerous performance opportunities including new works, contemporary and modern plays, Shakespeare and other classics, and music theatre.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Theatre arts requirements | 50 |
| Electives | 19 |
| Total units needed for graduation | 120 |

## Phase I, required for acting concentration (Freshman and Sophomore Years)

Students must complete Phase I before Phase II.
THAR 202 Intro to the History of Drama and Dance: Origins to 1800
THAR 203 Intro to the History of Drama and Dance: 1800 to present (strongly recommended)
THAT 120B Acting: Fundamentals for Acting Concentration Majors
THAR 220A Acting: Text and Scene Study
THAR 220B Acting: Characterization

Any two of the following three technical theatre classes:

* prerequisite or concurrent enrollment in THAR $143 A$.

THAR 143B* Costumes (2)
THAR 144A* Lighting (2)
THAR 144B* Scenery (2)
THAR 145A Voice for the Actor (strongly recommended) (1)
THAR 145B Speech for the Actor (strongly recommended) (1)
Total units required in Phase I
Phase II, required for acting concentration (junior and senior years)
THAR 300 Theatre in Action
THAR 320A Intermediate Acting Block A 5
THAR 320B Intermediate Acting Block B 5
ENGL 339 Introduction to Shakespeare (strongly recommended) 3
THAR 350 Directing Workshop 2
THAR 370A Early Plays: Evolution and Innovation 3
THAR 370B Modern Plays: Evolution and Innovation 3
THAR 400 Theatre of Today 1
THAR 420A Advanced Acting Block A 5
THAR 420B Advanced Acting Block B 5
Theatre Arts electives 5

| Total units in Phase I | 15 |
| ---: | ---: |
| Total units in Phase II | 35 |
| Total units in the acting concentration | 50 |

## Sample Four-year Program for Bachelor of Arts in Theatre Arts - Acting Concentration

FRESHMAN YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :---: | :---: |
| THAR 120B (2) | THAR 120B (2) repeat |
| THAR 143A (2) | THAR 144A (2) |
| THAR 145A (1) | THAR 145B (1) |
| U 150 (5) GE (A2 \& A3) | THAR 302 (3) elective |
| Additional GE (6) | U 150 (4) |
|  | Additional GE (3) |


| Fall Semester (15 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| THAR 116 (1) | THAR 203 (3) GE (C1) |
| THAR 110 (1) | THAR 120B(2) |
| THAR 143 A (2) | THAR 144B (2) |
| THAR 145A (1) | THAR 145B (1) GE (9) |
| THAR 143B (2) | GE (6) |

SOPHOMORE YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (16 Units) |
| :--- | ---: |
| THAR 202 (C1 GE) (3) | THAR 203 (C1 GE) (3) |
| THAR 220A (2) | 220 B (2) |
| THAR 143B (2) | THAR $325(2)$ |
| THAR 302 (3) elective | ENG $339(3))$ |
| GE (5) | GE (6) |

## ALTERNATIVE SOPHOMORE YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 143B (2) | THAR $110(1)$ |
| THAR 202 (3) (C1 GE ) | THAR 220 B (2) |
| THAR 220A (2) | THAR $302(3)$ elective |
| GE (9) | GE (9) |

JUNIOR YEAR:: 29 Units

| Fall Semester (14 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 320A (5) | THAR 320B (5) |
| THAR 350 (2) | THAR $300(3)$ GE UD (C1) |
| THAR 370A (3) | THAR $375(3)$ |
| GE UD (3) | THAR $400(1)$ |
| Electives (1) | GE (3) |

SENIOR YEAR:: 29 Units

| Fall Semester (14 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 420A (5) | THAR 420B (5) |
| THAR 302 (3) | THAR 371B(3) |
| GE UD (3) | GE UD (3) |
| Electives(3) | Electives (4) |

TOTAL UNITS:: 120

## Bachelor of Arts in Theatre Arts with Concentration in Dance

The dance concentration offers dance and movement studies with an emphasis on choreography, performance, and somatic approaches to dancing, with supporting courses in dance and theatre history, technical theatre, and special topics.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Theatre Arts requirements | 48 |
| Electives | 21 |
| Total units needed for graduation | 120 |

Students must complete Phase I before Phase II.
Phase I, Required (Freshman and Sophomore Years)
THAR 202 Intro to the History of Drama and Dance Origins to 1800 or

THAR 203 Intro to History of Drama and Dance: 1800 to present
THAR 210A Contemporary Dance I
THAR 210B Contemporary Dance II
THAR 240 Choreography I
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 required in Phase I

## Phase II, Required (Junior and Senior Years)

THAR 300 Theatre in Action
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
Electives - Dance 1
Total units in Phase I 13
Total units in Phase II 35
Total units in the dance concentration 48

## Sample Four-year Program for Bachelor of Arts in Theatre Arts - Dance Concentration

FRESHMAN YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 110 (1) | THAR 110 (1) |
| THAR 143A (2) | THAR 144A (2) or |
| THAR 143B (2) | THAR 144B (2) |
| GE (10) | THAR 202 (3) (GE-C1) |
|  | GE (9) |

SOPHOMORE YEAR:: 30 Units

| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 210A (2) | THAR 210B (2) |
| THAR $240(2)$ | THAR $340(2)$ |
| GE (8) | GE (7) |
| Electives (3) | Electives (4) |

JUNIOR YEAR:: 31 Units

| Fall Semester (16 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 310 A (5) | THAR 310B (5) |
| THAR $345(2)$ | THAR 300 (3) GE UD (C1) |
| THAR 371A (3) | THAR 400 (1) |
| GE UD (3) | GE (UD) (3) |
| Electives (3) | Electives (3) |

SENIOR YEAR:: 29 Units

| Fall Semester (15 Units) | Spring Semester (14 Units) |  |
| :--- | ---: | ---: |
| THAR 410A (5) | THAR 410B (5) |  |
| GE (5) | THAR 371B (3) |  |
| Electives (5) | Electives (3) |  |
|  |  | GE (3) |
|  |  |  |

## Bachelor of Arts in Theatre Arts with Concentration in Technical Theatre

The technical theatre concentration offers intensive work in design, theatre technology, and stage management, with supporting courses in acting and movement, theatre and dance history, and special topics.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Theatre Arts requirements | 48 |
| Electives | 21 |
| Total units needed for graduation | 120 |

Students must complete Phase I before Phase II.
Phase I, Required (Freshman and Sophomore years)
THAR 202 Intro to the History of Drama and Dance: Origins to 1800 or
THAR 203 Intro to the History of Drama and Dance: 1800 to Present (strongly recommended)

* prerequisite or concurrent enrollment in THAR 143A.

THAR 143B* Costumes
THAR 144A* Scenery
THAR 144B* Lighting
THAR 230 Stage Management
ART 101 Art Fundamentals (strongly recommended) (3)
ART 102 Art Fundamentals (strongly recommended) (3)
Choose 3 units from the following dance/drama courses:
THAR 120A or B Acting: Fundamentals (2)
THAR 110 Dance Fundamentals (1)
THAR 210A Contemporary Dance I (2)
THAR 116 Comedy and Improvisation (1)
THAR 230 Stage Management (3)
Total units required in Phase I

## Phase II, Required (Junior and Senior Years)

THAR 300 Theatre in Action
THAR 344A Design for the Stage 3
THAR 344B Design for the Stage 3
THAR 321A Intermediate Technical Block 2
THAR 321B Intermediate Technical Block 2
THAR 350 Directing Workshop 2
THAR 370A Early Plays: Evolution and Innovation 3
THAR 370B Modern Plays: Evolution and Innovation 3
THAR 400 Theatre of Today 1
THAR 421A Advanced Technical Block 2
THAR 421B Advanced Technical Block 2
THAR 444 History of Ornament 2
Electives - Theatre 5
Total units required in Phase II 33
Total units in Phase I 15
Total units in Phase II 33
Total units in the technical theatre concentration

Sample Four-year Program for Bachelor of Arts in Theatre Arts - Technical Theatre Concentration

FRESHMAN YEAR:: 30 Units

| Fall Semester (16 Units) | Spring Semester (14 Units) |
| :--- | ---: |
| THAR 143A (2) | THAR 144A (2) |
| THAR 143B (2) | THAR 144B (2) |
| GE (12) | GE (10) |
| SOPHOMORE YEAR:: 30 Units |  |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 202 GE (C1) (3) | THAR 120 or 210A (2) |
| GE (9) | THAR $230(2)$ |
| THAR 110 or 116 (1) | GE (9) |
| Electives (2) | Electives (2) |
|  |  |
|  |  |
|  | JUNIOR YEAR:: $\mathbf{3 0}$ Units |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 321A (2) | THAR 321B (2) |
| THAR 344A (3) | THAR 344B (3) |
| THAR 350 (2) | THAR 300 (3) |
| THAR 370A (3) | THAR $400(1)$ |
| GE UD (3) | GE UD (3) |
| Electives (2) | Electives (3) |
|  |  |
|  |  |


| Fall Semester (15 Units) | Spring Semester (15 Units) |
| :--- | ---: |
| THAR 421A (2) | THAR 421B (2) |
| THAR 444 (2) | THAR 370B (3) |
| GE (3) | Theatre Electives (3) |
| Theatre Electives (2) | Electives (7) |
| Electives (6) |  |

TOTAL UNITS:: 120

## Bachelor of Arts in Theatre Arts (General Theatre Degree)

The general theatre degree takes a liberal arts approach to studies in theatre and provides students with a broad-based theoretical background in the history, theory, and practice of theatre. It is for students aiming for careers in education, directing, research, script writing, arts management, film production, and other careers that may not have performance or theatre technology at their centers.

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Theatre arts requirements | 48 |
| Electives | 21 |
| Total units needed for graduation | 120 |

## Phase I, Required (Freshman and Sophomore Years)

Students must complete Phase I before Phase II.
THAR 202 Intro to the History of Drama and Dance: Origins to 18003
THAR 203 Intro to the History of Drama and Dance: 1800 to the Present 3
THAR 120A or B Acting: Fundamentals 2
THAR 143A Stagecraft 2
Any one of the following three technical theatre classes:

* prerequisite or concurrent enrollment in THAR 143A

THAR 143B* Costumes (2)
THAR 144A* Lighting (2)
THAR 144B* Scenery (2)
THAR 230 Stage Management 3
THAR 220A Acting: Text and Scene Study (may substitute 2 units of Dance) 2
Total units required in Phase I

## Phase II, Required (Junior and Senior Years) <br> THAR 300 Theatre in Action

Any one of the following three workshop classes:
THAR 301 Dance Ensemble (3) or
THAR 302 Drama Ensemble Workshop (3) or
THAR 303 Technical Theatre Workshop (3)
ENGL 339 Introduction to Shakespeare
THAR 350 Directing Workshop 2
THAR 370A Early Plays: Evolution and Innovation 3
THAR 371A History of Dance A
One of the following two classes:
THAR 370B Modern Plays: Evolution and Innovation (3) or
THAR 371B History of Dance B (3)
One of the following two classes:
THAR 374 World Theatre (3) or
THAR 373 Dances of the World (3)
THAR 375 Contemporary Plays and Playwrights 3

[^7]One of the following two teaching classes:
THAR 460 Drama for Children (2) or
THAR 470 Dance for Children (2)
Theatre Arts electives

Total units in Phase I
Total units in Phase II
Total units in the general drama concentration
Student may substitute 3 units from the following courses with consent of Theatre Arts advisor.

In English
ENGL 439 Studies in Shakespeare (3)
ENGL 329 Screen/Script Writing (Film-TV-Stage) (3)
ENGL 373 Introduction to Drama (3)
ENGL 474 Studies in Drama (3)
ENGL 377 Film and Literature (3)
In Chicano and Latino Studies
Chicano/Latino Theatre (1-2)

## In Modern Languages and Literatures

One of the above may be substituted for an upper-division dramatic literature course offered in the Modern Languages and Literatures Department (as available, and if student's language skills allow).

## Sample Four-year Program for Bachelor of Arts in Theatre Arts (General Theatre Degree)

FRESHMAN YEAR:: 31 Units

| Fall Semester (14 Units) | Spring Semester (17 Units) |
| :--- | ---: |
| THAR 101 (3) GE (C1) | THAR $200(3)$ GE (C4) |
| THAR 143A (2) | THAR 144B (2) |
| THAR 120 A or B (2) | THAR $302(3)$ |
| GE (7) | GE (9) |

Sophomore Years:: 31 Units

Fall Semester (15 Units)
THAR 202 (3) GE (C1)
THAR 220A (2) THAR 220B (2)
THAR 110 (1) THAR 325 (2)
THAR 230 (3) THAR 301, 302 or 303 (3) Elective
GE (6) GE ((6)

Spring Semester (16 Units)
THAR 203 (3) GE (C1)

| Fall Semester (15 Units) | Spring Semester (14 Units) |
| :---: | :---: |
| THAR 350 (2) | THAR 370B (3) |
| THAR 370A (3) | THAR 375 (3) |
| ENGL 339 (3) | THAR 400 (1) |
| GE UD (3) | GE UD (3) |
| Electives (4) | THAR 301, 302 or 303 (3) Elective |
| SENIOR YEAR:: 29 Units |  |
| Fall Semester (15 Units) | Spring Semester (14 Units) |
| THAR 371 A (3) | THAR 300 (3) GE UD (C1) |
| ENG 373 (3) | THAR 374 (3) |
| GE (3) | THAR 460 or 470 (2) |
| Theatre Electives (3) | Theatre Electives (3) |
| Electives (3) | THAR 301, 302 or 303 (3) elective |
|  | Electives (3) |
| TOTAL UNITS:: 120 |  |

## Minor in Theatre Arts

The minor in theatre arts consists of 24 units of theatre arts courses. Students may choose a minor concentration in acting, dance, technical theatre, or drama. Six of the elective units must be upper-division. Students contemplating a minor in theatre arts should consult the Theatre Arts Department full-time faculty at the earliest possible date for approval and advising.

## Minor Core Requirements

THAR 203 Intro to the History of Drama and Dance: 1800 to present 3
THAR 300 Theatre in Action 3
THAR 301 Dance Ensemble or
THAR 302 Drama Ensemble Workshop or
THAR 303 Technical Theatre Workshop
Total units in the minor core

## Minor Electives

Electives must include at least 6 upper-division units and should be chosen in consultation with an advisor. ( For dance emphasis, students may choose THAR 103, Intro to History of Drama and Dance, or THAR 371A or 371B, History of Dance. Choreography I is a core requirement for a dance emphasis.)

Total units in the minor electives

## WOMEN'S AND GENDER STUDIES

DEPARTMENT OFFICE
Rachel Carson Hall 18
(707) 664-2840
www.sonoma.edu/womenstudies

DEPARTMENT CHAIR
Charlene Tung
ADMINISTRATIVE COORDINATOR
Jo-Ann Smith

FACULTY
Lena McQuade
Don Romesburg

## Programs Offered

Major in Women's and Gender Studies
Minor in Women's and Gender Studies
Career Minor in Women's Health

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 course work in social science research methods, feminist theory, and original research projects, students are also required to complete at least four 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, the 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

| Degree Requirements | Units |
| :--- | ---: |
| General education | 51 |
| Major core requirements | 44 |
| Electives | 25 |
| Total units needed for graduation | 120 |

## I. Core Requirements

WGS 280 Women's Bodies: Health and Image or
WGS 285 Men and Masculinity or
WGS 350 Gender, Sexuality, and Family
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

## II. Disciplinary Concentration

Students must specialize in one discipline (defined as any recognized major or minor in the University) by completing 15 units of course work 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

## III. Skills Application

WGS 390 Gender and Work
WGS 395 Community Involvement Project (CIP)
Or WGS 499 Internships
Internships/Community Involvement Projects must be completed in a community organization chosen in consultation with a WGS advisor. Sites usually address social inequalities related to issues raised in WGS courses. Examples: United Against Sexual Assault, Circle of Sisters after-school program, The Living Room (drop-in center for at-risk women and children), and The Family Connection (work with families transitioning out of homelessness)

$$
\begin{array}{rr}
\text { Total skills application units } & 8 \\
\text { Total units necessary for major } & 44
\end{array}
$$

## 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 upperdivision.

## Minor Core Requirements (10 units)

The core courses provide an organized framework for understanding women's and men's lives and experience individually, 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
WGS 375 Gender, Race, and Class
WGS 475 Contemporary Feminist Theory

## Minor Supporting Courses ( 6 units)

Minors in women's and gender studies must complete at least two courses from at least two of the following categories for a total of 6 units.
Note: Courses on women and gender offered in other departments can fulfill these requirements.
I. Women and Gender in American Society
II. Women and Gender in the Humanities
III. Biological and Psychological Perspective on Women or Gender
IV. Women or Gender in International and Cross-Cultural Perspective
V. Special Topics on Women or Gender

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

Total units in the WGS minor

## 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
NURS 480 Health, Sexuality, and Society or WGS 350 Gender, Sexuality, and Family

## Practical Application (3-4 units)

WGS 499 Internship in Women's Health Setting (4) or NURS 425 Senior Clinical Study (3)

## Electives (10-11 units)

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

## Suggested Electives

GEOG 396 Medical Geography 3
GERN 300 Basic Gerontology 3
GERN 319/SOCI 319 Aging and Society 3
NURS 340 Health and IIIness in the Expanding Family 4
PSY 404/WGS 330 Psychology of Women 4
PSY 408 Transitions in Adult Development 4
PSY 454 Biofeedback and Somatic Psychology 4
SOCI 452 Health Care and Illness
(cross-listed as GERN 452)
WGS 301 Women's Health Lecture Series 1-2
WGS 440/SOCI 440 Sociology of Reproduction 4
WGS/NURS 495 Special Study Research
on Women's Health 1-4
Total units required in Women's Health minor 20
For more information come to the Women's and Gender Studies Department Office in Rachel Carson 18.

## 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

Fall Semester (15 Units)
GE (3), GE (3)
GE (3), GE (3), GE (3)
Spring Semester (15 Units)
GE (3), GE (3)
GE (3), GE (3), GE (3)

SOPHOMORE YEAR:: 30 Units
Fall Semester (16 Units)
Spring Semester (14 Units)
WGS 280 (GE) (3) or WGS 285 (3)
WGS elective (3)
Lower-division course in disciplinary concentration (4) Disciplinary course (4)
GE (3) GE (3)
Electives (6)
Electives (4)

JUNIOR YEAR:: 30 Units

| Fall Semester (17 Units) | Spring Semester (13 Units) |
| :--- | ---: |
| WGS 375 (3) | WGS 390 (4) and WGS $499(2)$ |
| Gender course in | Disciplinary course needed |
| disciplinary concentration (4) | for 20-unit minor (4) |
| WGS 350 (3) | Upper-division GE (3) |
| Disciplinary course needed to complete a minor (4) |  |
| Upper-division GE (3) |  |

SENIOR YEAR:: 30 Units
Fall Semester (17 Units)
Spring Semester (13 Units)
WGS 425 (4)
WGS 485 (4)
WGS 475 (4)
WGS 499 (2)
Electives (9)
Electives (7)

TOTAL UNITS:: 120

## COURSE DESCRIPTIONS

## American Multicultural Studies (AMCS)

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, Category A1. Prerequisites: Completion of GE Categories A2 and A3.

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, category D1. This course satisfies one of the core requirements of the AMCS major.

AMCS 255 Ethnicity in the Humanities (3)
A general survey of the major artistic and expressive developments in the U.S. with reference to native ethnic populations. An assessment of how race and ethnicity are represented in the arts, humanities, media, and popular culture. This course satisfies one of the core requirements of the AMCS major. May be taught with a focus on a single racial or ethnic group. Satisfies GE category, C4.

AMCS 330 Multicultural History of the United States (4)
A survey of the origins and histories of a wide range of racial and ethnic groups in the United States. This course will explore the social, economic, and political evolutions of various groups in an effort to understand their positions in the United States today. It will also focus on the development of various racial categories and identities throughout the American past.

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, category D1.

AMCS 345 Folklore and Ethnicity (4)
Methods and materials dealing with the traditional expressive culture of American ethnic groups through oral literature, festivals, children's games, customs, and beliefs. Includes training in collecting oral traditions and in the analysis of folklore texts and contexts. Topics subject to change.
amCS 350 Ethics, Values, and Multiculturalism (3)
An examination of how issues of race, and ethnicity affect the values and ethics of American society and its citizens. Students will be expected to assess how their views about race in the U.S. have been influenced by their upbringing and how their values and ethics reflect those views. This course satisfies one of the core requirements of the AMCS major. May be taught as a general survey or with a focus on a single racial or ethnic group. Meets ethnic studies and upper-division GE requirements in Area C3.

AMCS 355 Language and Ethnicity (3-4)
A study of language as an ethnic marker, language and ethnic identity, language and national revival, bilingualism and bi-dialectism, standard and nonstandard speech, foreign accents, and linguistic assimilation vs. language retention. Satisfies upper-division ethnic studies in GE, category C4.

AMCS 360 Ethnic Literature (3)
A survey of the representative novels, short stories, essays, biographies, and poetry of various ethnic authors in the United States. Satisfies upper-division ethnic studies in GE, category C2.

AMCS 370 Topics in Ethnic/Multicultural Studies (4)
A course enabling students to conduct in-depth study of a specific area of ethnic culture. The course may cover subject topics such as Asian American Cinema, Multicultural Autobiography, or African American music. Topics subject to change. May be repeated for credit with instructor's permission.

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 interracial relations, the impact of political and social factors, and the cultural expressions of the multiracial experience.
AMCS 376 African American Experience (4)
A historical examination of the African American experience from the pre-Colonial period to the present. This course will pay special attention to cultural and sociological aspects of African American history with a particular focus on the impact of gender and class. This class asks students to use historical analysis to understand race relations in the 21st Century.

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/senior status with satisfactory completion of either AMCS 210 or 255. By individual arrangement with instructor.

AMCS 392 Ethnic Images in Film and Media (3)
An examination of representative and significant works, tracing the evolution of ethnic images in cinema and media from their earliest to latest manifestations. Topics subject to change. Satisfies upper-division ethnic studies in GE, category C1.

AMCS 395 Community Involvement Program (1-4)
Course provides students with practical experience in various community organizations, health and social service agencies, and educational settings. Includes schools, recreation programs, tutoring programs, day care centers, cultural arts organizations, and civic promotion organizations.

AMCS 399 Student Initiated Course (1-4)
Student initiated and instructed courses on topics that enrich or extend current departmental offerings. Students may take up to four units of AMCS 399 courses for major credit.
AMCS 405 Black Family Life in America (4) Using sources from a wide range of disciplines, including literature, film, sociology, and history, students will review and assess major cultural themes surrounding black family life. Students will also be expected to explore how these narratives reflect larger issues of race and ethnicity in the United States

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 430 Topics in Multicultural History (4)
Subjects will vary by semester, but this course will concentrate on topics and periods in American Multicultural History. Students will be required to do a research project in this course. Students will also be asked to review primary documents in American Multicultural History. May be repeated for credit with instructor's permission.

AMCS 431 Ethnic History of California (4)
A historical examination of the major ethnic and racial groups in California and their influence on the Californian present and future. This course will look at environmental, social, demographic, geographical, sexual, political, and economic issues specific to California and its minority populations.

AMCS 432 Health and Culture (4)
An analysis of cultural and ethnic influences on health and health behavior, with an emphasis on developing strategies for bridging cultural disjunctions between health professionals and their clients, and for improving health care delivery to an ethnically diverse population.
amCS 439 Civil Rights and Human Rights Law (4)
A study of major court decisions, legal battles, and/or social movements that have influenced American's understanding of the civil rights and human rights that govern our society. This course will engage student understanding of the relationship between the executive, legislative, and judicial branches of government. Course may use a multicultural perspective or focus on a single racial or ethnic group.
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 460 Multi-Ethnic Children's Literature (4)
A study of multiethnic children's literature. Stories from folklore and literature are used to exemplify cultural images and traditions.

AMCS 470 Advanced Studies in Ethnic Culture (4)
A course enabling students to conduct in-depth study of a specific area of ethnic culture. The course may cover subject topics as Asian American Cinema, Multicultural Autobiography, or African American music. Topics subject to change. May be repeated for credit with instructor's permission.
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. May be repeated for credit with instructor's permission.
amCS 477 Selected Topics in Asian American Studies (4)
A course designed to explore areas of contemporary, historical, or artistic concern as they affect the Asian American experience. Advanced studies and/or research projects will be discussed and analyzed. Subject matter will vary. Topics subject to change. May be repeated for credit with instructor's permission.

## 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 to the political and moral implications of quantitative and field research. This course satisfies one of the core requirements of the AMCS major.
AMCS 481 Special Topics (1-4)
Please refer to current Schedule of Classes.

## AMCS 485 Senior Seminar (4)

Directed studies in a seminar setting on a particular topic or theme. Combines secondary reading and original research leading to the completion of a research project. Please see Schedule of Classes for the topic selected by the instructor.
AMCS 487 Senior Thesis (4)
Students in the major, with faculty supervision, may elect to write a thesis in order to quality for graduation with distinction in American Multicultural Studies. Prerequisite: AMCS 480.
AMCS 495 Special Studies (1-4)
Independent study. Prerequisite: AMCS 210 or 255; a core upper-division course; approval of supervising faculty member and approval of department chair.
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, and civic promotion organizations.

## Anthopology (ANTH)

ANTH 201 Introduction to Biological Anthropology (3)
An introduction to the evolutionary biology of human and nonhuman primates; evolutionary perspectives on form and function, behavior, population, and social structure are focused on reconstructing human evolution and explaining human adaptations. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). CAN ANTH 2.

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, category D1 (Individual and Society). CAN ANTH 4.

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 in the modern world. Identification of significant issues, schools of thought, and historic persons. Training in scholarly procedure, library research, bibliography, and professional format and style. Prerequisites: At least one of the following: ANTH 201, 202, 203, or consent of instructor. (ANTH 342 recommended.)

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 bodies and behavior. Implications for the emergence of modern human races are also considered. Prerequisite: for ANTH majors: ANTH 201; for non-majors: ANTH 201 or BIOL 115 and upper-division 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, sex differences in morphology and behavior, and ecological basis of sex differences in hominid evolution. Prerequisites: ANTH 201 for anthropology majors, ANTH 201 or BIOL 115 for non-majors, or consent of instructor, and upper-division standing.

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, biology of beauty, human variation, evolution of human, and/ or primate social behavior. May be repeated for credit with permission of chair if topic differs. Prerequisites: ANTH 201 for anthropology majors, ANTH 201 or BIOL 115 for non-majors, or consent of instructor, and upper-division standing.

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, category E (The Integrated Person). Prerequisite: for ANTH majors: ANTH 201; for non-majors: ANTH 201 or BIOL 115 and upper-division standing or consent of instructor. Cross-listed as HD 318.

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 the 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, urban societies, to the increasing impact of cultural resource legislation and the views and interests of modern indigenous populations on contemporary archaeological practice. Prerequisites: upper-division standing or consent of instructor.

ANTH 340 Living in a Pluralistic World (3)
This course explores differences in human cultures primarily as these are highlighted through cultural interactions. By learning to perceive how cultural differences influence the dynamics of human interactions and relationships in an age of globalization, one can develop the skills necessary to live in our pluralistic world. Not applicable to the Cultural Analysis and Theory core requirement for the anthropology major. Satisfies upper-division GE, category 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, category D2 (World History and Civilization). Prerequisite: upper-division standing or consent of instructor.

ANTH 342 Organization of Societies (4)
Intensive in-class discussions of ethnographies from several different cultures. Discussions will address key issues in cultural analysis, cross-cultural comparison, and a holistic examination of culture. Students are encouraged to think critically and interpretively about the organization and practices of the cultures 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 will focus on the study of environmental issues. The course will cover 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.

ANTH 352 Global Issues (4)
This course will explore anthropological perspectives on global issues. The course will include 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 will vary with each offering; may be repeated for credit with consent of instructor. Prerequisites: 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.) will be assessed both in terms of impacts on host cultures and their environments as well as on 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. Prerequisites: ANTH 203 or ANTH 340 or consent of instructor, and upper-division standing.
anth 370 Cultures, Illness and Healing (4)
This course ponders several questions central to the study of healing, wellness, and disease in one's own and other cultures. We explore what is meant by illness, explanatory models of disease, cross-cultural approaches to illness and healing, and how caregivers and care receivers often have different understandings and expectations of what disease and healing mean. We also explore current issues relating to health and illness, such as the influences of gender globalization, ethnicity in receiving and giving care, and current disease topics. Prerequisites: ANTH 203 and upper-division standing or consent of the instructor.
anth 372 Talk about Feeling Sick: Stories and Metaphors of Illness (4)
Severely ill individuals often re-make a sense of their lives and themselves through the stories or narratives, they tell about the disease. These stories, in turn, reveal key metaphors about how a culture thinks about bodies, diseases, and healing. By using selected narratives, we obtain a glimpse into how individuals experience threatening diseases, and better grasp how metaphors of shame, mind/body quality, and healing shape disease experiences in several cultures. Prerequisites: ANTH 203 and upper-division standing or consent of instructor.

ANTH 378 Bodily Constructs: Genders and Technologies (4)
The course focuses on topics that help us gain new insights into how bodies are constructed cross-culturally and what these constructions reveal about societies. Topics include embodiment theory, or how social disorder is manifest in individual bodies; how gender meanings and categories vary with and between cultures; and how current reproductive and other medical technologies reveal Eurowestern ideologies. Topics may vary. Prerequisites: ANTH 203 and upper division standing or consent of the 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. Prerequisite: ANTH 203 or upper division standing 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, 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. Prerequisite: 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. Cross-listed with LING 432. Prerequisite: 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; may be repeated for credit. Prerequisite: senior standing or consent of instructor.
ANTH 386 Sign Language 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: LING 200 or 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, and prehistoric technology and osteology - will be announced in the semester schedule. May be repeated for credit. 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, upperdivison standing and consent of instructor.

## 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.

## ANTH 400 Anthropology Praxis (1-3)

Supervision and assessment of curriculum development and application for students in instructional or faculty-adjunct roles. May be repeated once for credit.

## ANTH 414 Primate Behavior Laboratory (4)

Combined lecture/laboratory course for students interested in studying primate behavior. Course will include an in-depth survey of the primates, emphasizing one or more of the following topics: socioecology, social organization, behavioral ecology, and evolution of primate behavior. Students will also learn methods used in studying, describing and analyzing primate behavior. Laboratory consists of direct observations of local fauna and captive primates at Bay Area zoos. Prerequisites: ANTH 201 for anthropology majors, ANTH 201 or BIOL 115 for non-majors, or consent of instructor, and upper-division standing.
ANTH 415 Forensic Anthropology Methods (4)
Combined lecture/laboratory course for students interested in the principles and techniques used in the application of forensic anthropology. Topics covered in this course include estimating time since death; determining age, sex, stature, and ancestry; and identifying the effects of trauma and pathology on bones. Examination of forensic anthropology case studies. Prerequisites: ANTH 201 for anthropology majors, ANTH 201 or BIOL 115 for non-majors or consent of the instructor, and upper-division standing.
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. Prerequisite: concurrent enrollment in ANTH 421 or upper-division standing.
anth 421 Archaeology Methods: Laboratory (1)
Prerequisite: concurrent enrollment in ANTH 420.
anth 424 Mesoamerican Archaeology Field School (4)
A field school designed to introduce undergraduate students to archaeological fieldwork in the Maya lowlands of Belize. The project has a regional focus with a principal objective of studying the changes in settlement patterns and site relationships over time. Specific site focus and particular techniques taught may change from season to season. The curriculum focuses on instruction in archaeological field practice including excavation, data recording, artifact processing, and mapping. May be repeated for credit.

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 topic 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 vs. specialization. Prerequisite: ANTH 201 or 203 and upper-division or consent of instructor.

## ANTH 454 Ethnographic Field School (4)

A field school designed to help student 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. May be repeated once for credit. Prerequisites: ANTH 203 or equivalent, and upper-division standing, or consent of instructor.

ANTH 490 Topical Seminar in Anthropology (1-4)
Prerequisite: upper-division standing or consent of instructor. May be repeated for credit if topic differs.
ANTH 491 Working 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. Prerequisites: senior standing and 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.

ANTH 496 Agency Internships (1-3)
Students in the intern 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.
ANTH 497 Anthropology Internships (1-3)
Students in the intern 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 and evaluation by the faculty sponsor. $\mathrm{Cr} / \mathrm{NC}$ only. May be repeated for credit. Prerequisite: upper-division standing or 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 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. $\mathrm{Cr} /$ NC only.

ANTH 590 Advanced Seminar 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 Praxis 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 identity and describe a historic building, to document it using photographs, plans, and detailed drawings, and to 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 and department chair.
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.
ANTH 596A 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: graduate standing and consent of instructor.

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. Prerequisite: 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. Prerequisite: graduate standing and consent of instructor.

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, and 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. Prerequisite: graduate standing and consent of instructor.

ANTH 598 Teaching Assistant in Anthropology (1-3)
Provides experience by assisting the 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.
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). Prerequisite: 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). Prerequisite: 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 199 Student-Instructed Course (1-4)
Please see current Schedule of Classes for details.
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 stategies 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 Intro to Art History (3-4)
A survey course covering painting, sculpture, and architecture of prehistoric and primitive cultures and of ancient, classical, and medieval civilizations. Satisfies GE, category C1 (Fine Arts).

ARTH 211 Intro 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, category C1 (Fine Arts).

ARTH 212A Intro to World Film History A (3) Lecture, 2 hours; films, 2 hours. A chronological survey of historically representative and significant films tracing the evolution of the cinema as an art form. Includes study of the primitive period, the emergence of the feature film in America, Europe, and Japan, the advent of sound, the "great studio era," and alternative cinemas of the 1930s and 1940s. Satisfies GE, category C1 (History of the Fine Arts).

ARTH 212B Intro to World Film History B (3) Lecture, 2 hours; films, 2 hours. A chronological survey of historically representative and significant films tracing the evolution of the cinema as an art form. Includes study of post-war movements such as Neorealism and the French New Wave, cinematic modernism, the post-war film in Asia, and the emergence of new cinemas in the Third World and Eastern Europe. Satisfies GE, category C1 (Fine Arts).
ARTH 270A Survey of South and Southeast Asian Art (3-4)
A general survey of the arts and cultures of South and Southeast Asia, including India, Thailand, Indonesia, Cambodia, and Myanmar, from prehistoric periods to the present. Satisfies GE, category C1 (Fine Arts).

ARTH 270B Survey of Chinese,Japanese, and Asian Art (3-4)
A general survey of the arts and cultures of China and Japan from prehistoric periods to the present. Satisfies GE, category 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.)
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.

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 361 Classic Narrative Film (3)
Theory and analysis of classic Hollywood film. Emphasizes the evolution of the narrative systems, the art of editing, the history of American genre film making, the problematic notion of the auteur, and the place of the spectator in the classic fiction film.

ARTH 363 Other Cinemas (3)
Alternative film practices (i.e., outside the classic Hollywood model). Each semester's course is organized around a movement, a theme, or a critical problem and includes the study of Western and non-Western films. May be repeated for credit toward the minor.
ARTH 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 and the department chair.

ARTH 399 Student Instructed Course (1-4)
Please see current Schedule of Classes for details.
arth 400 Art History Information Resourse 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. Prerequisite: upper division art history standing or a related major and concurrent enrollment or completion of ArtH 490H.
ARTH 420 Pre-Classical Art (3-4)
Seminar/survey course covering the history of the arts and architecture of Egypt, Crete, and the Near East before the conquests of Alexander the Great.

ARTH 422 Greek Art (3-4)
A seminar/survey course covering the history of Greek art and architecture from the Proto-geometric through the Hellenistic periods (ca. $1000 \mathrm{BC}-100 \mathrm{AD}$ ).
ARTH 424 Roman Art (3-4)
A seminar/survey course covering Etruscan and Roman art and architecture from the early Republic through the age of Constantine, Fourth Century, C.E.

ARTH 430 Early Christtian, Byzantine, and Early Medieval Art (3-4)
A seminar/survey course covering Christian art from its origins in the Third 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 seminar/survey course covering 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)
Seminar/survey course covering painting, sculpture, and architecture in Italy in the 14th and 15th centuries.

ARTH 442 Later Italian Renaissance Art (3-4)
Seminar/survey course covering painting, sculpture, and architecture of Italy in the 16th century. Includes High Renaissance and Mannerist periods.

ARTH 444 Northern Renaissance Art (3-4)
A seminar/lecture course covering painting, printmaking, sculpture, and architecture of the 14th-16th Centuries in Europe, apart from Italy.
ARTH 450 Baroque Art (3)
A seminar/survey course on Italian and/or Northern European painting, architecture, and sculpture of the 17th Century. Content emphasis may vary. May be repeated with consent of instructor.

## ARTH 452 Eighteenth Century Art (3-4)

A seminar/survey course on 18th Century painting, architecture, and sculpture. Content emphasis may vary.
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, category C1 (Fine Arts). Prerequisite: HUM 200 or ENGL 101.

## ARTH 456 The History of Photography (3-4)

A survey course examining photographers and their work from the beginning of the art form to the present day. Content emphasis may vary.

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-divi-
sion GE, category C1 (History of the Fine Arts). Prerequisite: HUM 200 or ENGL 201.
ARTH 461 Selected Topics in Film (3)
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. May be repeated for credit toward the minor.

ARTH 464 History of Modern Art-20th Century (3-4)
A survey of art of the Western world in the 20th Century to the end of World War II, including non-Western and native influences. Satisfies upper-division GE, category C1 (Fine Arts). Prerequisite: HUM 200 or ENGL 101.
ARTH 465 Modern Art from 1945 to 1979 (3-4)
A survey of American and European developments in late modern and early postmodern art, focusing 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, and artists working outside New York will also be considered. Satisfies upper-division GE, category C1 (Fine Arts). Prerequisite: HUM 200 or ENGL 101.
ARTH 466 Contemporary Art (3-4)
A survey of Western and international developments in postmodern and current art. The course will examine some of the artists and movements that were recognized in the 1980s, such as Neo-Expressionism, Appropriation, Graffiti Art, Neo-Geo, Image-Text, and Video/Computer art. In addition to a chronological overview, current issues and theories necessary for a thorough understanding of contemporary art and artists will be explored. Readings and written papers on designated topics will be required. Prerequisite: ArtH 465.
ARTH 470A South and Southeast Asian Art (3-4)
A seminar/survey course examining in depth the arts of South and Southeast Asia, including India, Thailand, Indonesia, Cambodia, and Myanmar, from their beginnings to the present. Emphasis on sculpture and painting. Content emphases may vary. May be repeated with consent of instructor.
ARTH 470B Chinese and Japanese Asian Art (3-4)
A seminar/survey course examining in depth the arts of China and Japan from their beginnings to the present. Emphasis on sculpture and painting. Content emphases may vary. May be repeated with consent of instructor.

ARTH 474 Islamic Art (3-4)
Course explores the formation, establishment, and variations of Islamic artistic culture from its beginnings in the 7th Century through the apogee of the 0ttoman (Turkish) Empire in the 16th and 17th Centuries.
ARTH 476 Beyond European Trad:Selected Topics (3-4)
A seminar/survey 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 seminar/lecture 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 490F Theory and Methods of Film Criticism (3)
A senior-level seminar course that allows students to develop their critical expertise and plan an original piece of research and interpretation, to be presented as the senior paper.

ARTH 490H Pro-Seminar in Art Hist Method (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 nonmajors: consent of instructor. Students must have completed two Art History papers in upper division courses to be admitted.
ARTH 491F Senior Thesis in Film (1)
Submission of a scholarly paper to the faculty is required in the senior year. The student works in a tutorial situation with the film historian.

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.

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 intern 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.)

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 $\mathrm{Cr} / \mathrm{NC}$.

## Art Studio (ARTS

## ARTS 101 Art Fundamentals (3)

Basic design. A studio course in the study of form, color, and composition in twodimensional art; rendering of three-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 to 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.

ARTS 199 Student Instructed Course (1-4)
Please see current Schedule of Classes for details.
ARTS 200 Photography in the World (3-4)
Lecture presenting overview of the roll 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 two-dimensional 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.

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, and 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.

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, and textbook required. Lab fee due at time of registration. Prerequisites: ARTS 102.

## 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.
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 be applicable to requirements for a major in art. Prerequisite: 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.
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. $\mathrm{Cr} / \mathrm{NC}$ only.
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.

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.
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.
ARTS 310 Digital Imaging (1-3)
Covers intermediate digital techniques: lecture/discussion, reading, lab work, individual projects, and critiques. Topics may include ditial theory, hardware/ software techniques of 2D 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. Prerequisites: ARTS 210.
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.

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 on 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.

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 and fieldtrips. Laboratory fee due at time of registration. Prerequisite: ARTS 236 or consent of instructor. Textbook required.

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, and short writing assignments. Textbook required. Laboratory fee due at time of registration. Prerequisite: ARTS 236.
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.
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.
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 is 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. Prerequisite: 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, 329. Lab fee payable at time of registration.
ARTS 430 Large Scale Clay and Install 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 vocabularly through individual/group critiques. Lab fee payable at registration. Prerequisite: 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)
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, 329. Lab fee payable at time of registration.

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.
ARTS 465 BFA 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 BFA 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 to 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. Up to 12 units may be repeated for credit. Laboratory fee payable at registration. Prerequisite: ARTS 382.
ARTS 491 Visting Artists' Lecture Series (1)
This is a noontime visiting artists' lecturer series for the Art and Art History department. Cr/NC only. Attendance and paper required.

ARTS 492 BA 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.
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. 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.

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; 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 intern 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.

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, category B1 or B3 (Physical Sciences).
ASTR 231 Intro 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, techniques in imaging, photometry, and spectroscopy. Satisfies GE, category B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisite: previous or concurrent enrollment in ASTR 100.
ASTR 303 Extraterrestrial Intelugence and Interstellar Travel (3) Lecture, 3 hours. An open-minded appraisal of the possibilities and prospects for life in the universe and travel to the stars. Topics to be covered include a history of human thinking about extraterrestrial life; the nature of life; possible appearance and nature of extraterrestrial life; the Drake Equation; detection of extraterrestrial planets, planetary habitability, and the Fermi Paradox; SETI; spaceflight; interstellar travel. Satisfies GE, category B3 (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; the study of the origin and fate of the Universe, including the search to understand dark matter and dark energy. Satisfies GE, category 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, category 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 Adv 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 electro-magnetic 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.

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.
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 presentataion, student inquiry, and laboratory exercises. Topics include the bases of life; organization of living systems, from molecules to ecosystems, and their interactions; genetics, evolution, and ecology. Satisfies GE, category B2 (Biological Sciences) 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, category B2 (Biological Sciences). 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. For biology majors; satisfies GE, categories 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 mechanism of inheritance, evolution, and ecology. Recent advances in understanding processes underlying ecological and evolutionary relationships will be emphasized. For biology majors; satisfies GE, categories 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, categories B2 or B3. Prerequisites: BIOL 121 and 122 or consent of instructor and CHEM 115AB. 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, category B3 and GE laboratory requirement. Prerequisite: BIOL 115 or 121/122.

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, category B3 and GE laboratory requirement. Prerequisites: BIOL 115 or 121/122 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 115 and CHEM 115AB or 105.

Biol 243 Environmental Microbiology (4) Lecture, 3 hours; laboratory, 3 hours. Examines microbial activities that sustain the biosphere with focus on applied aspects including wastewater treatment, bioremediation, biological control of plant disease, and biofuel production. ENSP Hazardous Materials Management and Water Quality Technology core requirement. Prerequisites: BIOL 110 or 115 or 122; and CHEM 115AB/116AB.

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 121/122 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, category B3 (specific Emphasis in Natural Sciences). Prerequisite: BIOL 110, 115 or 121/122.

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, category B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 110, 115 or 121/122.

BIOL 311 Sexually Transmitted Diseases (3)
Lecture, 3 hours. Biological, environmental, societal, and psychosocial aspects of sexually transmitted diseases. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 110, 115 or 121/122.

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, category B3. Prerequisite: BIOL 110, 115 or 121/122.

BIOL 314 Field Biology (3)
Lecture, 2 hours; laboratory and field, 3 hours. A course emphasizing plant and animal communities of Northern California. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences) and GE laboratory requirement. Prerequisite: BIOL 110, 115 or 121/122.

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, category B3. Prerequisite: BIOL 110, 115 or 121/122.

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, category E. Prerequisite: BIOL 110, 115 or 123.

BiOL 322 Invertebrate Biology (4)
Lecture, 3 hours; laboratory and field, 3 hours. Exploration of the systematics, functional morphology, behavior, and ecology of invertebrate animals. Prerequisite: 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 and 122.

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, amphibia, reptiles, birds, and mammals. At least one weekend field trip. Prerequisites: BIOL 121 and 122.

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 and 122.

Biol 329 Plant Bilogy (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 five-hour field trips outside of scheduled class time. Prerequisites: BIOL 121 and 122 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 339 Mycology (4)
Lecture, 2 hours; laboratory and field, 6 hours. Principles and techniques for studying fungi and allied organisms, including the development of laboratory culture, identification, and field work on terrestrial and aquatic fungi. Prerequisites: BIOL 121 and 122.

BIOL 340 General Bacteriology (4)
Lecture, 2 hours; laboratory, 6 hours. An introduction to the 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. 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 343 Molecular Microbiology (4) Lecture, 3 hours; laboratory, 3 hours. The biochemical and molecular processes of pathogenic organisms within the four major groups of microbes: bacteria, parasites, fungi, and viruses. 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: BIOL123 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 mechanism. Prerequisite: BIOL 123.

BIOL 382 Parasitology (4)
Lecture, 3 hours; laboratory, 3 hours. The biology, epidemiology, ecology, pathogenesis, diagnosis, and prevention of parasitic diseases affecting animals and humans. Students will learn about the host-parasite relationship in the context of how social, economic, and ecological factors contribute to parasitic infections and disease. Labs involve microscopic identification of prepared and live specimens. Prerequisite: BIOL 324 or BIOL 326.

BIOL 383 Virology (4)
Lecture, 3 hours; discussion 1 hour. Viruses: their characteristics, classification, genetics, and host-parasite interactions, including methods of disease prevention, control, and applications in biotechnology. Prerequisites: BIOL 123 and CHEM 335A.

Biol 385 Contemp Issues in Biology (3)
Lecture, 3 hours. Selected topics related to the quality of life and the search for perspectives on the future. May be repeated with different topics. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 110, 115 or 121/122.

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. All majors and graduate students are encouraged to enroll each semester, although no more than 2 units are applicable to the biology major (BIOL 390) or MA degree (BIOL 590).

BIOL 395 Community Involvement Program (1-4)
CIP involves students in basic community problems related to biology-performing such tasks as tutoring, reading to the blind, service to local, county and state agencies, and service as teacher aides to elementary schools. Students receive 1-4 units depending on the specific task performed. A total of 6 units of CIP credit may be applied toward a degree. Cr/NC only. Prerequisites: approved petition to enroll and completion of biology minor core.
biol 426 Neurobiology and Neural Networks (4)
Lecture, 2 hours; laboratory, 3 hours. Theoretical and experimental approach to studying basic concepts of electrophysiology, neuronal electrical activity, and neuronal circuitry in invertebrate and vertebrate animals. Lab exercises include studies of neuronal networks in crayfish, horseshoe crabs, and sea hares. Prerequisites: BIOL 115 or BIOL 121/122 and PHYS 210B or PHYS 214; or consent of instructor.

BIOL 460 Ichthyology (4)
Lecture, 3 hours; laboratory and field, 3 hours. At least one weekend field trip. Morphology, classification, distribution, ecology, and evolutionary history of fishes. Prerequisite: BIOL 327 or 328.
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 Mammalogy (4)
Lecture, 3 hours; laboratory and field, 3 hours. Characteristics, classification, physiological ecology, habitats, behavior, reproduction, distribution, and evolution of mammals. Prerequisite: BIOL 360 or 370.

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 mechanism along with a conceptual framework for understanding how development occurs. Prerequisite: BIOL 342, 343, 344, or 383.

BIOL 480 Immunology (4)
Lecture, 3 hours; discussion 1 hour. The component elements of the immune response; antigens and antibodies; theories of antibody synthesis, cellular reactions, and hypersensitivity; immunogenetics. Prerequisites: one core course from each of the following U.D. core areas: Physiology, Molecular and Cell Biology.
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, and 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 321 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 491 Library and Information Researchs: Natural Sciences (2) Techniques for finding library and information resources in the life sciences. Course covers use and evaluation of print and electronic information sources, including online and Internet databases, research strategies and techniques, compiling and preparing bibliographies, scientific writing form and style, and organization of personal reference files. Prerequisite: at least one biology course or consent of instructor.
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: a major or minor in biology with an upper-division standing; consent of instructor and department chair, and approved petition to enroll.
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 495, senior standing in the major.

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. Prerequisite: consent of instructor.
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 8 units of credit; 3 hours per week for each unit. Cr/NC grading only.
biOL 500 S 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 503 Evolutionary Ecology (4)
Lecture, 3 hours; laboratory, 3 hours. Overview of the application of evolutionary principles to the study of natural populations in the field. Focus on principles of natural selection, population genetics, and adaptation. Emphasis on research projects and oral and written presentation of results. Prerequisites: BIOL 300, 301 or 345 recommended, or consent of instructor.

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 300.

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 517 Paradigms in Parasitology (2)
Lecture, 1 hour; discussion, 1 hour. A seminar format with occasional lectures. Parasitology is a subject area that crosses many biological disciplines, and concepts in parasitology can be applied to any field of science. Students may choose topics that most closely relate to their research interests. Topics may include ecology of emerging infectious diseases, how parasites affect their host's behavior, co-evolution of host-parasite associations, RNA editing, and how parasites evade the immune system. Prerequisite: consent of instructor; parasitology background not required.

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, cell-cycle dynamics, and macromolecular regulation of cell division. Prerequisites: BIOL 344, and BIOL 348 or 349 .

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 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 MS degree. Cr/NC 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. Prerequisite: 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 Bus (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 Principles of 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. Prerequisite: computer competency.

BUS 230B Principles of 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 Intro 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 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 online 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. $\mathrm{Cr} / \mathrm{NC}$.

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 $\mathrm{s} /$ he would like to develop in close consultation with a faculty member. Cr/NC only.

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 Mgt (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. Prerequisites: computer competency and BUS 211.

BUS 319 Intro 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 Info 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. Prerequisite: 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 340W Survey of Human Resource Mgmt/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 340 W 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. Prerequisite: BUS 211 and BUS 225.

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 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, to applied theories of motivation, and to 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 Intro 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. Prerequisites: BUS 211, 230A and 230B.
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, and the cultural, social, legal, and ethical differences of international markets. Emphasis on developing and adjusting the marketing mix of product, price, promotion, and distribution to compete in international settings. Prerequisite: BUS 360 .

BUS 370 Intro 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. Prerequisite: BUS 230A and 230B.

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.
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 Intro 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, 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 (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, 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 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 entityrelationship 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, 330B 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. Prerequisite: BUS 225.

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 non-profit vs. 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, followship, 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, working in teams with faculty and 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; 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 367.

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 211 (or ECON 317 or MATH 165), BUS 367 and BUS 319.
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 and BUS 367.
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. Prerequisite: BUS 316.

## 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. Prerequisite: BUS 360.

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 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 Financial Planning and Strategy (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 470.

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, and 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 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, a passing score on the WEPT, 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 495 Special Studies (1-4)
Student-designed and instructor-guided projects, to be arranged individually. May be repeated once for credit. 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.

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.

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 BS 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. $\mathrm{Cr} / \mathrm{NC}$ 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 BS 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 BS 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 BS 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 BS 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 BS 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 (4)
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 (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 (3)
A foundation course designed to provide the conceptual and analytic framework guiding financial decision-making within the business firm. Emphasis is on financial analysis, the evaluation of investment opportunities, working capital management, and alternative means of financing the firm. Prerequisite: BUS 501.
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 519 Management Information Systems (3)
Study of the fundamental role information systems and technologies play in organizations and of the management issues they raise. Topics include IS/IT's strategic importance; technology, legislative, and industry trends; systems development issues and practices; database design and management; and management of IS/ IT assets.

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 interdisciplinary 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 230 B , and BUS 507 .
bUS 540 Strategic Human Resource Mangement (3)
Strategic human resource management offers a framework for general managers to implement best HR practices in their organizations. The focus is on implementing long term programs that either add demonstrable value, or programs which effectively manage risks to the organization. Emphasis will be placed on utilizing HR metrics to measure outcomes.

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. Prerequisites: Classified graduate status in the Wine MBA concentration.

BUS 550 Seminarin 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, 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 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 to 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 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. Prerequisites: Classified graduate status in the Wine MBA concentration.

BUS 559 Seminar in Advanced Mgmt 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 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 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 MBA 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 and BUS 508 , or equivalent preparation.
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 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 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 592 Entreprensurship 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 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. Prerequisite: 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 students' graduate studies. CR/NC grade only.

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 MBA Coordinator before the student registers for this course.

CHEM 102 Chemistry and Society (3)
Lecture, 2 hours; laboratory, 3 hours. An introductory course in chemistry for students majoring in subjects other than the sciences. This course covers many of the ideas of chemistry in a way that requires only basic algebra. An emphasis is placed on the role of chemistry in daily life and in decision making. The laboratory will consist of experiments covering chemical principles and phenomena discussed in the lecture. Satisfies GE, category B1 (Physical Sciences) and GE laboratory requirement.

CHEM 105 Elem of General, Organic and Biochem (5)
Lecture, 3 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, category B1 (Physical Sciences) and GE laboratory requirement.

## 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.
This course assumes no previous chemistry background from the student and may be used as a first chemistry course or as a refresher course to enhance an insufficient chemistry background. Topics covered in the course include significant figures, unit conversions, naming chemical compounds, chemical equations, concentration units, pH , acids and bases, the mole concept, and stoichiometry. CHEM 110 may be taken to prepare for CHEM 115A. This course is not applicable to the chemistry major, minor, or GE requirement

## CHEM 115A General Chemistry (5)

Lecture, 3 hours; 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. Satisfies GE, category B1 (Physical Sciences), and laboratory requirements.

## CHEM 115B General Chemistry (5)

Lecture, 3 hours; laboratory 3 hours. Continuation of CHEM 115A. Prerequisite: CHEM 115A. Satisfies GE, category B1 (Physical Sciences), and laboratory requirements.

CHEM 125A Honors Analytical General Chemistry (5)
Lecture, 3 hours; laboratory 3 hours ( 5 units). This is a one-year sequential honors analytical general chemistry course. This course is designed for students who have a prepared background in chemistry. Topics traditionally covered in the first semester of general chemistry (periodic trends, stoichiometry, aqueous chemical reaction, and molecular geometry) will be briefly reviewed. However, this first semester of this course (CHEM 125A) will focus on bonding, kinetics, solutions, acidbase equilibrium, thermodynamics, and electrochemistry. Prerequisite: 4 or higher on the high school AP chemistry exam, or a pass on the departmental chemistry placement exam. Letter grade or Cr/NC. Fall A / Spring B. GE credit for area B1.

CHEM 125B Honors Analytical General Chemistry (5)
Lecture, 3 hours; laboratory 3 hours ( 5 units). The second semester (CHEM 125B) starts by applying the topics covered in the first semester to statistics, chemical literature, chromatography, spectroscopy, and biological chemistry. 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: 4 or higher on the high school AP chemistry exam, or a pass on the departmental chemistry placement exam. Letter grade or Cr/NC. Fall A / Spring B. GE credit for area B1.

CHEM 195 Lower Div Special Studies (1-3)
May be repeated.
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. CAN CHEM 12 or CHEM 125A.

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 255; CHEM 125B; MATH 211S; PHYS 210AB or 214 and 216; or consent of instructor.

CHEM 310B Fundamentals of Physical Chemistry (3) Lecture, 3 hours.Continuation of CHEM 310A. Prerequisites: CHEM 310A; CHEM 255; CHEM 125B; MATH 211S; PHYS 210AB or 214 and 216; or consent of instructor.

CHEM 313 Electronics (3) Lecture, 3 hours. 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. Crosslisted with PHYS 313. Prerequisites: concurrent enrollment in CHEM 313L is mandatory. MATH 107, PHYS 210B or 214; or consent of instructor.

## CHEM 313L Electronics Lab (1)

 Laboratory, 3 hours. Laboratory to accompany CHEM 313. Crosslisted with PHYS 313L. Experiments in this lab are designed to address the major topics of CHEM 313 lecture course. Students will experiment with physical and simulated circuits. Prerequisite: concurrent enrollment in CHEM 313 is mandatory.CHEM 316 Fundamentals of Physical Chem Lab (2) Lecture, 1 hour; laboratory, 3 hours. Physiochemical measurements with an emphasis on error analysis, instrumental techniques, report writing, and presentation. Prerequisites: CHEM 310A; concurrent enrollment in CHEM 310B or consent of instructor.

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 mechanism of inorganic and organometallic compounds including electron transfer. Prerequisites: CHEM 310B, or Concurrent enrollment.

CHEM 335A Organic Chemistry (5)
Lecture, 3 hours; laboratory lecture, 1 hour; laboratory, 3 hours. Basic course in the general theory and reactions of organic chemistry. Emphasis on basic principles. Recommended for science and pre-professional majors. Prerequisite: CHEM 115B; CHEM 125A or consent of instructor.
CHEM 335B Organic Chemistry (3) Lecture, 3 hours. Continuation of CHEM 335A. Prerequisite: CHEM 335A.

CHEM 336 Organic Chemistry Lab (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: CHEM 335A.
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: junior standing or consent of instructor.
CHEM 401 Instrumental Analysis and Chemical Synthesis (3) Lecture, 1 hour; laboratory 6 hours. An integrated inquiry and project-based upper-division couse for B.S. and B.A. majors. The projects will cover the synthesis of organic and inorganic molecules and characterization of student-prepared molecules. Lecture will focus on analysis of spectroscopic data, an overview of the instrumental hardware, and principles of chromatography. Topics inlcude basic electroics, optics, signal tonoise, detectors, IR, optical, MNR and fluorescenc spectroscopy, mass spectrometry, and chromatography. Prerequisites: CHEM 255, CHEM 125B; and CHEM 336 highly recommended.

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 BS chemistry degree. Topics will include air-sensitive syntheses, standard Schlenk line techniques, characterization through IR, optical and NMR spectroscopy, mass spectrometry, and electrochemistry. Prerequisite: CHEM 401. Highly recommended: CHEM 325, or consent of instructor.
CHEM 441 Biochemical Methods (3)
Lecture, 1 hour; laboratory, 6 hours. Applications of biochemical techniques to the study of proteins, enzymes, and nucleic acids. Prerequisites: CHEM 232 or 335B; CHEM 255 (strongly recommended); CHEM 445 or 446 ; and foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

## CHEM 445 Structural Biochemistry (3)

Lecture, 3 hours. A study of the structural function relationships of amino acids, proteins and enzymes, carbohydrates, lipids, and nucleric acids. Also includes topics such as enzyme kinetics, membrane transport, and signaling. Prerequisites: CHEM 335B or CHEM 232 and a foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.
CHEM 446 Metabolic Biochemistry (3)
Lecture, 3 hours. A study of bioenergetics, enzyme structure and function, and the metabolism of carbohydrates, and lipids and proteins. Prerequisites: CHEM 335B or CHEM 232; and foundation in spectroscopy, kinetics and thermodynamics, or consent of instructor.

CHEM 494 Undergraduate Research and Service Learning (1-6)
This course serves as a 'senior experience' for our graduating majors. Under supervision by the chemistry faculty, students may participate in the course in a variety of different ways including, but not limited to individual investigations of student-or faculty-initiated chemical problems, departmental service, and/or community outreach to connect society with chemistry. May be taken only by petition to the Chemistry Department. May be repeated. Prerequisites: consent of instructor.

CHEM 495 Special Studies (1-3)
Investigation of existing information on a specific or general topic of interest to the student. May be repeated. Prerequisite: consent of instructor; upper-division standing in chemistry or closely related science.
CHEM 496 Selected Topics in Chemistry (1-3)
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 reparation and use of PowerPoint, graphic, and web-based applications to create an informative talk. Prerequisites: senior standing 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 219 Chicano/Latino Identity and Heritage (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 and 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 ethnic studies requirement in GE, category D1 (Individual and Society).

CALS 220 Chicano/Latino Arts and Literature (3) A survey of the humanities (arts and letters) found in Chicano/Latino cultures. Introduction to traditional and contemporary literature, drama, cinema, art, music, and dance forms found in the Spanish-speaking communities of the Southwestern United States and their related heritages. Satisfies ethnic studies in GE, category C4 (Comparative Perspectives)

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 225 Spanish for Bilinguals (3-4)
The study of the grammar and structure of Spanish with ample practice, in oral and written forms, to help develop proficiency in normative Spanish, using various language-acquisition techniques. Students will be able to enter upper-division classes in Spanish. Standard or normative Spanish will be compared and analyzed in terms of non-normative, regional, and local community varieties of Spanish. Prerequisite: functional Spanish skills at the second-year level or equivalent. Satisfies foreign language in GE, category C4 (Comparative Perspectives and Foreign Languages). This course does not satisfy GE ethnic studies requirements. Requirement: concurrent enrollment in CALS 225L.

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 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 how 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 of Latinos in the United States. Satisfies upper-division ethnic studies in GE, category 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 Phllosophy (3-4)
The course examines the intellectual history of the Chicano/Latino community. This includes a rich variety of ideas, belief systems, world views, and philosophical perspectives derived from pre-Columbian times and later syncretized with European philosophy. The philosophical tradition of the West is seen from a different angle that provides challenging insights for students. Special attention is given to the relationship of these ideas to the ethics and values of the Chicano/Latino community within a cultural and historical milieu. A broader framework allows for the consideration of Chicano/Latino philosophy as a crossroads of Western and Asian philosophical traditions. Satisfies ethnic studies and upper-division GE, category C3 (Philosophy 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 (3)
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 bring understanding of their significance within a multicultural society. Satisfies ethnic studies and upperdivision GE, category C1 (Fine Arts).

CALS 374 Chicano/Latino Literature (3-4)
A course designed to identify, analyze, and appreciate current literary themes and forms within the Chicano/Latino experience, including their literary antecedents, through novels, short stories, poetry, and plays. Every fourth semester this course will focus on Chicano/Latino authors from California in conjunction with the California Cultural Studies Program. Satisfies ethnic studies and upper-division GE, category C2 (Ethnic Studies in World Literature). Note that CALS majors are required to enroll in the section designated for majors and related fields.

CALS 393 Chicano/Latino Cinema (3)
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/0-produced films, tracing the evolution of alternative aesthetic and narrative strategies. Satisfies ethnic studies and upper-division GE, category C1 (Fine Arts).

CALS 395 Community Involvement Program (CIP) (1-4) Provides students with practical experience in school classrooms, various ethnic community organizations, 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.
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.

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

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, category 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)

This course examines the role language plays in structuring social interactions among Chicanos/Latinos. The class includes an overview of the phonetics, morphology, and lexicon of multiple varieties of Spanish and English, and explores issues such as dual-language acquisition, code switching, language maintenance, non-verbal communication, policy planning, and bilingual education. Prerequisite: CALS 458

CALS 432 Latinos in a Global Context (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.

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 Chicano/Latino Humanities (3-4)
A comparative analysis of the history, literature, philosophy, religion, music, visual and performing arts, and popular culture as they have developed in the Chicano and Latino society from their historical origins in Mexico and Latin America. Course focuses on humanistic works and interpretations in Mexico since the Revolution in comparison to the development of contemporary Chicano/Latino humanities since the 1960s. Satisfies upper-division ethnic studies in GE, category C4 (Comparative Perspectives). Note that CALS majors are required to enroll in the section designated for majors and related fields.

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 majors to advanced research techniques in order to enhance their research and information literacy competencies. A brief history of the field and an overview of current debates in the discipline will also be presented. This class is a prerequisite for CALS 426, CALS 445, CALS 456 and CALS 480.

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. Prerequisite: 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 (3-4)
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, category 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.

## 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; and 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. Prerequisite: Senior status and completion of most CALS core classes.

CALS 595 Special Studies (1-4)
Directed study for graduate students. Prerequisite: completion and approval of a special studies form.

## Communication Studies (COMS)

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 Intro to Radio Broadcasting (4)
History of broadcasting, evolution of broadcast technology, and 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. Crosslisted as SOCI 331. Prerequisites: COMS 200, 202, and 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 and 202.

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 200, 202, and Senior-level standing.

COMS 316 Advanced Video Production (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 I-Movie2. Advanced students use 3-chip cameras and edit on Final Cut or Avid. 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, writing in-depth features and columns on issues, trends, and complex ongoing stories. Prerequisite: COMS 210, a semester at The Star, or equivalent experience writing in the professional world.

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, and 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, ads, PSAs, campaigns, film, television, music, and the Internet on related issues. Junior 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 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 standing required.

COMS 327 Media and Chlldren (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 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 standing required.

COMS 368 Newspaper Writing/Editing (STAR) (4)
The faculty advisor offers a comprehensive oral and written evaluation 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. Seniors only. Cannot be repeated for credit.

COMS 435 Seminarin 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 or SOCI 300 or SOCI 331 or consent of instructor. Crosslisted as SOCl 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.

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 499 Media Internship (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 an 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 provides an overview of how computers work and how to use basic software tools and utilities on a personal computer. Topics include computer types, history of computing, computer organization and operation, survey of computer languages, program development, computer applications (word processing, database, graphics, spreadsheets, etc.), and computers in society. Weekly hands-on experience with a variety of operating systems and applications. Not applicable to the CS major. Recommended for all students. Satisfies GE, category B3.

CS 110 Introduction to Unix (1)
Laboratory, 3 hours. This course is an introduction to the use of Unix as a programming environment. Communicating with a Unix host, shells and shell commands, files and directories, X Window System, jobs and processes, scripting, and programming utilities (compiler, linker, debugger, make, hex dump, etc.). Prerequisites: GE Math eligibility and previous or concurrent enrollment in CS 115, or consent of instructor.

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/0; subprograms; principles of good programming style, readability, documentation, and structured programming concepts; top-down design and refinements; and techniques of debugging and testing. Use of the above concepts will be implemented in a standard high-level programming language. Satisfies GE, category B3. Prerequisite: GE math 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. Corequisite: CS 115.

CS 175 Intro Computer Graphics (3) Lecture, 2 hours; laboratory, 2 hours. This is a 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 course or consent of instructor.

CS 185 Special Topics in Computer Sci (1-4)
This lower-division course may be repeated with different subject matter. Content will be indicated by the specific topic. Prerequisite: consent of instructor.

CS 215 Programming II (4)
Lecture, 3 hours; laboratory, 3 hours. This course is a 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 110 and CS 115 , 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 introduction to graph theory. Prerequisites: CS 115 and MATH 161, or consent of instructor.

CS 252 Intro 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 lowlevel 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 highlevel constructs. Prerequisites: CS 110 and CS 115, 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 by 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 215 or consent of instructor.

CS 340 Computer Security (3)
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; and discussion of recent technical, legal, and sociopolitical issues influencing computer security problems. 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 a sequel to CS 252 and includes the following topics: Instruction set design; stages of instruction execution, data and control path design; CISC, RISC, stack architectures; pipelining; program optimization techniques, memory hierarchy: cache models and design issues, virtual memory and secondary storage; $I / 0$ 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 entityrelationship (E/R) model, relational algebra, data normalization, XML as a semistructured data model, data integrity, and database administration. Current tools and technology 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, and polymorphism, and design patterns for object-oriented programming.
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 215, or consent of instructor.

CS 365 Computer Networking and the Internet (3)
Lecture, 2 hours; laboratory, 3 hours. A study of the principles, algorithms, and protocols used in computer networks with an emphasis on those used in the Internet. Prerequisites: CS 215 and CS 252, or consent of instructor.

## CS 370 Software Design and Development (4)

Lecture, 4 hours. Techniques of software design and development. Software lifecycle, requirements, formal specification, metrics, design, functional and structural testing, rapid prototyping, complexity, version control, team management, software metrics, and tools for component based software development. Prerequisite: CS 215 or consent of instructor.

CS 375 Computer Graphics (3)
An introduction to the principles of computer graphics hardware, coordinate transformations, 2 - and 3 -dimensional primitives, raster display algorithms, polygon manipulation, interactive techniques, device-independent software, and curve fitting. 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 Computer Sci (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 Colloquim (1)

Series of lectures on current developments in computer science. May be repeated for credit; a maximum of 3 units can be applied to the CS major; students will be required to attend all presentations, keep a journal, and do a research project based on one or more of these presentations. Contact the department for specific information. Cr/NC only.

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, interprocess 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 Compler Design and Construction (3)

Lecture, 2 hours; laboratory, 2 hours. Application of language and automata theory to the design and construction of compilers; lexical scanning, top-down and bottom-up parsing; semantic analysis and code generation; optimization; and design and construction of parts of a simple compiler using compiler generation tools. Prerequisite: CS 215 and 252, or consent of instructor.

CS 454 Theory of Computation (4)
Lecture, 4 hours. This course provides a mathematical study of the types of problems that can and cannot be solved by computers using 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, and internetworks, with examples. Prerequisites: 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, non-profit 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 gametree 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). Prerequisite: an upper-division CS course in the area of interest and consent of instructor.
CS 496 Senior Seminar (1-4)
Discussion of a topic of current importance in computer science. Independent student projects or oral presentations may be required. Prerequisite: senior standing in CS curriculum.

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, and fast Fourier transforms. Prerequisite: MATH 241 or consent of instructor.

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).

CES 432 Physics of Semiconduct Devices (3) Lecture, 3 hours. Semiconductor materials, crystal structure and growth, energy bands and charge carriers, and conductivity and mobility; metal semiconductor and $p-n$ junctions, $p-n$ junction diodes, bipolar junction transistors, 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. Prerequisites: ES 230 or PHYS 314 or consent of instructor.

CES 440 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, and internetworks, with examples. Prerequisites: ES 440 or consent of instructor.

## CES 490 Selected Topics in CES (1-3)

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 toward degree requirements. Prerequsite: consent of instructor.

CES 500 Queuing and Transform Theory (3) Lecture, 3 hours. Review of probability theory, fundamentals of transform theory, Fourier and Z-transforms, Markovian and discrete time queuing systems, single and multi server queuing networks, and their applications. The course may require significant lab and/or project activity. Prerequisites: ES 314 or consent of instructor.

CES 510 Intelligent Systems Design (3)
Lecture, 3 hours. Introduction to adaptive systems: neural networks, genetic algorithms (GAs), fuzzy logic, simulated annealing, and tabu search. 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. Introduction to data models, data warehousing, association-rule mining, searching the Web, Web Mining: Clustering, Al techniques (neural networks, decision trees), and 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. 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; 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. IC technology review; hardware description languages and describing hardware using one of the languages, modern VLSI design flow; circuit partitioning; clustering; floorplanning; placement; global routing; area efficient design, area-time trade-offs. 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. Concept of advanced computing architectures, pipelining, multiprocessing, and multiprogramming. Single and multi-stage interconnection networks, applications/algorithms for parallel computers, local and system business architectures, and 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 230-231 and CES 432 or consent of instructor.

CES 532 Advanced Photonics Devices (3)
Lecture, 3 hours. 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)
Characteristics of base-band and bandpass 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. 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. Decimation, interpolation, and multirate processing. Prerequisite: CES 400 or consent of instructor.

CES 543 Optical Fiber Communications (3)
Lecture, 3 hours. Lightwave fundamentals, optical fiber as transmission media, losses and bandwidth, and fiber cables, i.e. optical sources, detectors, optical components such as switches, access couplers, wavelength multiplexers and demultiplexers, analog and digital transmission techniques, line coding techniques, optic heterodyne receivers, thermal and shot noise, bit error rates, and optical transmission system design. Optical T-carrier systems and SONET, and future directions. The course may require significant lab and/or project activity. Prerequisite: PHYS 230-231 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, and 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. Information theory, models, lossless compression (statistical, dictionary, static, dynamic, huffman, arithmetic, and context-modeling), lossy compression (scalar quantization, vector quantization, differential encoding, subband transform, and predictive), and compression standards (JPEG, MPEG). Prerequisites: ES 314 or consent of instructor.

CES 547 Digital Switching:Techniques and Architectures (3) Lecture, 3 hours. Review of switching techniques, synchronous and asynchronous transfer modes (i.e., STM and ATM), and various switch architectures. Multi rate 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, and future directions. The course may require significant lab and/or project activity. Prerequisites: MATH 345, ES 230-231 and CES 440 or consent of instructor.

CES 550 Integrated Digital Networks (3)
Lecture, 3 hours. Information types and signals, definitions of services and integration, narrow ISDN and frame relay protocols, broadband ISDN concept and protocol, and 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. ISO model, review of the physical and data link layers, network layer and routing including for internet, multicast routing, TCP and UDP protocols their characteristics, performance and limitations, TCP/IP stack, applications such a 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. 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, and Ethernet transmissions using ADSL, 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. Multicasting fundamentals, multicast routing algorithms, IP multicast, architecture and operation of MOSPF, PIM, CBT, OCBT, HDVMRP, HPIM, BGMP, and Mbone protocols, real-time transport protocol and scalable reliable multicast, reliable multicast transport protocols, multicasting in ATM networks, IP multicast over ATM, and future directions. The course may require significant lab and/or project activity. Prerequisite: CES 552 or consent of instructor.

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 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 593 Lab and Tech 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 toward 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. Prerequisite: 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. Prerequisites: 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. Prerequisite: 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. Prerequisite: participation in the Migrant Education Advisor Program (MEAP) and consent of the instructor.
COUN 501 Theory and Practice: Professional Counselor (4)
This course surveys the roles and responsibilities of professional counselors, including an examination of students' professional identity development. Different approaches to counseling intervention (i.e., psychodynamic, affective/experiential, cognitive-behavioral, narrative approaches, and systemic theories) are compared and contrasted relative to the goals of counseling, the factors involved in helping individuals and families change, and the practitioner's role in the process. Professional identity development is further enhanced through exposure to the history and philosophy of the counseling profession, including professional roles, functions, and relationships with other human service providers. This overview also acquaints counseling students with a) relevant professional organization; b) the various credentialing, certification, licensure, and accreditation standards that may impact practice; c) advocacy processes to benefit clients; and d) ethical and legal standards of the various counseling disciplines.

COUN 502A Adult Development: Individual Family and Career (3) This course is designed to provide students with an overview of theories for understanding the processes of adult development and how to incorporate this understanding into counseling interventions. Students will discuss clinical cases within the context of adult transitions and life events, including long term care concerns and elder abuse. 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.

COUN 502B Career Development in Adulthood (1)
COUN 502B focuses more specifically on career counseling, including theories of career development, knowledge of interviewing, assessment, and print and computer-based career counseling materials. Further considered are how diversity issues influence personal needs, values, aptitudes, abilities, and interests, which in turn, affect career and educational choices.

COUN 503 Sem: Dynamics of Individual Behav (3)
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 DSM-IV-TR; (3) development of appropriate treatment plans; and (4) the relationship of class, gender, and ethnic background to diagnosis and treatment.

COUN 510A Sem: Counseling Pre-Practicum (4)
A course that provides students an opportunity to develop necessary basic counseling skills to prepare them for an internship in a wide variety of settings. 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. Recommend previous or concurrent enrollment in COUN 501. Cr/NC only.

COUN 510B Counseling Practicum (4)
A course that provides students with an opportunity to continue the development of counseling skills necessary for an internship. There are different sections for Community Counseling/MFT and School Counseling/PPS students: Community Counseling/MFT students see clients, and School Counseling/PPS students work in school settings under the instructor's supervision. Cr/NC only. Prerequisite: COUN 510A.

## Development (4)

An introductory course in K -12 academic counseling and career development. Course content includes the foundations of learning theory, youth/lifespan career development and academic guidance models, and print/Internet based academic/ career counseling materials. The course explores the impact of personal needs, values, aptitudes, abilities, and interests on academic progress and career/vocational choices.

COUN 512 Seminar: 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 stages of group formation, confidentially and trust issues, co-counseling in groups, group dynamics and structure, and basic group counseling skills. Practical approaches to group counseling include psychoeducational groups, interpersonal problem-solving groups, and task/work groups, among others. Prerequisite: COUN510A or consent of instructor.

COUN 513 Seminar: Research amd Evaluation in Counseling (4) A survey of the principles of research design as applied to community and schoolrelated issues and settings, with emphasis on evaluation of human service programs. Students will also develop and complete a written mental health or school guidance grant proposal under faculty supervision. Prerequisite: demonstrated competence in basic statistical analysis and COUN 525 .

COUN 514A Supervised Internship/Field Experience (4)
This seminar provides a group discussion and supervision format in conjunction with the field internship, which may be in school settings (PPS students) or in community counseling settings (MFT students). The class meetings are designed to supplement the individual supervision received by internship 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. Integral to this experience is the exchange of feedback and support among seminar participants. Prerequisites (Community Counseling/MFT): 510A/B, 501, and additional courses. Prerequisites (School Counseling/PPS): 510A/B, 520, (COUN 501 highly recommended). Cr/NC only.

COUN 514B Supervised Internship/Field Experience (4)
This seminar provides a group discussion and supervision format in conjunction with the field internship, which may be in school settings (PPS students) or in community counseling settings (MFT students). The class meetings are designed to supplement the individual supervision received by internship 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. Integral to this experience is the exchange of feedback and support among seminar participants. Prerequisites (Community Counseling/MFT): 510A/B, 501, and additional courses. Prerequisites (School Counseling/PPS): 510A/B, 520, (COUN 501 highly recommended. Cr/NC 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 national model of school counseling, and the expanding and changing role of school counselor.

COUN 521 Sem: Pupil Personnel Services - Concepts and
Organization (4)
A seminar in organizing, supervising, and administering comprehensive service Pupil Personnel Programs in elementary and secondary schools; legal and financial aspects, as well as 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 the school. Prerequisite: COUN 520.

COUN 523 Working w/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. Basic to this is the study of the student's own family of origin and its impact on the student. The primary emphasis in working with families will be the use of Solution-Focused counseling. 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 or consent of instructor is required.

## COUN 524 Counseling Children and Adolescents (4)

This course provides an overview of the theories and techniques of child and adolescent counseling. Counseling interventions used in schools and common concerns of school-aged students are emphasized. Method for establishing rapport, goal setting, and case formulation are highlighted. Special emphasis will be placed on developmental stages.

COUN 525 Psychological and Educational Assessment (2) Investigation of the nature and rationale of psychological measurement, both individual and group, with emphasis on its utility in community and/or school settings. Attention is given to both limitations and justification in the measurement of human characteristics. Class fee required at time of registration.
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. Also, 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.

COUN 527A Legal Issues in Special Education (1)
This course provides an overview of special education laws. Topics include: the different legal categories of exceptionality, Individualized Educational Program (IEP) procedures, suspension and expulsion of students with disabilities, and Section 504 Accommodation Plans.

COUN 527B Law and Ethics for School Counselors (2)
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.

COUN 528A Consultation (3)
This course provides a general framework for understanding and practicing 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 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 535 Seminar: Development and Clinical Issues with

## Children (4)

A course offering a developmental psychology perspective on the counseling interventions appropriately undertaken with children and adolescents. Course objectives include (1) providing students with an introduction to basic intervention strategies for counseling children and adolescents; (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.

COUN 540 Seminar: Marriage and Family Counseling (4)
This course offers a foundation for understanding couple and family relationships by providing an overview of historical and contemporary models of theoretical conceptualization, assessment, and intervention, including ways to work with families reflecting diversity. Attention is devoted to important legal and ethical considerations unique to working with families and couples; also included are assessment tools, crisis intervention (including domestic violence), and treatment planning. Prerequisites: COUN 510A or consent of instructor

COUN 545 Seminar: Law and Ethics for the Counselor (3)
A course designed to clarify the legal and ethical responsibilities of the community counselor. 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.

COUN 570 Sem:Cross-Cultural Awareness in Coun (3)
This course is designed to provide students with an understanding of how ethnicity, culture, sexual orientation, and gender can affect counseling processes. Students will identify and explore their own unique ethnic and cultural world view and see how it affects their counseling approaches in both community and school counseling settings. Students will also become knowledgeable about various ethnic groups in the United States and how majority culture influences their daily lives and their responses to counseling. The seminar will address cross-cultural aspects of counseling children, youth, and adults.

COUN 580A Relationship Counseling (3)
This course will explore relationship counseling from a variety of theories accompanied by their treatment approaches. An ecological approach to couples' functioning will be advocated with the result that counseling interventions will reflect the pluralistic needs of couples who are often embedded in complex social systems (including the legal system, and the health system, among others). Issues such as domestic violence, developmental challenges, parenting/step-parenting, infertility, and extramarital engagements will be discussed. Cross-cultural perspectives and ethical issues will be integrated into all discussions. Prerequisites: Concurrent enrollment in COUN 580B, 510A or consent of instructor. COUN 540 is recommended.

COUN 580B Sexuality Counseling (1)
This course provides students with knowledge and skills about counseling adults and couples about sexuality issues. Included are the physiological, psychological, and socio-cultural variables associated with sexual identity, sexual behavior, sexual disorders, sexual function and dysfunction, sex roles, gender identity, trauma and abuse, and aging. A biopsychosocial approach will be taken in working with a wide variety of sexual concerns; ethical and legal considerations in working with sexuality issues will be addressed, as will issues of transference and counter-transference in working with these sensitive and intimate issues. Concurrent enrollment in COUN 580A.

COUN 581 Intro 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 dependency and is designed to meet the requirements issued by the Board of Behavioral Sciences, State of California.

COUN 582 Psychopharmacology for Counselors (2)
Introduction to principles of psychopharmacology and to the community counselor's role in the effective and ethical use of psychotropic medications with therapy clients (i.e. referral,consultation, monitoring, etc.). Content includes basic psychopharmacological principles, physiological actions, and therapeutic and adverse effects of major psychiatric drugs. Attention is given to the historical and sociopolitical contextual issues surrounding the use of psychotropic medication.

## COUN 595 Special Studies (1-4)

COUN 596 Supervised Field Experience (1-4)
Counseling experience supervised by Counseling Department faculty. Experience can be gained both at on-campus Community Counseling Clinic or in outreach programs in the community. Cr/NC Only. Prerequisite: consent of instructor; for School Counseling students: permission of School Counseling faculty.

## Criminology and Criminal Justice Studies (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, category D1 (Individual and Society).

CCJS 220 Criminology (4) A survey of the theoretical explanations of delinquent and criminal behavior which examines the origins of criminal law, patterns of criminal behavior systems, and the nature and extent of criminal activity.

CCJS 330 Government and the Rule of Law (4)
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; 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 365 Management in Public Agencies (4)
Central concerns are the formation and administration of the managerial policies of public agencies. Focus on such vital issues as the allocation of public resources, public accountability, and the description, analysis, solutions, and synthesis of contemporary managerial problems in criminal justice agencies. Crosslisted as POLS 430.

## CCJS 370 Seminar: 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 Criminal Justice (4)
An in-depth examination of selected topics and issues in criminal justice. Specific course topic varies by semester.

CCJS 399 Lecture Series (1-3)
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 3 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. Crosslisted as POLS 423.

CCJS 405 Rights of the Accused (4)
Leading constitutional cases in criminal justice will be studied in detail, including search and seizure, death penalty, electronic surveillance, privilege against selfincrimination, jury trial, right to counsel, and double jeopardy. California Supreme Court decisions will be introduced where appropriate.

CCJS 407 Police, Courts and Community Relations (4)
Examines the history and role of the police in democratic society, including police discretion, police-community relations, police misconduct, and the impact of police strategies such as community-oriented and problem-oriented policing.

## CCJS 420 Seminar in Criminology (4)

An in-depth analysis of theories of criminal behavior; psychological, sociological, biological factors; professional criminals, white collar crimes, and other selected examples of deviant behavior and their relationship to agencies of social control. CCJS 220 strongly recommended.

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 insanity, delinquency, criminality, addiction, 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.

## CCJS 450 Punishments and Corrections (4)

A consideration of the problems created by pressures to punish and to control criminals, the politics of control strategies, the use and misuse of probation and parole, the concept of correction, and alternatives to incarceration.

CCJS 470 Media, Crime and Criminal Justice (4) Examines the role and significance of mass media to 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. Crosslisted as POLS 424.

## CCJS 490 Senior Seminar: 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 standing and/or consent of instructor.

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 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.

CCJS 499 Internship (2-4)
In consultation with the major advisor, the student selects a public, private, or community agency, gains field experience under the supervision of agency heads, and meets with the faculty advisor to discuss progress. Cr/NC only. May be repeated for a total of 8 units.

## Economics (ECON)

ECON 204 Intro 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, category D5 (Contemporary International Perspectives).

ECON 205 Intro 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.

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. Prerequisite: ECON 204 or 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 and MATH 131 or equivalent.
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 205 and MATH 131 or equivalent.

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, 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, 205, and MATH 165 or equivalent or consent of instructor.

ECON 318 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, and collusion, in order to understand how different market institutions lead to different restatements of the profit maximization rule. Prerequisites: ECON 205, MATH 107; ECON 305 recommended.

## 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 or 205.

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. Prerequisite: 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 204 or 205.

ECON 403 Sem in International Econ 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. Prerequisite: ECON 303 or 304 or consent of instructor.

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 131 or equivalent.

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 131 or equivalent or consent of instructor.

ECON 408 Seminar in Math Applications in Econ (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 or 305, and MATH 161 or equivalent 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 or 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 418 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, MATH 107; MATH 161 recommended.
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 205 and 305, or consent of instructor.

ECON 426 Sem in Hist 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, category D5 (Contemporary International Perspectives). Prerequisite: ECON 204 or 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 impact of international relationships on U.S. economic development. Prerequisite: ECON 204 and 205 or consent of instructor.

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. Prerequisite: ECON 204 or 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 longterm 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.
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 Sem in Teaching Economics (2)
A faculty-directed seminar in teaching methods and concepts for students tutoring in economics. Cr/NC only.

ECON 499 Internship (1-4)
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)

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. Offered only spring semester. For high schools only.
EDUC 238 Intro to Chlldren's School (1) An introduction to the theory and practice of early childhood education at the campus child care center. Emphasis is on developmentally appropriate practice as expressed through curriculum and guidance techniques. One-hour lecture and two hours of observation/participation in the Children's School is required for seven weeks.

EDUC 239 Parent Education Class (2)
The Parent Education Class facilitates value clarification and the objective study of parent-child behavior. Topics include the developmental stages of children, parental expectations and styles, and different techniques for guiding children's behavior.

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. Course is nationally certified by the College Reading and Learning Association, National Association for Developmental Educators, and American College Personnel Association. Focus is on the profiles of tutees and tutors 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, 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.
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. 30 hours fieldwork is mandatory.

EDUC 300 English Grammar I (1)
educ 328 Teaching to Instructional Objectives (2) Guidance in lesson preparation, with emphasis on direct delivery, self-evaluation and analysis of presentations. Grade only. Prerequisites: functional Spanish language skills and participation in the mini-corps program, or consent of instructor.

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 331 Practicum in Child Study (3)
An intensive study of the development and learning of young children through observation and participation in exemplary programs. May be applied toward a Child Development Permit. Satisfies field experience prerequisite for admission to Multiple Subject Credential program. Grade only.
educ 385 Risk Management (1-3)
educ 386 Purchasing and Auxillary Programs (1-3)
educ 389 Payroll and Personnel Management (1-3)
EDUC 390 Selected Topics in Education (1-4)
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 404 Computer Uses in Education (2)
Survey and practice of computer applications to enhance student learning. Review of current and projected uses of computers and affiliated technologies in education, through an introduction to current research, professional organizations, and a variety of instructional software and hardware. Grade only.
EDUC 405C Student Teach (Mult Subj/ECE) (14-14)
EDUC 414 Sem in Student Teaching (1)
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; and the influence of federal, state, and local governing agencies, the knowledge industry, and special-interest groups on education. Grade only. Satisfies GE, category D1 (Individual and Society).
educ 443A Observ/Partcip in Multicult Settings (2)
educ 464 Fld Prac in Reading/Lang Arts (0-2)
EDUC 471 Educational Computing (0-2)
educ 481 Devel Creat Clsrm (3)
EDUC 484 Intro 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 websites. 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.

## EDUC 495 Special Studies (1-4)

educ 509 Org, Admin and Supervision of Reading (3)
EDUC 510 SDAIE in Content-Area Classes (3)
educ 511 Professional Induction Plan: Sup Dev (1)
EDUC 538 Dev of Lang and Thinking: Infancy-Mid Cld (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. Prerequisite: 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 students to assess progress in the program and to complete portfolio development. Grade only. Prerequisite: completion of all M.A. coursework or taken in final semester of M.A. coursework.

EDUC 599 Supervised Research for Thesis/Proj (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 490 Service Learning:Educ Technology (3)
eDCT 544 Curiculum, 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.

EDCT 552 Educational Technology Praxis (3)
The Educational Technology Praxis is the prerequisite course for the Educational Technology area of emphasis within the Master of Arts in Curriculum, Teaching, and Learning. It is a practical course that requires participants to integrate existing skills and knowledge of information technology and educational technology into instructional practice.

EDCT 556 Technology, Pedagogy, and Society (3)
This course relates pedagogical theories to technology integration strategies at various levels of education. It also considers wider societal and cultural impact issues (e.g. child development and the Web, gender/class/race issues, lifestyle and health implications, teacher control, and facilitation issues).

EDCT 557 Project Mgmt for Educ Technology (3)
This course considers how a small-scale Educational Technology action research project can be conducted in an education environment. Educational Technology action research case studies will be reviewed to offer practical tools and applied research strategies to students prior to conducting their own Educational Technology thesis project.
eDCT 559 Education Media and Internet Resource Development (3) This course provides a practical forum for teachers, corporate trainers, and other educators to investigate how Internet and multimedia applications can be used to support education. The course will advance from usability and design issues to development and publication of personally developed educational resources. Prerequisite: EDCT 551 or instructor approval.

EDCT 560 Instructional Design and Technology (3) Instructional Design and Technology is a practical course that offers participants training in advanced instructional design methods and relates these to learning theories and pedagogical practices introduced in other Educational Technology courses. Advanced techniques will concentrate on evaluating and using a range of interactive instructional design authoring tools.

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. Grade only. This course is required in the Curriculum, Teaching, and Learning program. Prerequisites: consent of instructor and approval of the School of Education.

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. Grade only. This course is required for the Curriculum, Teaching, and Learning program. Prerequisite: consent of instructor and approval of the School of Education.

EDCT 595 Special Studies (1-4)

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, crosscultural 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)
Stages of development of play from infancy through adulthood from the perspectives of Piaget, Freud, Erickson, Mead, and Czskizenmihayhli are addressed as well as anthropological perspectives on play and culture, play's relationship to learning in academic disciplines such as language and literacy, and logical-mathematical thinking and the arts. Topics include the effects of technology (television, computers, and video) on children's play, gender development and play, and play as a tool for developmentally and culturally sensitive curriculum and assessment. Grade only.

EDEC 532 Social-Moral Development in ECE (3)
Theories and research addressing social-moral development in early childhood, including cultural value differences are discussed. Stages of perspectivism, friendship, and moral understanding from infancy through middle childhood are considered as well as research on the development of prosocial behavior through focused curriculum. Theories and research addressing gender identity and gender role socialization, research and theories applicable to resiliency for at-risk children, and working with parents to help them understand children's social-moral development are topics included. Grade only. Prerequisite: permission of instructor.

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)
A critical examination of current policy issues related to the inclusion of families in schools, including bilingual education, family literacy programs, Head Start and Even Start, and coordinated services for families and children from diverse cultural, linguistic, and socioeconomic background within school settings. Each student will propose and complete a field-based project touching upon one or more of these areas of professional expertise as part of the development of a leadership and advocacy portfolio for the course. Applicable to the Child Development Permit.

## Programs (3)

Focus is on child study, clinical interviews, ethnography, portfolio development, and other strategies designed to assess young children in both their first and second languages. The integration of curriculum and assessment in classrooms that meet the needs of children and families from diverse cultural, linguistic, and economic background is stressed. Grade only.

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. Current research and theories of cognitive, social, and emotional development as related to language development in home and at school and to the development of both first and second languages are studied. The development of oral, written, and spoken languages in school and care settings are highlighted. Major theorists such as Piaget, Erickson, Bruner, Vygotsky, Mead, and others who address the development of children's representational thinking, language, and crosscultural and family influences on development and learning are discussed. Current research on brain development in the first five years of life is also included and discussed from a critical perspective related to practice. Grade only. Prerequisite: permission of instructor or Master of Arts in Education program.

EDEC 539 Research Early Childhood Educ (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)

EDEL 580A Introduction to Education 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 decisionmaking 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 Poltics (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.

Candidates study curriculum theory and curriculum ideologies found in public and private schools. Candidates examine the relationship between standards and curriculum design. The candidate learns how to plan 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 toward 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.

EDMS 100 Explorations in Teaching (2)
This seminar is designed as a reflection space for students who would like to consider the teaching profession. They will observe and interact with children and teachers in elementary schools, and 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. ED/LIBS 200 also builds on LIBS 102 , In Search of Self, where the focus is on the construction of identity. 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 415 Foundations for Multicultural Education (4)

A critical examination of current issues in today's schools, preschool through high school, and future directions in education through the perspectives of history, philosophy, psychology, sociology, anthropology, and the politics of education. Content includes the trends and issues of contemporary school systems, developmentally and culturally appropriate practices, and examination of educational philosophies. The implications of cultural, racial, linguistic, and gender diversity in the classroom are examined, as well as strategies for respecting individual and family diversity. The course includes an introduction to educational ethnography and provides a basis for understanding the relationship of educational research on teaching and learning to inclusive practice in classrooms for diverse populations of children. Grade only. This course is a prerequisite to the Multiple Subject CLAD with Emphasis in Early Childhood Education Program.
edms 420 Child Development in Family, School, and Community (3)

Theories of child and adolescent development and learning in the contexts of families, schools, and communities are addressed; as well as perinatal health, cognitive and language development, social, emotional, and moral development, and their links to classroom practice. Gender socialization, second-language learning, and cultural differences in child-rearing practices are examined; as well as historical and philosophical perspectives on development, teaching, and learning. This course is a prerequisite to the Multiple Subject CLAD with Emphasis in Early Childhood Education credential program and may be applied toward the Child Development Permit. Grade only. Satisfies GE, category E (The Integrated Person).

EDMS 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. Grade only. 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.

EDMS 437 Sem: Integ. Curriculum in Pre-Elem School (3)
Design of integrated curriculum for preschool through elementary school classrooms. Focus is on using skills and concepts identified in California Department of Education frameworks of science, mathematics, language arts, history, social science, and visual and performing arts; to plan, implement, and evaluate developmentally appropriate curriculum. Grade only. Prerequisite: admission to Multiple Subject CLAD Early Childhood Emphasis or Education Specialist Credential program or consent of instructor.

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 curing systems, functions, and conventions of oral and written language, literature study, and composing strategies.

EDMS 464 Teaching Reading and Language Arts to Older
Students and Struggling Readers (2)
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.

EDMS 464B Reading and Language Arts for Older Students and
Struggling Readers (BCLAD) (2)
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.

## 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

(2)

Examination of multicultural approaches, activities, and materials integrating Social Studies with other elementary school subjects. Candidates research and develop History and Social Studies units, based on History-Social Science Content Standards. They employ technology and a range of learning strategies in addressing the cultural and learning needs of all students.
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)
This course will begin to prepare the multiple subject credential candidate for teaching science in the elementary classroom. Each participant will gain practical knowledge of science content and the California Science Standards, learn and develop successful science teaching methods, and leave with a practical knowledge of how to make science meaningful and exciting for all elementary school children.

## 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 and negative TB. $\mathrm{Cr} / \mathrm{NC}$ 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 480B Integrated Spanish Bilingual Curriculum in Elem School Classroom-BCLAD (2)
Focuses on various ways of organizing disciplined-based knowledge that give elementary students a coherent educational experience. Teacher candidates are encouraged to use lessons, materials, and unit plans written for this class in their concurrent student teaching experience. Grade only. Prerequisites: admission to the Multiple Subject Elementary Credential program; completion of Phase I should be taken in Phase II of program or can be taken in Phase III concurrently with EDUC 482. BCLAD candidates must see their advisor in order to take the BCLAD section.

EDMS 481A Intern Supervision (3)
This multiple-session supervision and seminar addresses profession issues faced by TIP candidates and examines issues in education through the perspectives of theoretical and empirical 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 TIP individual learning plan.

EDMS 481B Intern Supervision (3)
This multiple-session supervision and seminar addresses profession issues faced by TIP candidates and examines issues in education through the perspectives of theoretical and empirical 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 TIP individual learning plan.

EDMS 481C Intern Supervision (3)
This multiple-session supervision and seminar addresses profession issues faced by TIP candidates and examines issues in education through the perspectives of theoretical and empirical 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 TIP individual learning plan.

EDMS 481D Intern Supervision (3)
This multiple-session supervision and seminar addresses profession issues faced by TIP candidates and examines issues in education through the perspectives of theoretical and empirical 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 TIP individual learning plan.
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. Cr/NC only.
eDMS 482 S 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 emergent literacy, but 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 Dev 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, including 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.
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 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 extending 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 528 Adv Study in Secondary Reading (3)
Principles, methods, and materials for effective instruction in reading at the secondary level. Includes reading theory and current issues in reading/language pedagogy. Emphasis is placed on the interrelationships between language systems and the cognitive, affective, and social aspects of literacy acquisition and development. Issues of cultural and language diversity, bilingualism, and dialect variation are integral to the course. Intended for students admitted to advanced reading and language credential/degree programs. Requirements include independent inquiry or curriculum development. Grade Only. Prerequisite: consent of the reading/language program coordinator and/or course instructor.

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: Single Subject (EDSS)

EDSS 418 Learning and Development in Adolescents (3)
Examination of theories of learning and teaching, social, physical, emotional and cognitive development, with emphasis on adolescents. Includes the psychological foundations and research-based knowledge about effective secondary/middle school teaching in the areas of planning, implementing and evaluating instruction, motivation, self-esteem, classroom climate, and psychological perspectives on issues of diversity. Grade only.

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 situation 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/Partcipation in Multicultural Settings

(2)

Focused and systematic observation and structured participation in a middle, junior high, or senior high school classroom setting 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: Multicultural and CLAD Perspectives (3) Issues related to teaching in secondary school. Seminar focuses on aspects of classrooms observed in EDSS 443A, including competencies, classroom management, lesson and unit design. Students prepare for PACT Teaching Event by developing a detailed classroom management plan, creating lessons that they teach in their EDSS 443A classrooms, and engaging in systematic reflection on the lessons' effectiveness. Prerequisities: EDUC 417, EDSS 418, and admission to the Single Subject Credential program. Must be taken concurrently with EDSS 443A. Grade only.

## EDSS 444 Special Topics (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 is 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.

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. $\mathrm{Cr} /$ 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 4581 Intern-Student Teaching in Multicultural Settings (3-6)
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. $\mathrm{Cr} /$ NC only. Prerequisites: successful completion of all Phase I courses and successful presentation of a program portfolio. Must be taken concurrently with EDUC 459. Interns only. Permission to enroll from director of intern program required prior to registering.

EDSS 459 Student Teaching in Multicultural Settings (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 1 courses. Must be taken concurrently with EDSS 458.

EDSS 459 Intern Seminar: Student Teaching Multicultural Settings (2)
Support seminar focusing on issues of classroom management, concerns related to the student teachers' classroom experiences, and professional growth and career development. Emphasis is on integrating content of Phase I courses, including CLAD competencies, into the student teaching experience. Students use materials from the program portfolio and the student teaching experience to develop a professional portfolio. Grade only. Prerequisites: successful completion of all Phase I courses and successful presentation of a program portfolio. Must be taken concurrently with EDUC 458. Interns only. Permission to enroll from director of intern program required prior to registering. $\mathrm{Cr} / \mathrm{NC}$ only.

EDSS 495 Special Studies (1-4)

## Education: Special Education (EDSP)

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 by permission of the instructor.

EDSP 423 Assessment, Curriculum, and Instructional Strategies
for Students with Disabilities (4)
Candidates explore the basic principles and strategies of assessment, curriculum, and instruction that are appropriate for individuals with diverse special education needs. Candidates learn to assess student needs utilizing a variety of formal and informal assessments and to develop appropriate goals and learning objectives based on assessment findings. The linkage between assessment, curriculum, and instruction is emphasized, including monitoring of student learning. 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 the Education Specialist Credential program or by permission of the instructor.

EDSP 424 Classroom Ecology: Management, Discipline, and Behavioral Supports (4)
EDSP 424 provides candidates with an overview of both class-wide and individual classroom behavior management. Theories and philosophies of creating classroom ecologies, management strategies, discipline and behavioral supports are considered to inform how special educators teach and enforce pro-social behavior for all students. 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, selfmanagement, and communication skills of students with special needs through behavior support. Grade only. Prerequisite: Admission to the Education Special Credential program or by permission of the instructor.

EDSP 425 Dev Acad 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 by permission of the instructor.

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. 30 hours of field experience are included. Elements of this course will include the use of the Internet and the World Wide Web.

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. 90 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 (10)
EDUC 465 represents the student teaching component of the Mild/Moderate Disabilities credential program. Student teaching is a culminating experience that must occur in the final semester of the program. Credential candidates student teach for 12 weeks under the guidance and supervision of a duly selected master teacher in the schools as well as a university supervisor from Sonoma State University. Student teaching sites are selected to reflect current prevailing practices in the education of learners with mild or moderate disabilities. Thus, resource specialist programs, special day classes, transitional classes, inclusion programs, and "non-public schools" certified by the California Department of Education all represent possible placement sites for student teachers. Candidates may receive student teaching credit for assignments where they are also the "teacher of record," or otherwise employed, contingent on suitable supervision and guidance availability on-site. Cr/NC only. Prerequisites: Admission to the Education Specialist Mild/Moderate Disabilities credential program, and EDUC 422, EDUC 423A, EDUC 424A. Corequisite: EDUC 466.

EDSP 466 Seminar:Mild/Moderate Disabilities (2)
EDUC 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 EDUC 466. In addition to the instructor of EDUC 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, EDUC 422, EDUC 423A, EDUC 424A. Corequisite: EDUC 465.
eDSP 467 Practicum:Moderate/Severe Disability (10)
EDSP 467 represents the student teaching component of the Education Specialist Moderate/Severe Disabilities Credential program. Student teaching is a culminating experience that must occur in the final semester of the program. Credential candidates student teach for 12 weeks under the guidance and supervision of a duly selected master teacher in the schools as well as a university supervisor from Sonoma State University. Student teaching sites are selected to reflect current prevailing practices in the education of learners with moderate or severe disabilities. Thus, resource specialist programs, special day classes, transitional classes, inclusion programs, and "non-public schools" certified by the California Department of Education all represent possible placement sites for student teachers. Candidates may receive student teaching credit for assignments where they are also the "teacher of record," or otherwise employed, contingent on suitable supervision and guidance availability on-site. Cr/NC only. Prerequisites: Admission to the Education Specialist Moderate/Severe Disabilities credential program, and EDUC 422, EDUC 423A, EDUC 424A. Corequisite: EDUC 468.

EDSP 468 Seminar:Moderate/Severe Disabilities (2)
EDUC 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 EDUC 468. In addition to the instructor of EDUC 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, EDUC 422, EDUC 423A, EDUC 424A. Corequisite: EDUC 467.

EDSP 481 Intern Practicum/Seminar (4)
This course provides on-going support and guidance to Intern 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 course work and 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 495 Special Studies (1-4)
EDSP 511 Professional Induction Plan:Sup Dev (1)
EDUC 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)
EDUC 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 Adv Legal Issues in Special Educ (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 Assesmemt (1)
EDUC 516 is the final course in 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 Рroject Continuation (1-3)

EDSP 595 Special Studies (1-4)

## Engineering Science (ES)

ES 110 Introduction to Engineering \& 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 210 Digital Circuits and Logic Design (4) Lecture, 3 hours, Laboratory, 3 hours. Logic gates, combinatorial logic and analysis and design of combinatorial circuits, 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 relationship between them, basic principles of computer design. Laboratory work will include designing, building, and testing of digital circuits, logic and sequential circuits. Prerequisites: MATH 142E, Co-req: 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, and ideal transformers. Amplifiers and frequency response, filters. Prerequisites: ES 110 and MATH 211; Corequisite: 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 and corequisite: ES 220.

## ES 230 Electronics I (3)

Lecture 3 hours, Laboratory 0 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, single and multistage amplifiers; modeling and simulation using spice/multisim software. Prerequisite: ES 220 and 221 and corequisite: ES 231 or consent of Instructor.

## ES 231 Electronics I Laboratory (1)

Lecture, 0 hours, Laboratory, 3 hours. Laboratory work to accompany ES 230. Computer assisted design of electronic circuits involving devices such as diodes and transistors. Designing, building, and testing of electronic circuits such as filters, oscillator, amplifiers, etc. Corequisite: ES 230.
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 $I / 0$ interfaces, comparison of various microprocessor architectures and capabilities, 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, Laboratory, 0 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 (3)
Lecture, 2 hours, Laboratory, 3 hours. Analysis and design of high frequency amplifiers; high frequency models of transistors; operational amplifiers and applications; feedback amplifiers; oscillators, modulators, bandpass amplifiers, and demodulators for communications. Laboratory work. Prerequisite: ES 230 or consent of instructor
eS 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, and fast Fourier transforms. Prerequisite: MATH 241 or consent of Instructor. (Crosslisted with MATH 430 and CES 400)
eS 430 Electromagnetic Theory and Applications (3) Lecture, 3 hours. 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. (Crosslisted with PHYS 430)

ES 432 Physical Electronics (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, 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. Prerequisites: ES 230 or consent of Instructor. (Crosslisted with PHYS 475 and CES 432)
ES 440 Analog and Digital Communications I (3)
Lecture, 2 hours, Laboratory, 3 hours. Mathematical modeling of signals, time and frequency domain concepts, spectral density, components of a communications system, 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. 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. Prerequisite: ES 314 and ES 440 or consent of instructor.

ES 443 Intro Optical Fiber Communications (3)
Lecture: 3 hours. Principles of light wave propagation, and propagation in an optical fiber, fiber characteristics, $0 / \mathrm{E}$ and $\mathrm{E} / 0$ conversions, coupling, WDM, modulation techniques for efficient information transmission, and system design. Prerequisite: ES 430 and Corequisite: ES 441 or consent of the instructor.

ES 445 Рhotonics (3)
Lecture: 3 hours. 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, junction photodiodes; p-i-n diodes, avalanche photodiodes; and detector noise. Prerequisite: PHYS 314 or consent of Instructor. (Crosslisted with PHYS 445 and CES 430)

ES 465 Introduction to Networking (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, and Internetworks, with examples. Prerequisites: ES 314 and ES 440 or consent of Instructor. (Crosslisted with CS 465 and 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. Prerequisites: ES 314 or consent of Instructor. (Crosslisted with CS 480)

## 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; laboratory: 0 hours. 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 99T 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 99 Basic Composition and Workshop (4)
Study and review of grammar, sentence structure, punctuation, and other elements of standard written English and practice in the reading and analysis of essays. Students assigned to course on basis of English Placement Test scores. Course includes workshop for individual and small group tutoring. Cr/NC only. Not applicable toward graduation. Prerequisite: completion of the English Placement Test (EPT).

ENGL 101 Expository Writing and Analytical Reading (3) Study and practice in the expression of facts and ideas; principles of investigation, of organization, and of effective writing style, with emphasis upon expository writing and upon developing analytical reading ability. Satisfies GE, category A2 (Fundamentals of Communication). Prerequisite: completion of the English Placement Test (EPT). CAN ENGL 2.

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, category A1. Prerequisite: completion of GE categories 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, category A1.

ENGL 207 Intro to Creative Writing (4) A writing workshop which focuses on crafting the short story. May be repeated for credit. Prerequisite: consent of instructor. CAN ENGL 6.
engl 214 Literature of the World (3)
An introduction to the study of literature. Masterworks drawn from a worldwide range of cultures and historical periods will provide the basis for discussion. Emphasis will be placed on written analysis of literary form and meaning. Satisfies GE, category C2 (World Literature). Prerequisite: ENGL 101.

ENGL 215 Intro 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, category C2 (World Literature). Prerequisite: ENGL 101
eNGL 237 Survey: Early American Literature (4)
Survey of American Literature from the Seventeenth Century through the middle decades of the Nineteenth 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. CAN ENGL 14.

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 Eighteenth Century. Focus is on major authors in their cultural context.

ENGL 240 Survey: Later British Literature (4)
Survey of British literature from the late Eighteenth Century to the present. Focus is on major authors in their cultural context.
ENGL 275 Composition Workshop (1-3)
Intensive study of/and preparation for in-class and timed writing situations like the WEPT. Topics of special study include rhetorical strategies for argumentation and expository writing, grammatical review and techniques for revising, editing, and proofreading. May not be counted towards the English major. Prerequisite: students must have taken the WEPT at least once.

ENGL 280 Intro to California Cultural Studies (3)
Introduction to California culture studies and its multiethic, 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 General Education requirement in 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 Prog (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, and California and the West; Race, Ethnicity and Culture in California.
ENGL 303 Special Studies in Composition (2-4)
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 307 Intro to Fiction Writing (4)
A writing workshop which focuses on crafting the short story. May be repeated for credit. 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. May be repeated for credit under different subtitles.

ENGL 314 Modern World Lit in English (3)
Studies of literature in translation as well as works written originally in English, including a minimum of 50 percent from non-Western literature. Satisfies GE, category C 2 (World Literature).

ENGL 315 California Ethnic Literature (3)
An introduction to representative modern California writers from 1900 to the present. Includes an examination of the theoretical, regional, multicultural, and multiethnic foundations of California literature. Satisfies GE, category C2 (World Literature). Satisfies Ethnic studies requirement.

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 Intro 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 (3)
A survey that, with a varying focus from semester to semester, considers women writers in a number of different periods, countries, and genres. Format lecture/ discussion. Suitable for non-majors. May be repeated for credit. Satisfies GE, category 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 toward Creative Writing concentration units.

ENGL 377 Film and Literature (3-4)
The novel/play as a genre has been a dominant feature in Western culture for centuries. This course will involve reading novels/plays and viewing film adaptations of these novel/plays. The course will focus on the uniqueness of both the novel/ play and film as well as the profound influence the novel/play has had on motion pictures. Normally offered through Special Sessions in Extended Education.
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 Intro-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.

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. May be repreated for credit.

ENGL 430 Creative Writing: Select Genres (1-4)
A workshop in the writing of a selected genre such as memoir, autobiography, screenplay, stage play, and novel. May be repeated for credit.

ENGL 435 Directed Writing (2-8)
Individualized instruction in poetry, fiction, or creative non-fiction writing, one-onone with a published writer. Prerequisite: consent of the instructor. No more than eight units of ENGL 435 may be counted toward the English major.

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.

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, 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, Seventeenth Century, Restoration and Eighteenth Century, Romantic, Victorian, Twentieth 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 Seventeenth through the Twentieth 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.

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. 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.

ENGL 474 Studies in Drama (4)
Study of representative plays of a particular period: Medieval, Renaissance, Neoclassic, 19th Century, and Modern. Please see Schedule of Classes for current offering. May be repeated for credit.
ENGL 475 Master Class in NonFiction (4)
An advanced workshop in creative non-fiction, focused on the writing of publishable essays and the art of the book proposal. Prerequisite: ENGL 375, 352, 430 (Creative Non-Fiction) or consent of instructor.

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 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.

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.

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.

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 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. May be repeated for credit. 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. Prerequisite: consent of instructor and department chair.

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. 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 6 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. The MA 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 MA 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/Post-Colonial Literature (4)
Studies related to different aspects of world and/or post-Colonial 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. Prerequisites: 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 post-Colonial 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, post-Colonial and/or Antlophone 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. Prerequisites: 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 MA. 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 (GSO1) 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, category D5 (Contemporary International Perspectives). Prerequisite or Corequisite: enrollment in ENGL 101 or PHIL 101.

ENSP 201 Environmental Forum (1)
Regular weekly departmental lecture series. Outside professional speakers and alumni report on environmental topics and opportunities for environmental action. Cr/NC only.

ENSP 202 Quantitative Methods: Env Studies (3)
Lectures and workshop 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, graphic display of information; and conceptual introduction to calculus, differential equations, and complex numbers. Prerequisite: completion or concurrent enrollment in GE category B4 (Math Concepts). Cr/NC only.

ENSP 301 The Human Environment (3-4)
This course is designed to explore environmental issues and their impact to/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, attitudes in relation to human and nonhuman environment. Prerequisite: ENSP 200 or equivalent and junior standing.
ENSP 302 Appled 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 Category B2 (Biological Sciences) 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 categories B1 (Physical Sciences) and ENSP 200.

ENSP 305L Computer-Aided Communications (3)
Designed to introduce ENSP students to theory and techniques of computer-aided environmental communication. The fundamentals of visual and audio communication will be addressed, demonstrated, and applied through a variety of instructional technologies. Web tools, presentation graphics, digital photography, and desktop publishing are the areas primarily addressed.

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; logical and conceptual foundations for an environmental ethic. Prerequisite: completion of GE category A (Communication and Critical Thinking).

ENSP 307 Environmental History (4)
History of the American environment and the ways in which different cultural groups have perceived, used, managed, and conserved it from Colonial times to the present. Changes in attitudes and behavior toward nature and the conservation/environmental movements are also examined. Prerequisite: Completion of GE category 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 more recent works by Mary Austin, Edward Abbey, Annie Dillard, and other environmental authors. The natural, political, artistic, and historical environment of the writers, and cultural results of the environmental movement in various major periods. Prerequisite: completion of GE, category C2 (World Literature).

ENSP 309 Soll 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, category B (Natural Science and Mathematics).

ENSP 310 Introduction to Planning (3)
An overview of land use planning and associated concerns, such as transportation, open space preservation, housing, economic development, environmental protection, 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.
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. Prerequisite: 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, BIOL 122 or permission of instructor and junior or senior 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 (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 326B Native Plant Propagation (1)
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 \& 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; energy economics, institutions, and politics. Elementary quantitative analysis.
Prerequisite: ENSP 202 or equivalent: may be taken concurrently.
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. Strong algebra background and PHYS 210A recommended.
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; and energy economics. Strong algebra background and PHYS 210 recommended.

ENSP 345 Portfolio Development and Review (3)
Course designed to introduce students to critical issues in elementary education as well as to conduct an initial assessment of students entering ENSP multiple subject education program. Students develop portfolios and present to classmates. Majors only or consent of instructor. Field trips. Cr/NC only. Recommended for juniors. Course fee.
ENSP 350 Hazardous Materials Management (3)
Through lecture, discussion, and guest experts, the scope of the newly evolving field of hazardous materials management is discussed. Includes such topics as the public's right to know; environmental auditing; emergency response planning; transfer, storage, and treatment facilities; update of local and regional public agencies' activities; and career development for students. Prerequisite: ENSP 200 or equivalent.
ENSP 360 Assistance Projects (1-4)
Involvement in on-campus environmental and planning activities. Requires preapproval of activities by faculty supervisor.
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 course provides a basic introduction to both American institutions and major environmental policy issues. Examines choices shaping the structure of governance and tools of environmental policy, and asks questions about decisionmaking, responsibility, and accountability. Open to juniors, seniors, and graduate students only or consent of instructor.
ensp 403 Computer Modeling (3)
A practical course in simulating complex systems using digital computers and dynamic programming. The simulation language STELLA is taught. The principles examined in the course can be applied to any simulation language. Applications in biological conservation, land use planning, hazardous materials management, energy, water quality, and environmental impact reporting are emphasized. Prerequisites: junior standing and GE category B4 (Mathematical Concepts).
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.

## ENSP 405 Qualitative Research Methods (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.

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 , senior standing and/or consent of instructor. Course fee.

ENSP 411B Planning Workshop (4)
Continuation of ENSP 411A. Spring semester focuses on preparation of the plan, including implementation programs, and following state guidelines. Public presentations of class project. Class fee required at time of registration. Prerequisites: ENSP 411A and consent of instructor. Course fee.
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, 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: ENSP 310 recommended.

ENSP 415 Land Use Law (4)
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. Prerequisite: ENSP 310 recommended.

ENSP 416 Environmental Planning (3)
Review of land use planning and regulation as it relates to the protection of various natural resources and environmental systems. Course subject matter varies and may include wetlands, open space, biodiversity, endangered species, coastal resources, agricultural land, forests, land subject to flooding, multi-species habitat planning, and air quality. Regulatory tools used to ensure resource and environmental protection. Prerequisite: ENSP 310 and/or 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. Prerequisite: 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 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.) 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.

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. Open to juniors, seniors, and graduate students only or consent of instructor.

## ENSP 423 Environmental Restoration (3-4)

Field course introducing major concepts and practical aspects of environmental restoration. 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. Prerequisites: ENSP 302 or BIOL 122, or consent of instructor. 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; climate change and fire. Prerequisite: ENSP 200. Course fee.
ENSP 425 Restoration Seminar (3)
This seminar focuses on the ideas and theories behind environmental restoration work and asks some critical questions about current challenges in 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 really mean by the terms "wilderness," "native," "diversity," and so forth? Do environmental mitigation projects really work? We will also look at several realwork cases of restoration projects through the semester. Open to juniors, seniors, and graduate students only or consent of instructor.
ENSP 427 Conservation Design (3)
This course applies concepts from landscape ecology and conservation biology to landscape 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 strategies for development and biodiversity conservation and evaluate those strategies as alternative scenarios in a GIS environment. Prerequisite: ENSP 322, consent of instructor, ENSP seniors only.

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, along with 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 to writing a scientific paper based on the results. Each class focuses on a different topic and related set of field methods. Prerequisite: consent of instructor.

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.
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. Prerequisite: ENSP 337.

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 439L Computer Applications in Energy Management
Laboratory (1-2)
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. Prerequisite: ENSP 337 or consent of instructor.

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 (3)
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.

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 (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 category B4 (Mathematical Concepts) and one semester of chemistry.

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: G.E. category D4 (U.S. Constitution and California State and Local Government).
ENSP 460 Teaching Asst 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: consent of instructor.

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. Prerequisite: consent of instructor required prior to registration.

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.

ENSP 495 Special Studies (1-4)
Independent study designed in consultation with an instructor. Requires prior approval of ENSP faculty member and department chair. Prerequisite: successful completion of at least two ENSP courses and submission of a completed SSU special studies form.

ENSP 498 Senior Sem:Issues in Prof. 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.

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: majors only, senior standing, consent of instructor.

## Foreign Language (FL)

FL 101 Special Topics in Foreign Language (1-3)
FL 102 Special Topics in Foreign Language (1-3)
FL 195 Elementary Special Studies (1-4) Directed, individual lower-division study in a modern language.

FL 214 World Literatures in English (3-4) 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, category C2 (World Literature). Prerequisite: ENGL 101.

## FL 230 Modern Languages, Cultural Studies (1-3)

FL 314 World Literatures in English Translation (3) Studies in world literatures in English translation. Topics may include non-Western cultural and religious values, Colonialism vs. emerging nationalisms, and the quest for identity, personal, cultural, and national. Satisfies GE, category C2 (World Literature). Prerequisite: ENGL 101.

FL 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.

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 FREN 101L.
FR 101L Language Laboratory (1) A minimum of two academic hours ( 100 minutes) weekly of practice sessions in the language laboratory. Cr/NC only. Prerequisite: concurrent enrollment in FREN 101.

FR 102 Second Semester French (4)
Students progress through increasingly complex sentence structures. Listening and speaking competence tested at intermediate-low levels; reading and writing at intermediate-mid levels. (Testing includes cultural knowledge.) Requires concurrent enrollment in FREN 102L. Prerequisite: FREN 101 or by examination.

FR 102L Language Laboratory (1)
A minimum of two academic hours ( 100 minutes) weekly of practice sessions in the language laboratory. Cr/NC only. Prerequisite: concurrent enrollment in FREN 102.

FR 201 Third Semester French (4)
A thorough and detailed review of all French grammar, supplemented by strong cultural content. This course is intended to enable the student to pursue his or her interests independently. Testing (includes cultural knowledge) of speaking and listening skills at the intermediate-mid levels; reading and writing at the intermediate-high levels. Requires concurrent enrollment in lab, FREN 201L. Prerequisite: FREN 102 or by examination.

FR 201L Language Laboratory (1)
A minimum of two academic hours ( 100 minutes) weekly in practice sessions in the language laboratory. Cr/NC only. Prerequisite: concurrent enrollment in FREN 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 advanced-low level. Prerequisite: FREN 201 or by examination.

FR 300 Introduction to Literary Analysis and Critical Writing (4) Study of advanced aspects of French grammar and stylistics as encountered in literary and nonliterary texts, with a focus on introducing students to literary analysis of the various genres. Oral and written presentations. Prerequisites: FREN 201 or equivalent, and FREN 202.

FR 314 French Literature in English Translation (4) Studies in French-speaking Caribbean, African, Near Eastern, Asian, and North American literatures in English translation. Topics may include non-Western cultural and religious values, Colonialism vs. emerging nationalisms, and the quest for identity: personal, cultural, and national. Satisfies GE, category C2 (World Literature). Prerequisite: completion of GE category A.

## 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. Readings, discussion, and oral and written reports in French. Prerequisite: FREN 300 or equivalent (may be taken concurrently).

FR 321 France Today (4)
French civilization: history, social and political institutions, and the arts, as revealed in written documents and visual media, Revolution to present. Readings, discussion, and oral and written reports. Prerequisite: French 300 (may be taken concurrently).

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: FREN 320.

FR 411 French Literature (4)
Readings in theatre, prose, and poetry from major writers and movements from the 19th and 20th, and early 21st Centuries. May be organized around themes or genres or by aesthetic movements. Readings, discussion, and oral and written reports in French. May be repeated for credit when content is different. Prerequisite: FREN 321.

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, and French impressionism. Readings, discussions, oral and written reports. May be repeated for credit when topics change. Prerequisite: FREN 320 or 321 (may be taken concurrently).

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: FREN 321 or 411 (may be taken concurrently).

FR 495 Special Studies (1-4)
Directed individual study. Prerequisite: consent of instructor.
FR 499 Internship (1-4)
Students in the intern 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.

GEOG 203 Cultural Geography (3)
A study of the interrelationships between man and the physical environment. Attention is focused on man's role in changing the face of the earth, and on the manner in which the cultures of peoples have influenced their utilization of the environment. Diverse theories of man-environment relationships are discussed. Satisfies GE, category D2 (World History and Civilization). CAN GEOG 4.
GEOG 204 Global Environmental Systems (4)
An integrated study of the physical environment, focusing on the processes and relationships between the four spheres: the atmosphere, biosphere, hydrosphere, and lithosphere. Major topics include global and regional patterns of climate and weather, soils, distribution of plants and animals on earth, and erosional and depositional processes that create landforms on the earth's surface. Also explored are possible links between human activities and changes in climate and vegetation patterns and dominant landform processes. Field trips and hands-on lab exercises included. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). CAN GEOG 2.

GEOG 205 Introduction to Map Reading and Interpretation (1)
The intent of this course is to provide students a background on map projections and reference systems, scale concepts, coordinate systems, a bit of air photo interpretation, and topographic maps. Class time is a mix of lecture and lab work. This course, or its equivalent, is required for entry into Geography $315,380,385$ and 387.
geog 302 World Regional Geography (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, category D5 (Contemporary International Perspectives).
GEOG 314A Field Experience Northern Calif (1-2) Field experience is provided in a variety of areas not usually offered in the regular geography courses. The course titles and contents may vary from semester to semester and may be repeated for credit. Please see the current Schedule of Classes for particular interest areas offered. A fee will be charged for this course. Up to 2 units of GEOG 314A, B and C in total may be counted toward the major.

GEOG 314B Field Experience Northern Calif (1-2)
Field experience is provided in a variety of areas not usually offered in the regular geography courses. The course titles and contents may vary from semester to semester and may be repeated for credit. Please see the current Schedule of Classes for particular interest areas offered. A fee will be charged for this course. Up to 2 units of GEOG 314A, B and C in total may be counted toward the major.

GEOG 314C Field Experience Beyond No. CA (2)
Field experience in areas beyond the normal range of GEOG 314A and 314B, including but not limited to attending professional meetings in nearby states. Course titles and contents may vary and may be repeated for credit. See the current Schedule of Classes for particular offerings. A fee will be charged for this course. Up to 2 units of GEOG 314A, B and C in total may be counted toward the major.

GEOG 314D Field Experience Abroad (2-3)
Field Experience outside the United States (2-3). Cultural and physical studies of people and laces 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 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 within a Geographic Information System (GIS). Prerequisites: Math 165 and GEOG 205, no exception but can be taken concurrently. Laboratory fee may be charged; see current Schedule of Classes.
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 Geographic Perspectives on International Economic Development (4)
In this course we compare how different regions of the world participate in the global economy, and why some regions, such as East and South Asia, have been more successful than other regions, such as Africa. Emphasis is placed on the poor countries of the world as we examine the economic, social, and environmental consequences of globalization. We will examine some of the key issues in development studies such as: the natural resource curse, the relationship between oil and democracy, the relationship between poverty and conflict, the pursuit of "sustainable development," and the rise of indigenous people' s movements. We conclude with a study of democracy and the problems faced by the new democracies in the developing world.

## GEOG 330 Historical Geog 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 331 Geography of Wine (3)
California's wine industry in perspective, with a brief look at wine origins and world production. An examination of the various wine-growing regions of California. Included are discussions of climate, soil, wine history, grape-growing, and wine making. Guest speakers who are experts in enology and viticulture will be featured.

GEOG 335 Global Agricultural Systems and Issues (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 effect 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, category 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 345 Resource Wars (4)
The geopolitics of oil, blood diamonds, illegal drugs, and water wars are all topics addressed in this course, as we seek to understand how natural resources fuel conflict. From the oilfields of the Arabian Peninsula to the pipelines of Central Asia and the shipping lanes that supply oil-thirsty economies, we look at the growing demand for oil and its influence on foreign policy. We will travel from the bloody mines of Sierra Leone to the coca fields of Colombia and the deserts of Darfur, using these, and other case studies to evaluate current theory on environmental scarcity and violence.

GEOG 350 Urban Geography (4)
A consideration of urban origins, the diffusion of the city, and modern-day interand 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 354 Resource Wars (4)
The geopolitics of oil, blood diamonds, illegal drugs, and water wars are all topics addressed in this course, as we seek to understand how natural resources fuel conflict. From the oilfields of the Arabian Peninsula to the pipelines of Central Asia and the shipping lanes that supply oil-thirsty economies, we look at the growing demand for oil and its influence on foreign policy. We will travel from the bloody mines of Sierra Leone to the coca fields of Colombia and the deserts of Darfur, using these, and other case studies to evaluate current theory on environmental scarcity and violence.
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 204, GEOL 102, or consent of instructor.
GEOG 365 Biogeography and Landscape Ecology (4)
Biogeography is the study of plant and animal distributions at local to global spatial scales. This course seeks to understand the physical and biological processes that determine these patterns through time, as well as help design management strategies for conserving our planet's biological diversity. Thus, this is a highly integrative field of inquiry, pulling on concepts, theories, and data from general ecology, landscape ecology, evolutionary biology, geology, and physical and human geography. Field trips consider the biogeography of plants and animals in the local anthropogenic landscape. Prerequisite: BIOL 115, 121, 122, or consent of instructor.

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 204 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. Prerequisite: GEOG 204 or consent of instructor.

GEOG 375 Natural Hazards (4)
Natural hazards do not exist alone, but in reference to people. This course provides a survey of natural hazards in relation to human populations and activities around the world. The focus is on natural disasters generated by weather, climate, geomorphic, and biogeographical events and processes. Students study natural occurrences such as drought, severe weather, hurricanes, and tornadoes, as well as fires and air pollution events. We also look at landslides, floods, volcanic eruptions, tsunamis, earthquakes, and disease dispersals such as ebola, and bird flu. Hazards related to global climate change are also explored. Basic concepts regarding risk assessment, hazard perception, population change, and impact on the built environment are studied. Prerequisite: Geog 204 or consent of instructor.

GEOG 380 Remote Sensing and Image Processing (4)
Lecture, 3 hours; laboratory, 3 hours. In this class, students learn how to create land-cover maps from satellite imagery. Raw satellite images are imported into computer software programs, preprocessed for radiometric and geometric corrections, enhanced for better interpretation, and finally classified into land cover maps using various techniques. These land cover maps are then assessed for accuracy through field ground truthing using geographic positioning systems. Students make land-cover maps of Sonoma county and use these to monitor changing land-use and cover patterns. Students utilize various software programs, including IDRISI and ERDAS. The class incorporates hands on computer labs, field trips, and an independent project. Prerequisites: GEOG 205, no exception but can be taken concurrently. Laboratory fee may be charged; see current Schedule of Classes.
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. Prerequisite: GEOG 205, no exception but can be taken concurrently. Laboratory fee may be charged; see current Schedule of Classes.

GEOG 387 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: CS101 or basic competency with Microsoft operating system and Office applications, and GEOG 205 with no exception but can be taken concurrently. Laboratory fee may be charged; see current Schedule of Classes.

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 American Culture and Environment (4)
A consideration of topics of special importance to Latin America, including population growth, urbanization, and economic development. Specific countries will also be examined in detail, with an emphasis on settlement patterns and environmental characteristics.

GEOG 393 South Asia (4)
This course covers four broad topics in South Asia: (1) geopolitics, including foreign policy objectives of key states in the region, and competition for oil \& gas; (2) the prospects for democracy in the region, with attention to Maoist rebellions in Nepal and India, tribal unrest and Islamist politics in Afghanistan and Pakistan, Hindu nationalism in India, the civil war in Sri Lanka, and the prospects for democratic reform in post-conflict Nepal; (3) economic development and stagnation, including the success of the high tech sector and the continuing poverty of agricultural and industry laborers; and (4) human-environment relations, including land degradation, water shortage, and environmental protest movements.
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 487 Advanced Geographic Info 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 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 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 intern program will be given the opportunity to gain practical experience using geographical skills by working in a variety of county and city agencies in the Sonoma State University service area. Credit is given for three hours per unit work per week as arranged with the intern coordinator. Must have junior or senior class 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.

GEOG 499B Geography Internship Program (2-5)
Students in the intern program will be given the opportunity to gain practical experience using geographical skills by working in a variety of county and city agencies in the Sonoma State University service area. Credit is given for three hours per unit work per week as arranged with the intern coordinator. Must have junior or senior class 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.

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.

GEOL 102 Our Dynamic Earth: Intro Geol (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, category 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, category 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 a student must be enrolled in the AMCS, LIBS, CALS, or ENSP credential program. This class is not allowable as a prerequisite for upper division Geology courses.

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. Extensive internet work for current information. Course content may vary with instructor. Satisfies GE, category B3 (Physical Sciences, Specific Emphasis).

GEOL 120 Regional Field Geology (3)
Lecture, 1 hour; 10 -day required field trip. Field study of rocks, minerals, and landforms, and the processes that form them. A 10-day field trip to the Death Valley area is taken during spring vacation. Not intended for geology majors. Fee required. Satisfies GE, category B3 (Physical Sciences, Specific Emphasis) and laboratory requirements. Prerequisites: GEOL 102 or concurrent enrollment; students must be in good physical condition.

GEOL 205 Mineralogy (2)
Lecture 1 hour; laboratory, 3 hours. Principles of crystal chemistry, and properties and origin of common rock-forming minerals. Laboratory sessions emphasize hand specimen mineral identification through determination of both physical and chemical characteristics. Prerequisites: completion of or concurrent enrollment in GEOL 303 and CHEM 115A/116A.

GEOL 301 Natural Hist of the Hawailan 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; conservation biology efforts to save the rare and endangered species of Hawaii. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). Prerequisite: BIOL 115 or 121/122.

GEOL 303 Advanced Principles of Geology (4)
Lecture, 3 hours; laboratory, 3 hours. Advanced treatment of the principles, methods, and tools of geology emphasizing the materials that constitute the earth and the processes that act or have acted on them. Required of all prospective geology majors; recommended for those strongly interested in science. Satisfies GE, category B3 (Physical Sciences, Specific Emphasis) and laboratory requirements. Prerequisite: GEOL 102; strong science background recommended.

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 305 Optical Mineralogy (3)
Lecture, 1 hour; laboratory, 6 hours. Introduction to crystallography and the principles of optical mineralogy. Laboratory exercises are devoted to understanding the properties of crystal lattices and the fundamentals of mineral identification with the petrographic microscope. Prerequisites: MATH 107 and completion of or concurrent enrollment in GEOL 205 and 303.
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; development of natural resources, 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, 2 hours; laboratory, 6 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 305 and completion of or concurrent enrollment in CHEM 115B/116B.
GeOL 308 Igneous and Metamorphic Petrology Field Course (1)
Field studies done in conjunction with GEOL 307. Required weekend field trips. Fee required. Prerequisites: GEOL 304 and concurrent enrollment in GEOL 307.
Students must be in good physical condition.

## GEOL 323 Hydrology (3)

Lecture, 3 hours. Water as a natural resource, the hydrologic cycle, and distribution of water on the earth. Atmospheric water, soil water, runoff, and groundwater as related to water supply and use. 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. Prerequisite: 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/116A and GEOL 305 or concurrent enrollment, and consent of instructor.

GEOL 410 Geophysics (4)
Lecture, 2 hours; laboratory 3 hours. The principles of physics as they are related to the earth. Physical basis for the methods of geophysical investigation: seismology, gravity, magnetics, and electromagnetics. Application of geophysical methods to geological problems such as oil exploration and plate tectonics. Fieldwork and analysis of geological problems using geophysical instruments. Extensive use of computer. Required field trips. Prerequisites: GEOL 102 or 303, MATH 161 and PHYS 114.
GEOL 411 Sedimentary Petrology (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. Hand specimen and thin section petrography and other techniques for studying sedimentary rocks will be used in the laboratory. Prerequisites: GEOL 307 and 308.

GEOL 412 Sedimentary Petrology Field Course (1) Field studies done in conjunction with GEOL 411. Required weekend field trips. Prerequisites: GEOL 308 and concurrent enrollment in GEOL 411. Students must be in good physical condition.
GEOL 413 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, vertebrate, and plant fossils. Laboratory work will include becoming familiar with stratigraphically important fossil groups and the use of fossils in solving both geological and biological problems. Prerequisite: GEOL or 303 for majors, GEOL 102 for non-majors.
GEOL 414 Paleontology Field Course (1)
Field studies done in conjunction with GEOL 413. Required weekend field trips. Prerequisites: GEOL 303 for majors, GEOL 102 for non-majors, and concurrent enrollment in GEOL 413. Students must be in good physical condition.

GEOL 417 Structural Geology (4)
Lecture, 3 hours; laboratory, 3 hours. Introduction to theoretical and experimental rock deformation; description and genesis of folds, faults, and related minor structures; interior structure of the earth, plate tectonics, and regional structural history. Prerequisites: GEOL 303,304 and MATH 107.

GEOL 418 Structural Geology Field Course (1) Field studies done in conjunction with GEOL 417. Required weekend field trips. Prerequisite: previous or concurrent enrollment in GEOL 417. Students must be in good physical condition.
GEOL 420 Field Geology (4)
Lecture, 1 hour; 12 days of fieldwork. Principles of geologic mapping, interpretation of geologic maps, and preparation of field reports. Fee required. Prerequisites: GEOL 411, 412, 417 and 418. 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. Prerequisite: 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 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 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. Students must qualify and adhere to the department policy on independent study as outlined below. Prerequisite: approval of advisor. Department Policy on Independent Study (1) The student must have a 3.00 or higher grade point average; (2) The student must have demonstrated ability to work independently and do quality work in field classes; (3) The student must have submitted a detailed proposal of work to do, schedule, and results expected; (4) 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. This will be reported on the standard University Special Studies form and signed by the student, faculty advisor, and department chair; (5) A copy of all documents and two copies of the final paper or report will be filed with the department office before a grade will be assigned.

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)

GER 101 1st 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, category C4 (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 laboratory. Cr/NC only. Concurrent enrollment in GER 101 required.

GER 102 2nd 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, category C4 (Comparative Perspectives and Foreign Languages. Prerequisite: GER 101 or consent of instructor. Requires concurrent enrollment in GER 102 L.

GER 102L Language Laboratory (1)
A minimum of two academic hours ( 100 minutes) weekly of practice sessions in the language laboratory. 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 to increase their understanding of Germany, Austria, and Switzerland by engaging with increasingly complex topics (i.e. education, environmental issues, politics, and history). Satisfies GE, category C4 (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 laboratory. 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, category C4 (Comparative Perspectives and Foreign Languages). Prerequisite: GER 102

## GER 210L Language Laboratory (1)

A minimum of two academic hours ( 100 minutes) weekly of practice sessions in the language laboratory or online. Cr/NC only. Must be taken concurrently with GER 210.

GER 300 Advanced German Studies (4)
Prepares students for the "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. 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 310 Germany Today (3)
A general introduction to present-day Germany and its people, attitudes, customs, and popular culture. Reading and discussion of current and recent material from German newspapers and magazines. Film, slides, and recorded music will also be used. Includes discussion of film, visual art, and music.
GER 312 Germany in Film I (3)
Salient aspects of current German society and its turbulent recent history, introduced through German film. Includes consideration of Austria and Switzerland. Some filmmakers to be treated: Herzog, von Trotta, Wenders, Fassbinder, Petersen, and Schlondorff; films may include The Tin Drum, Das Boot, Europa Europa, Mephisto, and The Nasty Girl. All films in German with English subtitles; course taught in English with frequent reference to German terms and concepts.
GER 313 Germany in Film II (3)
German society of the 1920s, '30s, and early '40s, introduced through German film. Focus on contrasts between expressionistic trends of the 1920s Weimar Republic and fascist-oriented developments under Nazi rule. Filmmakers to be treated include Lang, V. Harbou, Engel, and Riefenstahl; films include Olympia, Triumph of the Will, Caligari, Kolberg, Dr. Marcuse, and M.
GER 314 Literature and Culture from the German-Speaking World (3)
Studies of literature, film, art, and the cultural histories of German-speaking countries. Taught in English. Satisfies GE, category C2 (World Literature). Prerequisite: ENGL 101 and GER 102, or consent of instructor. Requires concurrent enrollment for German minors in GER 399L. May be repeated for credit under different title.
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 one to four units, depending on the specific tasks performed. Prerequisite: consent of instructor.

GER 399L Language Laboratory (1)
A minimum of two academic hours (100 minutes) weekly of practice sessions in the language laboratory or online. Cr/NC only. German minor students must take this course concurrently with GER 314.
GER 405 The Art of Translating (3)
Intensive practice in translation from German to English, and vice versa, of prose (both literary and media-style), drama, and poetry. Thorough attention is paid to the pitfalls of translation as well as to developing the special artistry that good translation demands. Prerequisite: GER 301.
GER 490 Senior Seminar in Area Studies (4)
Ger 491 Senior Seminar in Area Studies (4)
GER 495 Special Studies (1-4)
Directed individual study. Prerequisite: consent of instructor.
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 stage of development with both positive and negative aspects. Specific issues discussed include health care, housing, income maintenance, and advocacy. Satisfies GE, category 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 psyco-social context of the sibling relationship in addition to theories of the psychology of the individual. Crosslisted 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. May be repeated for credit.

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. May be repeated for credit. Crosslisted as PSY 312.

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. Crosslisted as SOCI 317. Satisfies GE, Category 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, category D1 (Individual and Society). Crosslisted as SOCl 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. Crosslisted as SOCl 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. May be repeated for credit.

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. Crosslisted as PSY 408. Prerequisite: junior 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. Crosslisted as PSY 421.

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. Crosslisted as PSY 422. Prerequisite: Junior standing. Prerequisite: Junior standing.
Gern 432 Group Work with Older Adults (4)
This service-learning course introduces students to the fundamentals of group work with older adults. The class provides an overview of the phases of group development and basic skills and techniques for facilitating effective groups. Theoretical perspectives from sociology and psychology are used to examine how groups function, the value they have for older adults, and common themes in groups for older adults. To enhance learning, students go to senior sites in the community to co-facilitating weekly intergenerational dialogue groups. Crosslisted with SOCI 432 and PSY 432. Prerequisite: Junior 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. Crosslisted with 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. Crosslisted as SOCI 452.
GERN 482 Teaching Intern (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. Requirements: 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.
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. Crosslisted 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. Crosslisted 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 Grad 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. Prerequisite: 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 entensive international coverage.

GLBL 200 Introduction to Global Studies (3)
Students practice the techniques of critical reading and thinking, of expository writing, and of oral expression. They develop and apply these skills through introductory study of a broad range of globally relevant issues. Satisfies GE, Category A1 (Written and Oral Analysis). Prerequisites: completion of GE categories A2 and A3.

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. Also, 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 350B Global Social Movements (1)
Students will be exposed to visual representations of social movements that have had global significance through viewing and discussing a range of documentary film-videos. Students will exercise analytic skills acquired in other classes as they participate in structured, mandatory discussions of each film. Documentaries will cover issues such as a) the student protests at Tiananmen; b) a worker's movement to take over abandoned factories (in the wake of failed structural adjustment programs) in Brazil; c) the failed coup attempt to replace Hugo Chavez in Venezuela; and d) human trafficking around the globe. 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 (3) 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 on such 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.

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.)

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 CE) 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. Satisfies part of the Social Sciences Single Subject Waiver Program. Required of all history majors. Satisfies GE, category D2 (World History and Civilization). Prerequisite: ENGL 101. CAN HIST 2.

HIST 202 Development of the Modern World (3)
An introduction to modern and contemporary history from 1500 CE 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 part of the Social Sciences Single Subject Waiver Program. Satisfies GE, category D2 (World History and Civilization). Prerequisite: ENGL 101. CAN HIST 4.

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, category 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, category 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, category D3 (U.S. History), and the state code requirement in history. Satisfies part of the Social Science Single Subject Waiver Program. Prerequisite: ENGL 101. CAN HIST 8.

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, category D3 (U.S. History) and the state code requirement in history. Satisfies part of the Social Science Single Subject Waiver Program. Prerequisite: ENGL 101. CAN HIST 10.
hist 303 The Ancient Near Eastern Texts (4)
Texts in translation from Mesopotamia, Egypt, Anatolia, Canaan, Ancient Israel, Mycenaean Greece, and Iran will be the sources for the construction of understandings of the cultures that created them. The course will focus on a careful analysis of the text as a foundation for the study of social and political organization, economics, family structure, and ideology. Texts will be selected from the earliest writings toward the end of the fourth millennium BCE to the period of the beginning of the Persian Empire late in the sixth century BCE.

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, 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 Twentieth 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 Sixteenth 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 relatiohship 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 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 Twenty-First 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. (Offered every other year.)

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 Twenty-First 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.

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.

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.

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.
HIST 376 Special Topics and Themes in World Hist (2-4)
Studies of particular themes, issues, and topics of special interest pertaining to World History.

HIST 377 Special Topics in Asian and Pacific History (4)
Studies of particular themes, issues, and topics of special interest pertaining to Asian and Pacific History.
hist 380 20th 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. Fulfills part of the Social Science Single Subject Waiver Program requirement. Satisfies upper-division GE, category D2 (World History and Civilization).

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 349 Historical Themes (2-4)
Studies of particular themes, issues, and topics of special interest to general students as well as to majors.

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. Satisfies part of the Social Science Single Subject Waiver Program.

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 a Mediterranean empire.
HIST 401 The Roman Empire (4)
A history of the Roman Empire from Octavian to 476 CE, covering political, economic, social, and cultural change in Rome's transition from a 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 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 l; the appeal of totalitarian systems: communism, fascism, and 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 Eighteenth Century. Topics include religion, law, labor, social, and family relations. The course also considers the impact on gender relations of major historical developments such as the Renaissance, Reformation, Scientific Revolution, industrialization, and the rise of the modern state.

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 the 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 Ninth 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 Eighteenth 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 425 BRITAIN 55 BCE то 1399 CE (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 Fourteenth 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 give 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 eighteenth 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; 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.

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, \& Family in American History, Women, \& 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.

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 Nineteenth Century, women's associations, and the various "waves" of women's rights and feminist activism.

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 Twentieth 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.

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 Nineteenth-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 Nineteenth and early Twentieth-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 Twentieth 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 superpower 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 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 Callfornia 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 Callfornia 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 Nineteenth Century through the Twentieth 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 and 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 BCE to the Council of Nicea in 325 CE. 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 Twentieth 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.

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 BCE. The study of the language and writing systems is used to introduce students to related aspects of Egyptian culture and history. May be repeated for credit once.

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).
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 three times 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.

## 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.

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. Cr/NC only.

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. $\mathrm{Cr} /$ 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. Grade only.

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. Prerequisite: 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. Prerequisite: 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. Prerequisite: 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, category E (The Integrated Person). Crosslisted as ANTH 318. Prerequisite: for ANTH majors: ANTH 201; for non-majors: ANTH 201 or 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 crossspecies, cross-cultural and multicultural, and class and gender perspectives. Open to human development majors. Prerequisite: Junior standing. Grade only.
hD 490 Senior Project (1)
A course devoted to senior projects required of human development students. Prerequisite: Admission to the Human Development Major and consent of instructor. Prerequisite: Admission to the Human Development Major and consent of instructor.

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. Prerequisite: Admission to the Human Development Major and consent of instructor.
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, category A1 (Written and Oral Analysis). Prerequisites: completion of GE categories A2 and A3.
hUM 301 War and Peace Lecture Series (3)
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, category C3 (Ethics and Values).
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.

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 Greek culture, 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 scientific and abstract thought. Prerequisite: A passing score on the EPT.
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.

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 literature, art, philosophy, comparative religions, and science. The course considers Newtonian and quantum mechanical theories of physical reality, the religions of various cultures, and the functions of myth and religious language. 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. Asking how it is possible in the 20th Century to live a moral life, the course 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. Also included is a major project addressing environmental issues.

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 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. Also, 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 nonWestern cultures, cross cultural issues, popular culture, and global politics.

LIBS 310 Independent Study (1-4)
Independent Study for juniors 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, develops a plan of study, including number of units, project outcomes, number of meetings with the faculty, and deadline for completion. Project Form is submitted to Admissions after the beginning of the semester and before last day to add classes. May be repeated for credit. Prerequisites: LIBS 302 and consent of instructor.

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 315 Directed Study (1-4)
Directed Study for juniors is an individualized program of study that is taken for credit/no credit. It may be an exploratory study or project where a student is learning material or skills for the first time. It may be a program of study devised by a faculty member in which the student plays a part. A student consults with a faculty member on a topic, develops a plan of study, including number of units, the project outcomes, number of meetings with the faculty sponsor, and deadline for completion. Project Form is submitted to Admissions after the beginning of the semester and before the last day to add classes. Cr/NC only. May be repeated for credit. Prerequisites: LIBS 302 and consent of instructor.

LIBS 320A 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. Examples of seminars in Core A: Mars Society, PostModernism, and Global Warming. Prerequisite: LIBS 302 prior or concurrently or LIBS 202 prior.
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. 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. Examples of seminars in Core B: Experiencing Nature, Health and Healing, and Systems Thinking. Prerequisite: LIBS 302 prior or concurrently or LIBS 202 prior.

LIBS 320C 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. Examples of seminars in Core C: Photography and Literature of the 20th Century: Creating the Real, Art, Literature and Cultural Context: Comparisons and Contrasts, and Philosophy and Practice of Asian Painting. Prerequisite: LIBS 302 prior or concurrently or LIBS 202 prior.

## LIBS 320D 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. Examples of seminars in Core D: Utopian Thinking and Human Nature, Encounters with Critical Pedagogy, and Aspects of Envisioning. Prerequisite: LIBS 302 prior or concurrently or LIBS 202 prior.

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 students examines the pedagogy and socio-political context of literacy in the contemporary world, including the process of language development and the significance of literacy as a broader educational and social issue. Students will explore the philosophies of pedagogy, the politics of language, and classroom lesson designs.
LIBS 330 The Child in Question (3)
A close inspection of child development through the windows of Western culture, emphasizing relevant social and cultural factors as well as major theoretical views of physical, emotional, and personality growth. Subjective views of childhood experience will be contrasted with objective observations. Readings from Erikson, Freud, Hall, Goodall, and others.
LIBS 336 Special Topic Workshops (1-4) Topics will vary from semester to semester. May be repeated for credit. Cr/NC only.
LIBS 337 Special Literary Project (2) Faculty proposed special projects. For students working on faculty-initiated research projects. May be repeated for credit.
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 the 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.
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, and take down show.

## LIBS 360 Special Topic Workshops (1-2)

Topics will vary from semester to semester. May be repeated for credit. 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 journalkeeping, 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, develops a plan of study, including number of units, project outcomes, number of meetings with the faculty sponsor, and deadline for completion. Project Form is submitted to Admissions after the beginning of the semester and before 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. (See note below) Information for exchange programs is available in the SSU International Studies Office. 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.
(Note: LIBS 397 Study Away does not apply to the State University Study Abroad Program. Students enrolled in a SSU Study Abroad Program received transfer credit to the Liberal Studies major for 12 units of specifically approved courses taken abroad. Please consult with the advisor in the International Studies Office and then with the Hutchins School Director for information about this opportunity.)
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 (Cr/NC only) as elective units in the Hutchins major. Cr/NC only. May be repeated once for credit.
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 synthesizing aspects of that individual's own intellectual development. Students with similar interests work in small groups and in tutorials. 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, develops a plan of study, including number of units, project outcomes, number of meetings with the faculty, and deadline for completion. Project Form 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 415 Directed Study (1-4)
Directed Study for seniors is an individualized program of study taken for credit/ no credit. It may be an exploratory study or project where a student is learning material or skills for the first time. It may be a program of study devised by a faculty member in which the student plays a part. A student consults with a faculty member on a topic, develops a plan of study, including number of units, the project outcomes, number of meetings with the faculty sponsor, and deadline for completion. Project Form is submitted to Admissions after the beginning of the semester and before the last day to add classes. Cr/NC only. May be repeated for credit. Prerequisites: LIBS 302 and consent of instructor.

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/or 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.

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.

LIBS 595 Special Studies (1-4) Individualized studies in areas beyond the scope of the established curriculum.

KIN 101 Physical Education Activities (1-2)
Activities classes. Classes are conducted in the following activities: aquatics (swimming, physical conditioning swimming, water polo, and scuba). Individual sports (adapted activities, martial arts, tennis, and indoor rock climbing). Fitness (aerobics, conditioning, pilates, jogging/running, and weight training). Dance (recreational, and yoga). Outdoor activities. Team sports (basketball, soccer, softball, and 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 once for credit. Cr/NC only.

KIN 120 Motor Skill Dev 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.
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.

## 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.

## KIN 240 First Aid and CPR (1)

Study of the basic principles and practical applications of first aid and C.P.R. techniques required by a first-aider 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 300 Analysis of Motor Performance (1-2)
Lecture, activity laboratory. A series of 1 -unit courses. Each course is designed to provide students 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 each course.

Kin 301 History and Phllosophy 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. Prerequisite: ENGL 101, upper-division standing, and consent of instructor for nonkinesiology majors.

KIN 305 Psychological Basis 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, sport, and exercise psychology theories on such topics as learning, motivation, goal setting, stress, anxiety, group dynamics, leadership, moral development, and exercise adherence. Prerequisite: ENGL 101, WEPT, Upper Division standing, and consent of instructor for non-Kinesiology majors.

KIN 307 Computer Applications in Phy Educ (3)
Provides students with information on, training in, and experiences with various information technology methods and applications related to Physical Education. Two hours of lecture and two hours of laboratory activity per week. Prerequisites: Consent of instructor.

KIN 311 Selected Topics (1-4)
Selected upper-division courses that are taught on a one-time basis.
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: ENGL 101. Priority given to 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. Prerequisites: Junior standing or with consent of instructor.
Kin 320 Curriculum, Pedagogy, and Assessment (3) This course is designed to explore different styles of teaching, management strategies, and assessment techniques used in physical education. Effective teaching characteristics will be discussed and opportunities given for students to put these into practice. Prerequisite: KIN 300 ( 3 courses) 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 disabiities, with a primary focus on implications for physical education. Course includes 18 hours of practical experience in the field.

KIN 330A Measurement and Evaluation (1)
A survey of descriptive statistics. Includes measures of central tendency, variability, scale scores, correlation, and graphing with applications in kinesiology. Meets first half of the semester. Required for all kinesiology majors. Prerequisite: GE math.

KIN 340 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.
KIN 342 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. Prerequisite: BIOL 220.

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: BIOL 220 and GE math.

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: GE math; BIOL 115 and BIOL 224.

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, 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: 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's 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.

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 majors in kinesiology, or multiple-subject credential candidates, or by consent of instructor.

KIN 404 Theory of Coaching (2)
A survey of issues encountered by coaches in all sports. Topics will include, but not be 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: 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.

Kin 425 Seminar in Adapted Physical Educ (3)
Exploration and discussion of current research and professional issues in the field of adapted physical activity. Prerequisite: KIN 325 or equivalent. Corequisite: 1 unit KIN 430C.

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 325, 330A, and 410 or consent of instructor.

KIN 427 Individuals with Disabilities in Educational and
Recreational Settings (3)
To explore the role of psychosocial context in the design and implementation of effective learning environments for youth and adults with disabilities, using service-learning pedagogy.

Kin 430A Field Experience in Physical Education (1-3)
Provides upper-division kinesiology majors experiences in teaching in K -12 public or private school setting. Course requirements include a work journal, development of a personal portfolio, and verification of completion by immediate supervisor. Prerequisites: completion of 10 units in physical education concentration related to specific 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.

KIN 430D Fld Exp 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.

KIN 430E Field Experience in Lifetime Fitness (1-3)
Provide qualified upper-division students an opportunity to gain experience 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.

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: KIN 342.
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 coursework in biomechanics, exercise, physical and conditioning for performance and health. Students will be involved in group-centered instruction, field observation, laboratory experiences, and skill execution practicals. Prerequisites: KIN 350 and KIN 360.

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 .

KIN 495A Special Studies in PE (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: 495A Special Studies in Physical Education; 495C Special Studies in Adapted PE; 495D Special Studies in Exercise Science; and 495E Special Studies in Lifetime Fitness.
KIN 495C Special Studies in Adapted PE (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: 495A Special Studies in Physical Education; 495C Special Studies in Adapted PE; 495D Special Studies in Exercise Science; and 495E Special Studies in Lifetime Fitness.

KIN 495D Special Studies: Exercise Sci (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: 495A Special Studies in Physical Education; 495C Special Studies in Adapted PE; 495D Special Studies in Exercise Science; and 495E Special Studies in Lifetime Fitness.

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: 495A Special Studies in Physical Education; 495C Special Studies in Adapted PE; 495D Special Studies in Exercise Science; and 495E Special Studies in Lifetime Fitness.

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. Prerequisite: KIN 330A or a course in descriptive statistics; an introductory computer course; and graduate standing.

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 group over the lifespan. Prerequisite: KIN 305 and KIN 315 or equivalents.

## 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.

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.

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.

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/Adaptive P.E.

KIN 550 Seminar in Biomechanics (2)
This course uses topical published research articles to discuss the quantitative 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.

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 adull 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, and exercise in extreme environmental conditions, and commonly used ergogenic aids. Prerequisite: KI 360 or equivalent.

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. $\mathrm{Cr} /$ 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. Prerequisite: 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. Prerequisite: KIN 590 and an authorized Advancement to Candidacy form.

## Linguistics (LING)

LING 200 Introduction to Linguistic Studies (3)
The nature and structure of natural language; language and the mind; child language acquisition; role and function of language in the context of personal and group interactions and identities; language and other communication systems in culture and society; and how language changes using the skills and insights afforded by the scientific study of language. Satisfies GE, category D5 (Contemporary International Perspectives).

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 nonWestern 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 430 Language Acquisition and Communicative Development (3)

Investigation of the processes underlying the acquisition of language in childhood and beyond including both first and second languages. Examination of various perceptual, cognitive, and social skills that interact with communicative development. Consideration of key questions concerning the nature of stages in development, the role of innate linguistic knowledge, and the role of experience in language acquisition. Prerequisite: LING 200.

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.

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. Prerequisite: LING 200 or an appropriate upper-division course in linguistics or another discipline; consent of supervising faculty member and approval of program coordinator.

LING 499 Internship: 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 corequisite: LING 441 or 442 . To be taken one time only.
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. Prerequisite: graduate standing and consent of instructor.

MATH 35 Elementary Algebra (4)
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 45 Intermediate Algebra (4)
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 GE requirement for mathematics, category B4. 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 GE requirement for mathematics, category B4. 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 GE requirement for mathematics, category B4. Prerequisite: satisfaction of ELM requirement.

MATH 107 Precalculus Mathematics (4)
Covers a brief review of college algebra; functional notation, composition, and decomposition of functions, inverse functions; behavior of families of functions such as polynomial, rational, exponential, and logarithmic; trigonometric functions, equations, and identifies; and some mathematical modeling. Emphasis on problem solving. Satisfies the GE requirement for mathematics, category B4. Prerequisite: satisfaction of ELM requirement. CAN MATH 16.

MATH 107W Precalculus Workshop (2)
A workshop designed to be taken with MATH 107. Exploration of precalculus concepts through problem solving in a group setting. Cr/NC only. Corequisite: MATH 107.

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 manmade 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 GE requirement for mathematics, category B4. 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 GE requirement for mathematics, category B4. 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 requirement for mathematics, category B4. 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. Prerequisites: MATH 107 or equivalent, or consent of instructor.
MATH 150 Modern Geometry (3)
A study of Euclidean geometry. It will cover topics such as compass and straightedge constructions, proofs, parallel and perpendicular lines, triangles, circles, polygons, measurement, solids, transformations, tessellations, and the use of geometry software. Satisfies the GE requirement for mathematics, category B4. Prerequisite: satisfaction of ELM requirement.
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 requirement for mathematics, category B4. Prerequisite: MATH 107 or consent of instructor. CAN MATH 18.

MATH 161W Calculus I Workshop (2)
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. Corequisite: MATH 161.

## 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 requirement for mathematics, category B4. Prerequisite: satisfaction of ELM requirement. CAN STAT 2.
MATH 175 Mathematics Colloquium (1)
A student taking this course will be required to attend all presentations in the $\mathrm{M}^{\star} \mathrm{A}^{\star} \mathrm{T}^{\star} \mathrm{H}$ 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 included 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. Prerequisite: 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 consent of instructor. CAN MATH 20.

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 211 S. Exploration of second-semester calculus concepts through problem solving in a group setting. Cr/NC only. Corequisite: MATH 211 S .

## MATH 211W Calculus II Workshop (2)

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. Corequisite: MATH 211.

## MATH 220 Higher Mathematics: An Introduction (3)

This is a transitional course supplying background for students going from calculus to the more abstract upper-division mathematics courses. The principal aim of this course is to develop proficiency in reading and creating proofs. The following topics are included: elementary logic, methods of proof, set theory, relations and functions. Topics that may be covered include algebras, homomorphisms, cardinality, Boolean algebra, the integers, limits, and the real numbers. Transfer students are encouraged to take MATH 220 during their first semester here. Prerequisite: MATH 211 or equivalent, or consent of instructor.

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, and linear transformations. Prerequisite: MATH 107 or consent of instructor. CAN MATH 26.

MATH 241 Differential Equations with Linear Algebra (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, and geometric and numerical methods. Prerequisite: MATH 211 or equivalent, or consent of instructor.

MATH 250 Probability and Statistics (3)
A study of elementary probability and statistics and their uses in real-world contexts. Topics include the binomial distribution, conditional probability, expected value, data collection and sampling, measures of location and variability, correlation and regression, estimation, and simple hypothesis testing. This course is designed for teachers and may not be substituted for MATH 165. Prerequisite: Any GE-level math course or consent of instructor.
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. May be repeated for credit up to 6 units total. 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 other 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 (3)
Topics may include mathematical induction, Euclidean algorithm, congruences, fundamental theorem of arithmetic, perfect numbers, number theoretic functions, and prime number theorem. Prerequiste: MATH 142 or MATH 200 or MATH 220 or consent of instructor.

MATH 308 College Geometry (3)
Topics may include the Hilbert postulates, isometries in the Euclidean plane, nonEuclidean geometries, and construction of geometries from fields. Prerequiste: MATH 142 or MATH 200 or MATH 220 or consent of instructor. Any student who has not taken high school geometry is advised to take MATH 150 before MATH 308.

MATH 310 History of Mathematics (3)
Mathematics from ancient times to the present. The student learns how to solve problems of the past using only the tools of the past. Prerequisite: MATH 161 or consent of instructor.

MATH 316 Graph Theory and Combinatorics (3)
Set theory, counting techniques such as permutations, combinations, generating functions, partitions and recurrence relations, Polya's theorem, Hamiltonian and Eulerian properties of graphs, matchings, trees, and coloring problems and planarity. Applications in many disciplines. Students may not earn credit for both MATH 316 and MATH 416. Prerequisite: MATH 142 or MATH 200 or MATH 220 or consent of instructor.

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 (3)
Topics include applications using linear models, vector spaces, linear transformations, matrices, linear equations, determinants, and the Cayley-Hamilton theorem. Prerequiste: MATH 220 and either MATH 222 or 241 or consent of instructor.

MATH 330 Techniques of Prob Solving (2)
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 331 Differential Equations II (3)
Topics may include Picard's method and a discussion of the existence and uniqueness of solutions; general properties of solutions, including the Sturm separation theorem for second-order linear equations; power series solutions for a regular singular point; Laplace transform; linear systems of differential equations; and nonlinear differential equations and stability. Prerequisite: Math 241 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 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. Prerequisite: 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 352 Numerical Analysis (3)
Selected numerical and iterative processes for solving equations. Topics include computer methods, finite differences, Lagrange interpolations, introduction to the finite element method, and the theory of spline functions. Prerequisites: MATH 241 (may take concurrently) and MATH 180 or CS 115 or competence in a high-level programming language, or consent of instructor.

MATH 360 Introduction to Complex Variables (3)
Topics will include the complex field, functions, limits, continuity, complex differentiation and the Cauchy-Riemann equations, complex integration, residues, and conformal mappings. Prerequisites: MATH 261 (may be concurrent) and MATH 220. MATH 340 is strongly recommended.
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* ${ }^{*}$ * ${ }^{*}$ 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 requirement. 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. Prerequisite: requires previous or concurrent enrollment in an upper division mathematics course and consent of instructor. Cr/NC only.
MATH 416 Graph Theory and Combinatorics (3)
Set theory, counting techniques such as permutations, combinations, generating functions, partitions and recurrence relations, Polya's theorem, Hamiltonian and Eulerian properties of graphs, matchings, trees, coloring problems, and planarity. Applications in many disciplines. 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 200 or MATH 220 or consent of instructor.

MATH 418 General Topology (3) Topics include definition of a topology, closed sets, relativizations, base and subbases of a topology, compact topological spaces, separation axioms, normal spaces, regular spaces, metric spaces, continuous mappings, product spaces, and function spaces. Prerequisite: MATH 340 or consent of instructor

MATH 420 Modern Algebra II (3)
A continuation of MATH 320. Advanced topics in the theory of groups, rings, and fields. Coverage may include topics such as the direct product of groups, finite Abelian groups, Sylow Theorems, unique factorization domains, field extensions, and Galois Theory.

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.

A course in partial differential equations (PDEs). Topics include mathematical models in physics, theory and solution of quasi-linear first-order PDEs, second-order linear and nonlinear PDEs including applications, Fourier series, boundary-value problems, Fourier and Laplace transforms, numerical methods and solutions. Prerequisite: MATH 241 or consent of instructor.

MATH 440 Real Analysis II (3)
A continuation of MATH 340. Topics include sequences and series of functions,
Taylor series, Weierstrass approximation theorem, Fourier series, and the Lebesgue integral. Prerequisite: MATH 340 or consent of instructor.
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 queuing theory), and stationarity. Prerequisite: MATH 345 or consent of instructor.

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; and nonparametric techniques and multiple comparison methods. Prerequisite: MATH 265 and MATH 241 or a course in linear algebra 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 Models (3)
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 models. Applications to biology, physics, chemistry, geology, social science, and environmental sciences. Prerequisite: MATH 211 or consent of instructor.

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. Prerequisites: Senior standing or consent of instructor.

MATH 495 Special Studies (1-4)
Prerequisites: a lower-division math course and consent of instructor.
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. May be repeated for credit up to 3 units total. 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.

MUS 101 Introduction to Music (3)
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, category C4 (Comparative Perspectives).

MUS 105 Music Theory for Non Majors (3)
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; and dominant seventh; Use of music notation software. Not open to Music Majors. Satisfies GE, category 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, and 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; 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. Prerequisite: prospective major status 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, 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 112 Jazz Theory I (3)
Harmonic materials and aural skills appropriate to jazz composition, arranging, and performance. Prerequisite: Mus 105 or the equivalent, or consent of instructor.
MUS 115 Vocal Methods (1)
Group work in the fundamental techniques of singing. Problems of tone production, breath control, diction, repertory, and interpretation. 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)
Basic performing techniques on guitar. Offered for upper-division credit as MUS 418 with additional course requirements. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 120 Ear Training I (2)
Development of sightsinging and dictation skills using pentatonic and diatonic materials. Techniques include moveable-do solfa, takadimi rhythmic system, and drills in intervals, triads, and dictation, facilitated by computer software and partner work. Also emphasizes development of broad listening skills, using examples of great works based upon simple diatonic melodies. Prerequisite: MUS 105 or equivalent.

MUS 122 String Methods (1)
Basic performing techniques on orchestral string instruments. Offered for upperdivision credit as MUS 422 with additional course requirements. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 123 Woodwind Methods (1)
Basic performing techniques on band and orchestral woodwind instruments. Offered for upper-division credit as MUS 423 with additional course requirements. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 124 Brass Methods (1)
Basic performing techniques on band and orchestral brass instruments. Offered for upper-division credit as MUS 424 with additional course requirements. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 129 Percussion Methods (1)
Basic performing techniques on standard percussion instruments. Offered for upper-division credit as MUS 429 with additional course requirements. 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. 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 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, category C1 (History of the Fine Arts).
MUS 151 Repertory Class-Private Instr (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 159 Audio and Recording Production I (1)
Fundamentals of audio and recording production in a studio and of live performances. Discussion and demonstrations of major types of software and/or hardware used in the production of music including creative and innovative methods.
Students will develop skills in all phases of studio and live performance operation and will complete a number of individual projects.

MUS 189 Jazz Improvisation I (1-2)
Exploration of the techniques of melodic composition and improvisation based on the scales and chords used in jazz. Maybe repeated for credit. Prerequisite: MUS 105 and consent of instructor.

MUS 199 Student Instructed Course (1-3)
Topic will differ each semester. Cr/NC only.
MUS 201 Music in Action (3)
Experience great classical, jazz, and world music performances created by today's musicians. Students are engaged as audiences for on-campus, videotaped, and recorded performances of renowned and important performers and composers and for Music Department productions. Post-performance small group discussions and on-line chats ask students to further engage by reflecting upon their shared experiences. Attendance is required at several on-campus free admission performances. Satisfies GE, category C4.

MUS 209 Intensive Keyboard Lab II (2)
A continuation of work begun in MUS 109. Prerequisite: MUS 109.
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, and 9th, 11th, and 13th chords, melodic, phrase and theme structure, 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 Theory II (3)
A continuation of MUS 112. Advanced harmonic concepts are studied. Includes ear training, culminating in transcription of a jazz solo. Prerequisite: MUS 112 or consent of instructor.

MUS 220 Ear Training II (2)
Continuation of Ear Training I. Sightsinging progresses to two-,three-, and fourpart music, incorporating the most common chromatic tones. Dictation focuses upon triad inversions, continuing development of melodic and rhythmic dictation skills, and the introduction of polyphonic dictation. Listening skills are pursued using great works which emphasize contrapuntal techniques. 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, category 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 embodies the study of the evolution of musical genres, from 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. Prerequisites: MUS 110, or by 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 embodies the study of representative composers including Mozart, Beethoven, Brahms, and Stravinsky, as well as analytical studies of specific works dating from this time period. This course is offered to both Majors and non-Majors with a working knowledge of musical notation and theory. Prerequisites: MUS 210, or by consent of instructor.

MUS 259 Music Technology: Tools and Applications (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 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: (Subtitle) (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 301 Music and Technology: Then and Now (3)
How does technology affect musical composition, performance, and listening? An exploration of the effects of musical notation, music printing, acoustic musical instruments, self-playing musical instruments, recording, electronic instruments, and digital resources on past and present music making. No prior background in music is required. Satisfies GE, Category C1 (History of the Fine Arts).

MUS 309A Keyboard Proficiency Lab (1)
The study of functional keyboard; figured bass, harmonization, transposition, and sightreading. 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 sightreading. 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 including 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 314 Orchestration (2)
Techniques of instrumentation and choral arranging. Prerequisites: MUS 323, 324 or 325 , and 210 or 212 or 317 ; performance experience on strings, woodwind, brass, and percussion instruments (recommended); and 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 for the stage, Italian and Latin 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 foreign texts in French and German.

MUS 317 Small Jazz Band Arranging (3)
Arranging for two, three, and four parts in a jazz style is explored. Instrumental and vocal orchestration is studied. Prerequisites: MUS 112 and 212.
MUS 320 Ear Training III (2)
Continuation of Ear Training II. Focuses upon the music of Bach. Bach's chorales form the core of sightsinging and dictation exercises, supplemented by excerpts from cantatas and other works. The full chromatic gamut is introduced, as are more advanced harmonic and rhythmic patterns. Listening and analysis activities focus upon a diverse selection of Bach's works. 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, scorereading, 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, 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 324 Sonoma County Bach Choir (1-2)
Medium-sized vocal ensemble specializing in rehearsal and performance of music from the Renaissance, Baroque, Classical, and 20th-Century periods. Repertoire features major choral/orchestral works by Schutz, Bach, Mozart, and others, performed with historical instrumentation and performance practices. Frequent public performances. Admission by audition.
MUS 325 SSU 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 on preparation of repertoire. Includes public performances. No previous choral experience required; singers will be given a simple screening after enrolling. May be repeated for credit.
MUS 326 Classical Guitar Ensemble (1-2)
The course focuses on all aspects of the literature for multiple guitars performance, listening, sightreading, 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)
Woodwind, brass, and percussion ensemble of $60+$ music majors, qualified nonmajors, and community members. Focus is on the performance of serious wind band literature, including the best of the traditional band repertoire. Four annual concerts includes some touring. Placement by audition. 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 San Francisco Symphony and the San Francisco Opera Orchestra will coach each ensemble on a periodic basis. 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 study and performance of operatic and musical theatre literature. Designed for singers, actors, and others interested in Music Theatre. Maybe repeated for credit. Prerequisite: By audition.
MUS 340 Musical Theatre Scenes Workshop (1-3)
A performance course designed to broaden students' familiarity with the opera and musical theatre repertoire. Students have input regarding literature and 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 (1-3)
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 category C1.

MUS 344 Studies-Specific Composers (1-3)
An in-depth study of the life and works of a single composer. Course activities will include lecture, listening, and in-class performances. Prerequisite: MUS 101, 201 or consent of instructor. Satisfies GE category 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. May be repeated for credit.

MUS 350 Survey of World Music (3)
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 rhythm. Satisfies GE, category C4 (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.
mus 359 Audio and Recording Production II (1) A continuation of Audio and Recording Production I. Prerequisite: MUS 159or by consent of instructor.

MUS 370 Music and Dance in the World's Religions (3)
A survey of music and dance in the world's major religions as well as in the traditional religions of Africa, Asia, and the Native Americans. Satisfies GE, category C4 (Comparative Perspectives).

MUS 376 Chamber Wind Ensemble (1-2)
While the core instrumentation of the group is the traditional wind octet or harmoniemusik, the ensemble maintains a flexible instrumentation to accommodate a diverse and exciting repertoire. Original repertoire from composers such as Gabrieli, Strauss, Dvorak, and Stravinsky form the core repertoire of this group comprised of select members from the Symphonic Wind Ensemble.

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 Repertory. 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 repertory. The ensemble affords its members the chance to cultivate sensitive chamber music skills and to explore performance techniques on all the various percussion instruments.

MUS 379 Contemporary Jazz Ensemble (1-2)
Rehearsal and performance of literature from post-bebop through fusion, with different ethnic music, classical music, rock, and free improvisation. May be repeated for credit. A Latin music ensemble is also offered some semesters. Prerequisite: consent of instructor.

MUS 389 Jazz Improvisation II (3)
This class explores tunes that are based on the diatonic modes and blues progressions in all 12 keys. Various improvisation techniques are discussed. Prerequisite: MUS 289 or consent of instructor.

MUS 390 Jazz Big Band (1-2)
The Big Band performs the best literature for the medium from the traditional swing era to modern big band arrangers. 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.
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.

MUS 399 Student Instructed Course (1-3)
Topic differs each semester. Cr/NC only.
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 emphasis on baton technique and development of effective conducting and rehearsal techniques common to instrumental and vocal ensembles.

MUS 402 Choral Conducting and Methods (3)
Basic conducting techniques, and techniques of choral rehearsal and performance. Prerequisite: MUS 401 or consent of instructor.

MUS 403 Instrumental Conducting and Methods (3)
Conducting techniques through the study of selected instrumental works. The course will include score-reading at the piano. Prerequisites: MUS 402 or 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)
The goal of this class is to compose five original jazz compositions. Various melodic, harmonic, and rhythmic concepts will be discussed. Prerequisites: MUS 112 and 212.

MUS 415 Voice Methods (1)
Group work and teaching techniques in the fundamentals of singing. Problems of tone production, breath control, diction, repertory, and interpretation. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 418 Guitar Methods (1)
Basic performing and teaching techniques on 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 twentieth century. Emphasizes accurately singing and hearing music of increasing chromatic complexity, 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)
Basic performing and teaching techniques on orchestral string instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 423 Woodind Methods (1)
Basic performing and teaching techniques on band and orchestral woodwind instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 424 Brass Methods (1)
Basic performing and teaching techniques on standard brass instruments. May be repeated for credit with consent of instructor. Prerequisite: consent of instructor.

MUS 425 Composers Forum (1-3)
Individual projects in creative work. May be repeated for credit. Prerequisite: consent of instructor.

MUS 429 Percussion Methods (1)
Basic performing and teaching techniques on 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)
Private instruction for advanced students. May be repeated for credit. Prerequisites: MUS 141 and audition.

MUS 442 Private Instruction-Indian Singing (1)
Private instruction in Indian classical singing. Maybe repeated for credit. Prerequisite: 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.

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 advance singers of Indian classical music. It is open to those who have taken 3 semesters of MUS 321/353 or the consent of the instructor.

MUS 460 Teaching Assistant in Music (1-4)
MUS 480 Special Topics (1-4)
Topic will vary from semester to semester. Consult Schedule of Classes for current offering.

MUS 481 Special Topics Workshop (1-3)
Activity will vary from semester to semester. Consult Schedule of Classes for current offering.

MUS 489 Jazz Improvisation III (3)
A continuation of MUS 389. May be repeated for credit. Prerequisite: MUS 389 or consent of instructor.

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 (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.

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.

MUS 500 Intro 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.

NAMS 200 Intro 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 category D1 (Individual and Society), and the ethnic studies requirement.

NAMS 205 Intro to Native American Arts (3) A general introduction of the traditional American Indian arts in the United States. The course will include information on the culture that produced the art forms. Craft projects or research paper by the student will be a part of the class requirements. Satisfies GE, category C1 (Fine Arts), 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 (3)
This course examines and critiques the depiction of Native Americans in American cinema, video, and documentary films. These media efforts are analyzed through an exploration of stereotypes, literature, and other popular influences found in American society. Documentary films by non-Indian and Native American film makers will be examined and analyzed. Satisfies GE, category C1 (Fine Arts), and the ethnic studies requirement.
NAMS 346 Phlosophic Systems and Sacred Movements in Native North America (3)
Only by common participation in religious cults and philosophic systems have the separate Indian tribes of North America ever united. This proposition will be critically examined by analysis of prehistoric and contemporary American Indian religious movements and philosophic systems. Precontact native religious systems will be surveyed. Archaeoastronomy and native art forms will be investigated as expressions of religious activities. Postcontact religious reorganization such as the ghost dance will be studied. Satisfies GE, category C3 (Philosophy and Values), and the ethnic studies requirement.

NAMS 354 Native American Literatures (3)
A discussion of traditional myths and songs as well as contemporary literary works of Native Americans. Satisfies GE, category C2 (World Literature), 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 Sem:Individual Native Amer 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 Amer Cultures of Amer SW (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)
Seminar. 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 Amer Educ (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 Amer Art Workshop (0-0)
Emphasizes the practical application of traditional and contemporary Native American art forms, designs, and techniques. This course attempts to advance the 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: Nat Amer of CA (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.

## Nursing (NURS)

NURS 200 Professional Concepts in Nursing (3)
Seminar, 3 hours. Professional, Philosophical and theoretical foundations of nursing are explored. Basic concepts of health are examined and issues common to all aspects of professional nursing are introduced. Corequisites: NURS 205 and 210A.

NURS 203 Basic Pharmacology for Nurses (2)
Seminar, 2 hours. Introduction to principles of pharmacology and to the nurse's role in the safe administration of medications. Content includes basic pharmacological principles, physiological actions, therapeutic and adverse effects of major drug classifications and routes of administration, basics of drug calculations, and patient education.

NURS 205 Skills in Professional Nursing Practice (3)
Lecture 2 hours, Laboratory 3 hours. Concepts, processes, and practices are offered in a variety of classroom and laboratory activities using the nursing process. The nursing laboratory emphasizes the role of the nurse and the opportunity to acquire and demonstrate communication an psychomotor skill proficiency. Laboratory fee payable at time of registration.

NURS 206 Psychiatric/Mental Health Nursing (3)
Seminar 2 hours, Laboratory 3 hours. Students are introduced to the principles of mental health and illness. Nursing care therapeutics with populations experiencing mental stresses and psychiatric illnesses are examined.

NURS 208 Nursing Applications of Pathophysiology (3)
Seminar, 3 hours. Pathophysiology in medical-surgical nursing is presented as a foundation for caring for the adult patient. Health and disease processes are studied as they apply to the clinical care of the adult patient.

NURS 210A Clinical Practicum I (4)
Clinical Laboratory, 12 hours. Students apply the nursing process and theoretical principles to the care of adults across the lifespan in health care settings. Students develop the ability to recognize health problems and implement professional standards of care. Corequisites: NURS 200, 203 and 205.

NURS 210B Clinical Practicum II (4)
Applies theoretical principles of nursing care to individuals across the lifespan in acute care and psychiatric health care settings. Emphasis is on providing care to persons experiencing changes in health and illness. Prerequisites: NURS 200, 205, 210A.

NURS 300 Introduction to Evidence-Based Practice (3)
Seminar, 3 hours. Discusses the nature of scholarly inquiry to locate, and critically appraise and use research and practice guidelines to inform evidence-based practice. Approaches to research in nursing are explored. Students critically appraise and interpret studies and practice guidelines to enhance their understanding of the relationship between theory, practice, and research. Prerequisites: Statistics.

NURS 305 Assessment and Clinical Decision Making (3)
Seminar, 2 hours; laboratory, 3 hours. Concepts and skills of human health assessment basic to clinical decision making within the caring process are expanded. Interview skills focus on eliciting an accurate and thorough history, taking into account multiple dimensions that characterize the person. Physical examination skills are further developed to provide a database for nursing diagnosis and planning nursing care. Laboratory fee payable at time of registration. Prerequisite: acceptance to RN-BSN program.

NURS 312 Baccalaureate Nursing Perspectives I (4)
Explore contemporary perspectives in baccalaureate nursing with emphasis on professionalism, theory and evidence-based practice, communication, client education, critical thinking, leadership, and professional development.

NURS 313 Baccalaureate Nursing Perspectives II (4)
Seminar, 4 hours. Application of baccalaureate nursing perspectives to women's and children's health care, adult complex care, and mental health care. Explores advocacy and care of individuals, families, and communities. Pre/Co-requisite: NURS 312.

NURS 340 Women's Health in the Expanding Family (2-3)
Seminar, 3 hours. Principles and concepts of wellness and illness in childbearing and child-rearing families. Preventive and therapeutic aspects of nursing care for the pregnant and post-partum client. Use of community resources introduced. Prerequisites: all 200 -level nursing major courses; concurrent enrollment in NURS 342 and 345.

NURS 342 Child Health in the Expanding Family (2-3)
Seminar, 3 hours. Principles and concepts of child wellness and illness in the context of the family. Preventative and therapeutic aspects of nursing care of the infant, child, and adolescent are emphasized. Prerequisites: all 200 -level nursing courses; concurrent enrollment in NURS 340 and 345.

NURS 345 Clinical Practicum with Expanding Fam (3-4)
Clinical Laboratory, 12 hours. Applies the nursing process to child-bearing and child-rearing families. Clinical experiences focus on principles and concepts of health promotion and maintenance to families in various phases of the health and illness continuum. Prerequisite: all 200 -level nursing major courses. Corequisite: NURS 340 and 350 . Malpractice insurance required.

NURS 348 Foundations of Obstetrical and Pediatric Nursing (6) Challenge credit for obstetrical and pediatric nursing care principles and practice content in curriculum for licensure. Open only to matriculated RN-BSN students who have passed the NCLEX-RN. Prerequisite: NURS 312 and NURS 313.

NURS 380 Care of Individuals and Familes with Complex Needs (3) Seminar, 3 hours. Applies the nursing process to individuals and families with complex health care needs, emphasizing care of older adults. Prerequisite: NURS 340, 342 and 345. Corequisite: NURS 385.

NURS 385 Clinical Practicum in Care of Individuals and Families with Complex Needs (3)
Clinical Laboratory, 9 hours. Applies the nursing process to individuals and families with complex health care needs, emphasizing care of older adults. Clinical experience originates in acute care settings and includes discharge planning, case management, and leadership roles of the nurse. Corequisite: NURS 380.

NURS 388 Foundations of Psychiatric and Complex Nursing
CARE (7)
Challenge credit for advanced medical-surgical and psychiatric nursing care principles and practice in curriculum for licensure. Open only to matriculated RN-BSN students who have passed the NCLEX-RN. Prerequisites: NURS 312 and NURS 313.

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). The course may be repeated for credit with different topics, to a maximum of 12 units. Prerequisite: consent of instructor.

NURS 404 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. Prerequisite: NURS 300 .

NURS 405 Community Health Nursing Practicum (3)
Clinical practice, 9 hours. Students apply knowledge and skills from nursing and public health science to provide clinical care for client, individuals, and families in their communities. Cultural diversity and vulnerable populations are emphasized while exploring the community as client. Pre/Corequisite: NURS 404.

NURS 415 Theory in Nursing Practice (1)
Seminar, 1 hour. Theories and concepts from nursing and related sciences are applied to a selected client population in a clinical setting. A learning contract for senior clinical study is developed by each student in a selected area of nursing practice that includes client care, research and theory, legal and ethical issues, standards of practice, and leadership and management in the clinical setting. Students must expect to complete NURS 425 Senior Clinical Study within the next two semesters.

NURS 425 Senior Clinical Study (4)
Clinical Laboratory, 12 hours. Clinical application of Humanistic Nursing Theory. Concepts from nursing and from related sciences are applied in the nursing care of selected populations. Informed choices through critical analysis of evidencebased practice and moral and ethical standards are applied to nursing care. Integration and synthesis of concepts, personal development, and leadership/management abilities are expanded through professional nursing practice. Prerequisite: NURS 415 within past two semesters.
NURS 440 Nursing Leadership and Management (3)
Lecture/discussion, 3 hours. Formulates a theoretical foundation for the process of nursing leadership and management. Attitudes and behavioral principles of effective leadership are developed and applied. Problem-solving strategies are developed as management problems are analyzed. Effects of the management process on patterns of health care practice and delivery are critically evaluated. Prerequisite: completion of all 300 -level course work.
NURS 450 Nursing in a Sociopolitical Environment (3)
Seminar, 3 hours. Explore historical and current sociopolitical issues in nursing and health care and their impact on the practice and profession of nursing. Professional accountability and effective sociopolitical advocacy are emphasized. Prerequisite: completion of all 300 -level course work.

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, category E. Open to non-nursing majors. Prerequisite: upper-division standing.

NURS 495 Special Studies (1-4)
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.

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 500A Scholarly Inquiry (3)
Seminar, 3 hours. Linkages between theory, research, and advanced practice are developed to provide the student with the necessary skills to critically analyze and apply research.

NURS 500B Scholarly Inquiry (3)
Seminar, 3 hours. Students apply the knowledge and skills gained in NURS 500A through scholarly activities and projects in community settings.

NURS 501 Assement and Maintenance of the Individual, Family, and Community (3)
Seminar, 3 hours. Expands the students' ability to identify and promote behaviors that enhance the health of self, individuals, and families. Principles from epidemiology, family health, psychology, sociology, change theory, and related therapies. Focuses on rapid identification of physical, mental, emotional, and spiritual health risks and modification of those risks as part of primary care.

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 504 Policy and Politics of Health Care (2)
Seminar, 2 hours. Course reviews the principal ways health care is organized and financed, and identifies current issues in health care organization and financing. Analytic perspectives on health and health care economics are emphasized.
Prerequisite: graduate nursing student or consent of instructor.
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 Assessment and Clinical Decision Making (3) Seminar, 3 hours, Laboratory 3 hours. Advanced concepts and skills in human health assessment are presented in relation to clinical decision making. Interview skills focus on eliciting an accurate and thorough history, taking into account multiple dimensions of the person. Exam skills are further developed to provide a database for advanced diagnosis and care. Lab fee. Open to the individuals entering the Family Nurse Practitioner program.

NURS 510 Professional Issues and Leadership (2-3)
Seminar, 2 or 3 hours. Current nursing issues in advanced practice, professionalism, and nursing education are examined from a leadership perspective. Focuses on expanding nursing power and influence in professional situations. Faculty and students collaborate in the identification of contemporary issues.

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. Pre/Corequisite: 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. DEMSN students take this course for 3 units; all other Leadership and Management students take this coures 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 CNL Professional Role Development (2)
Provides leadership in the application of the nursing process to client care, organizational processes and/or systems, and 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. Prerequisites: 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 N535A 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/CoRequisite: N535A.

## NURS 536 CNL Professional Role Devlopment (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: RN licensure and completion of N506, N502, N509, N507, N515A, N500A, N500B, and N514.
NURS 540A Pathophysiological Concepts in Diagnosis and
Treatment I (2)
Seminar, 2 hours. Develops 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 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.

NURS 540B Pathophysiological Concepts in Diagnosis and
Treatment II (4)
Lecture/discussion, 4 hours. Further develops a foundation for the diagnosis and management of common, yet more complex, acute, and chronic illness 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. Continues to emphasize the interdisciplinary aspect of primary health care through partnerships with patients as a basis for collaboration, consultation, and referral. Prerequisite: NURS 540A.

NURS 549 Health Maintenance Practicum (3)
Clinical Laboratory, 9 hours. The course reviews health assessment of the adult and introduces assessment of the well-child and healthy pregnant woman. The course correlates with and supports the student in applying the theoretical concepts of health maintenance from 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 maintenance plan. Prerequisites: acceptance into family nurse practitioner program; concurrent enrollment in NURS 550A and previous or concurrent enrollment in NURS 501 and 540A. Laboratory fee payable at time of registration.

NURS 550A FNP PRECEPTORSHIP I (2)
Clinical preceptorship, 6 hours. 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. Begins to develop advanced nursing role identity as FNP. Prerequisites: concurrent enrollment in NURS 549; previous or concurrent enrollment in NURS 501, 540A and 552. Laboratory fee payable at time of registration.

NURS 550B FNP Preceptorship II (5)
Clinical preceptorship, 15 hours. 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 diagnoses and management plans. Personal and professional parameters of the nurse practitioner role are examined. Prerequisite: NURS 550A. Laboratory fee payable at time of registration.

NURS 550C FNP Preceptorship III (4)
Clinical preceptorship, 12 hours. Expands 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 540A/B, 549 and 550A/B.

NURS 552 Pharmacology for FNPs (3)
The principles of pharmaco-kinetics and pharmaco-dynamics provide the management of primary care conditions. The course emphasis is on safe, ethical, and legal NP scope of practice and meets State criteria for the furnishing of drugs and devices by NPs, including Schedule II and DEA. Concurrent enrollment in NURS 540A 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 chartnotes and verbal presentation to preceptor.

## 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. $\mathrm{Cr} /$ 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 master's program in nursing and consent of instructor and department chair.

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.

PHIL 101 Critical Thinking (3)
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, category A3 (Critical Thinking).

PHIL 102 Introduction to Logic (3)
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, category A3 (Critical Thinking). CAN PHIL 6.

PHIL 120 Introduction to Philosophy (3)
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, category C3 (Philosophy and Values).

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 categories A2 and A3.

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/or the nature of beauty. Topics will vary from year-to-year depending on the interests of faculty. Prerequisites: current philosophy major or minor, or permission of instructor.

PHIL 290 Studies in Ancient Phlosophy (3)
This course treats topics relating to philosophy in the pre-Modern period. Readings might be drawn from the ancient Greek, Hellenistic, Medieval, and non-Western ancient traditions and may include subsequent studies thereof. Emphasis will vary from semester to semester.

PHIL 295 Studies in Modern Philosophy (3)
This course treats topics relating to philosophy in the Modern period. Readings might be drawn from the period spanning the Sixteenth through the Twentieth Centuries in Europe and may include subsequent studies thereof. Emphasis will vary from semester to semester.

PHIL 302 Ethics and Value Theory: (3)
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, category C3 (Philosophy and Values). Consult Schedule of Classes for topic to be studied. May be repeated (with a different focus) for credit.

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 305 Truth (3)
The aim of this course is to examine a wide sampling of answers to one of the great perennial questions of philosophy: what is truth? Depending on the interests of the faculty, possible readings might address, but are not limited to, the following thematic areas of interest: debates over truth from Socrates to Nietzsche and beyond; the meaning of truth in science, technology, religion, and art; truth and power; non-Western approaches to truth; and/or universal versus particular truth. This course is required of all students who are majoring in philosophy.

PHIL 310 Being (3)
The aim of this course is to examine a wide sampling of answers to one of the most fascinating questions of philosophy: what is the nature of reality? Depending on the interests of the faculty, readings can address, but are not limited to, the following thematic areas of interest: scientific and technological conceptions of reality; religious conceptions of reality; differences/similarities between human and nonhuman reality; non-Western approaches to reality; and/or the reality of history and the history of reality. This course is required of all students who are majoring in philosophy.

PHIL 311 Robotics and the Transhuman Future (3)
The field of Cognitive robotics presents us with profound philosophical ques-
tions. Can robots be used to model or replicate human cognitive functions? How would robust robotic artificial intelligence change the world we live in? What would it mean to be human in a fully automated world? To begin to answer these questions we will create simple mechanical reasoning devices and discuss their relevance to philosophical theories of life and mind. We will use LEGO beams, plates, gears, motors, and a RCX micro controller board programmed in the LEGO or NQC (Not Quite C) language along with various sensors and motors to construct small autonomous robots. These robots will be used to try to recreate and explore the strengths and weaknesses of some recent experiments in the field of cognitive robotics.

PHiL 313 Ethics in Science, Engineering, and Information Technology (3)
Advanced sciences and high technologies constantly challenge our notions of ethics and morality. In this class we will look at ethical theories that seek to give guidance to scientists, engineers, and other technologists whose work is not only changing the way we live our lives but also our very understanding of life and our place in the universe. Students will look at case studies on topics such as biotechnology, ethical decision making in the technological design process, engineering disaster analysis, ethics and information technology, and/or technology design and its impact on the traditional social contract.

PHIL 315 Existentialism (3)
Existentialism points to the philosophical significance of human existence itself: to do philosophy means to take oneself seriously as an embodied, finite subject, existing in the world and relating to other subjects. Existentialist thought is both a historical movement in philosophy and also a methodology of philosophy. In this class, we will read several prominent existentialist philosophers and examine relevant themes such as the ethics of ambiguity, anxiety and dread, passion and desire, subjectivity and intersubjectivity, finitude and the divine, and/or freedom and choice.

PHIL 325 Environmental Philosophy (3)
This course examines the philosophical problems that emerge with sustained reflection on environmental issues. These problems include the moral standing of non-human entities, the status of "value" in nature, and the status of "nature" itself as something other than human and vice versa.

PHIL 335 Religion, Spirituality, and Social Justice (3)
In this seminar, we will explore the theme of spiritual or contemplative practice and its relations to social justice. More specifically, in order to probe the related questions--how is spiritual inwardness related to moral or political change, and how does contemplative practice lead to collaborative work for social justice?-this course will examine several key thinkers (eg. Kierkegaard, Arendt, and Habermas) who give us resources for diagnosing the symptoms of violence and political apathy, and who suggest different and complementary models of contemplative practice. The guiding question of the course will be to what extent are forms of spiritual praxis, whether overtly religious, secular, or post-secular, inseparable from the search for non-violent means of social change?

PHIL 338 Philosophy of Emotion (3)
A philosophical study of emotion; raising definitional, epistemological, meta physical , and value questions about emotion. The course includes the study of particular emotions, such as love, compassion, fear, and pride, and makes use of information about emotions from and the sciences and social sciences.

PHIL 340 Buddhism and Philosophy (3)
From its historical beginnings in India through to the schools of Japanese Zen and its eventual introduction to the West, Buddhism has had a distinctive and important impact on philosophical thought. The course will focus on the metaphysical, psychological, ethical, aesthetic, and practical dimensions of Buddhist teachings. Course content and historical emphasis will vary.

PHIL 350 Topics in Moral Phlosophy (3)
The aim of this course is to examine recent research and scholarship dealing with a wide range of problems and issues of concern to philosophers who are working in the area of practical philosophy. Some possible topics include the roles of reason and emotion in moral motivation and judgment, the objectivity of value, the nature of moral identity; social dimensions to moral experience, advanced work in the theory of justice, the scope and limits of morality, the relationship between morality and self-interest, and the character of rational action.

PHIL 355 American Philosophy (3)
This course surveys major themes and thinkers that define America's distinct philosophical tradition. Stress will be on the origins of "Pragmatism" as a philosophical movement. Our focus will be on the classical thinkers: Emerson, Thoreau, Peirce, James, Dewey, and Mead, and extend to cover the "Neo-Pragmatism" of Richard Rorty, Hilary Putnam, Cornell West, Stanley Cavell, and others. Course content and emphasis may vary.
PHil 360 Philosophy of Art and Literature (3)
An inquiry into the nature of art and literature. This course includes consideration of such topics as: The Possibility of Defining "Art", Artistic Imagination, Creativity and Genius, the Purpose of Art, The Interpretation, and Critical Evaluation of Artworks and Works of Literature, Art and Literature in Everyday Life, and the intriguing relationship between philosophy and literature.

## PHIL 368 Philosophy and Film (3)

A turn to film and film studies in search of contemporary culture's handling of philosophical themes. The course will develop strategies to study the hidden philosophical significance found within selections from film genres. Such study is indebted to the work of Stanley Cavell and his project to find in film the voices of a repressed American philosophy. Work from throughout critical theory will be considered.

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; the 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 378 Feminist Philosophy (3)
This course is an introduction to feminist philosophy. In this class, we will see how the meaning of concepts such as the body, identity, gender, sexuality, and race have changed throughout the past two centuries by looking at central debates within feminist thought. Questions may include how is it that we come to expect behavior, appearance, and actions to be essentially gendered? What are the implications of gender for how we understand sexuality and race? Where can we find resources for changing such expectations? How do we decide when such transformation is necessary and worth pursuing?

PHIL 383 Philosophy of Language (3)
A study of classical and current theories about the nature and functions of language, and about truth and meaning. Analysis of the relevance of philosophy of language to other branches of philosophy, linguistics, psychology, and the social sciences. Analysis of philosophical issues in the language of fiction and poetry.

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 instuctor 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 instuctor consent.

Phil 462 Research Assistant in Phllosophy (1-6)
Intended to give selected students experience in participating in the construction of a professor's research project. Prerequsites: advanced standing and a faculty invitation.

PHIL 470 Teaching Assistant in Phllosophy (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.

PHIL 495 Special Studies (1-3)
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.

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 Phlosophy (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. Not recommended for B.S. students. Satisfies GE, category B1 or B3 (Physical Sciences). Prerequisite for chemistry, physics, or mathematics majors: Physics and Astronomy Department approval.

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, category 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, category B1 or B3 (Physical Sciences). Prerequisite: MATH 161.

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, category B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisite: previous 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 appreciation of the sense of the physical universe gained through experimentation. 209A satisfies GE, category B1 or B3 (Physical Sciences) and GE laboratory requirements. Prerequisites: high school algebra, 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 appreciation of the sense of the physical universe gained through experimentation. Prerequisites: 209A and previous or concurrent enrollment in 210B.

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. 210A satisfies GE, category B1 or B3 (Physical Sciences) requirement. Prerequisites: high school algebra and trigonometry or MATH 107. CAN PHYS SEQ A.

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. Prerequisites: 210A. CAN PHYS SEQ A.

PHYS 214 Introduction to Physics II (4)
Lecture, 4 hours. The continuation of PHYS 114. Electrostatics, quasistatic fields and currents, and magnetostatics; electromagnetic induction; waves; physical and geometric optics. Prerequisites: PHYS 114; previous or concurrent enrollment in 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. 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; elements of electronic music. Satisfies GE, category B3 (Specific Emphasis in Natural Sciences). Prerequisite: one course in physical science or consent of instructor.

## PHYS 313 Electronics (3)

Lecture, 3 hours. A comprehensive review of DC and AC circuit theory, applications of diodes, transistors and operational amplifiers, and 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. Cross listed as CHEM 313. Concurrent enrollment in PHYS 313L/CHEM 313L is mandatory. Prerequisites: MATH 107, 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 PHYS 313 lecture course. Students will experiment with physical and simulated circuits. Cross listed as CHEM 313L. Concurrent enrollment in PHYS 313/CHEM 313 is mandatory. Prerequisites: MATH 107, PHYS 209B or 216; or consent of instructor.

PHYS 314 Introduction to Physics III (4)
Lecture, 4 hours. The continuation of PHYS 214. 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, Boltzmann statistics. Prerequisites: PHYS 214; previous or concurrent enrollment in 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 previous or concurrent enrollment in 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, orthonomal 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, category 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 $\mathrm{C}++$ 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, and potentials and fields. Prerequisites: PHYS 214 and previous or concurrent enrollment in PHYS 325.
## PHYS 445 Рнотомics (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, avalanche photodiodes; and detector noise. Prerequisite: PHYS 314 or consent of instructor.PHYS 450 Statistical Physics (2)
Lecture, 2 hours. An introduction to statistical methods. Topics include ideal gas, heat capacities, entropy, enthalpy, 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; $\mathrm{I}-\mathrm{V}$ and $\mathrm{C}-\mathrm{V}$ characteristics of diodes; and characterization of transistors. Prerequisite: PHYS 314 or consent of instructor.
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. Prerequisite: Physics 214 and 216 or Physics 210B and 209B.

## 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. Prerequisites: PHYS 313L. Application form required prior to enrollment.

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.
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 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: Contempo 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, category D4 (U.S. Constitution and State and Local Government). CAN GOVT 2.

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, category 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, category 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 Introduction to Comparative Government (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 Introduction to 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 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 Development of Modern Political Thought Since 1500 (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 is critical theory in reevaluating our political values as we face an increasingly diverse and interdependent world?

POLS 315 Democracy, Capitalism, and Socialism (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, category 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 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.

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

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. May be repeated for credit.

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.

POLS 424 The Bill of Rights, Civl 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.

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: 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 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.

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 six 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 nongovernmental, 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?"; "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; 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 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 452 Third World Political Systems (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. 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 in 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.

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)
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 MPA 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 Non-Profit Agencies (2)
An examination of applied issues in non-profit budgeting and fiscal management. Fund accounting, cash flow analysis, expenditure control, long-range financial planning, audits, grants, and contracts in non-profit agencies are studied. Required for non-profit 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 Non-Proft Organizations (2) Examination of current issues in the management of employees and volunteers in non-profit 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. Crosslisted 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 Supvervision (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.

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 master's degree. Prerequisite: permission of the graduate coordinator. $\mathrm{Cr} /$ NC only.
pOLS 580 Nonprofit Dynamics: Politics and Community Environment (2)
Introduction to nonprofits and the environment in which they operate. Analysis of nonprofits 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 MPA 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 agen-
cies, together with techniques for designing and implementing realistic marketing and public relations programs. Course will stress adaptation of marketing techniques for not-for-profit organizations, and will explore the types of access to press, electronic, and other media available to nonprofits.

POLS 587 Grant Writing and Administration (2)
Focus upon full process of prospect research, proposal development, application, 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 (4)
An intensive review of the literature in specific areas of concentration, including budgeting, the American Presidency, legislatures, and such public policy areas as health, aging, and regulation. 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 strategy for dealing with the problem and work toward implementing the strategy.
POLS 599 MASTER's Thesis (2-4)
Prerequisite: submission of an authorized Advancement to Candidacy form.

PORT 101 Beginning Portuguese (4) Introductory course in Portuguese. This course develops skills in speaking, listening, reading, and writing, as well as a knowledge of significant cultural topics in Portuguese-speaking areas of the world. Emphasis is on Brazilian Portuguese, but attention is also given to varieties spoken in Europe and Africa.

PORT 110 Portuguese for Spanish (3)
This course provides Spanish-speaking students with an accelerated introduction to spoken and written Portuguese. Prerequisite: SPAN 202 or consent of the instructor.

## Psychology (PSY)

PSY 201 Human Potential (3-4)
Concepts and skills useful for increasing self-understanding and interpersonal effectiveness.

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. 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, category D1 (Individual and Society).

PSY 290 Special Topics (1-4)
One or more psychological topics are selected for study in depth. Consult the schedule of classes for topics to be studied and current unit offering. May be repeated for credit.

PSY 299 Student Instructed Course (1-3)
Each Student-instructed Course is designed by an advanced student under the guidance of a faculty sponsor. Each course proposal is carefully reviewed by the department Executive Committee before approval is granted. Consult the Schedule of Classes for the topic studied. Only two SICs may be credited toward the psychology major. Cr/NC only.

PSY 302 Development of the Person (3)
A multidisciplinary examination of the 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, category E (The Integrated Person).

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 in the others. Interrelationships with larger political and economic variables are explored, drawing from other disciplines that offer relevant insights and knowledge. Satisfies GE, category D1 (Individual and Society).

PSY 304 Sibling Relationships (4)
An exploration of the role of siblings in 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. Crosslisted with GERN 304.

PSY 306 History of Modern Psychology (4)
Part I of a year-long course that presents perspectives on the field of psychology. Includes past and present understandings of human experience, integrating issues and controversies. The first semester includes epistemology, traditional scientific and clinical methodologies, and behavioral, psychoanalytic, and Gestalt psychologies. Prerequisites: PSY 250, ENGL 101, PHIL 101, admission to the psychology major or consent of instructor, and sophomore standing.

PSY 307 Humanistic, Existential, and Transpersonal
Psychology (4)
Part II of this series continues with theories, methods, and research in humanistic, existential, and transpersonal psychology. Prerequisite: PSY 306 or consent of instructor.

PSY 311 Psychology Dialogue Series (1-2)
A lecture series that explores careers and topics of interest to psychologists. Practitioners in diverse fields of psychology are invited to speak on the nature of their work, current social and political trends in psychological practice, and their view of the future of psychology. Cr/NC only.

PSY 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. May be repeated for credit. Crosslisted with GERN 312.

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.

PSY 322 Мyth, 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 standing.

PSY 324 Learning Moments (1)
A series of presentations from individuals from all areas of the university, focused on their own personal moments of significant learning. May be repeated once for credit. Cr/NC only.

PSY 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. Crosslisted with SOCI 326. Satisfies GE D1 (Individual and Society).
pSY 327 Psychology of Organizations (4)
This course considers the psychological factors that contribute to meaningful and satisfying work and the application of psychological theories and principles to analyze issues and events in the workplace. Drawing on current research and theory, course topics include individual motivation; social perception; leadership and participation; group, inter-group, and system dynamics; conflict and conflict resolution; and cooperation and group decision-making.

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 worldview regarding race, ethnicity, culture, gender, sexual orientation, age, and disability. Students will 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.

PSY 329 Group Process (3-4)
The use of the small group as a basis for understanding the individual, the individual's relationship to others, and the individual in group behavior. This class is normally conducted as an encounter group, with supplementary readings and written work. Prerequisites: Admission to the Psychology major and junior standing. Cr/NC only.

## 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.

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, and everyday life. Emphasis on individual and group projects. Service-learning course.

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, readings, and discussions of the psychodynamics of meditation. Cr/NC only.

## PSY 352 Psychology of Yoga (3-4)

Unification of mind and body through the practice of Yoga. An introduction to the literature and practice of Yoga. The course normally includes separate lecture and practice sessions. May be repeated once for credit.

PSY 358 Health Psychology (3-4)
This course focuses on the relationship between the body and the mind in physical health, psychological well being, and personal growth. Students will 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. Prerequisites: Admission to the Psychology major and junior standing.

PSY 360 Peak Performance Psychology (4)
This course will focus 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 will learn how to teach themselves and those with whom they work to increase concentration, ovecome 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, calmness, and grace. This course will include 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 standing.

PSY 362 Human Sexuality (4)
Human Sexuality will cover 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.

PSY 380 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. Prerequisite: PSY 250 and admission to the psychology major.

PSY 398 Student-Instructed Course (1-3)
Each student-instructed course is designed by an advanced student under the guidance of a faculty sponsor. Each course proposal is carefully reviewed by the department executive committee before approval is granted. Consult the Schedule of Classes for the topic studied. Only two SICs may be credited toward the psychology major. Cr/NC only.

PSY 399 Graduate Student-Instructed Course (1-3) Each graduate student-instructed course is designed by an advanced student under the guidance of a faculty sponsor. Each course proposal is carefully reviewed by the department Executive Committee before approval is granted. Consult the Schedule of Classes for the topic studied. Only two SICs may be credited toward the psychology major.

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 standing.
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. Crosslisted as GERN 408. Prerequisite: junior standing.
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.

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 standing, or consent of instructor.

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. Prerequisite: junior standing.

PSY 412 Adolescent Psychology (3-4)
An examination of the social, cognitive, and biological theories in adolescent development. Material is drawn from research and personal interaction with adolescents. Prerequisite: junior standing.

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. Prerequisite: junior standing.

PSY 421 Psychology of Aging (4)
Analysis of psychological development as a life-long process. Examination of patterns of adult learning and ways to facilitate it. Exploration of the role of memory for learning and for psychological functioning. Study of issues in mental health in adulthood and later life. Crosslisted as GERN 421. Prerequisite: junior standing.

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, and immortality will be addressed. Crosslisted as GERN 422.

PSY 423 Community Psychology (3-4)
Community structure and processes in relation to human needs. Organizing community action and the role of the individual in social change. Theories and strategies of organizing, building alliances, and affecting legislation and policy.

PSY 424 Human Systems Leadership (3-4)
Designed to develop insight and skills related to the functioning of human, taskoriented organizations, this course uses social-psychological theory, phenom-enologically-based data, and a holistic, systems perspective. In field projects with community organizations, psychology majors gain practical experience and leadership skills for assisting human organizations to function more effectively and humanely.

PSY 425 Abnormal Psychology (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. Prerequisites: PSY 306 and junior standing, or consent of instructor.

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. Prerequisites: PSY 306 and junior standing. Some sections require admission to the major and consent of instructor.

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, perspectives and personal growth. May be repeated once for credit. Prerequisite: PSY 307 or 329 or 428 or consent of instructor.

PSY 431 Introduction To Art Therapy (3-4)
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. Prerequisite: junior standing.

PSY 432 Group Work with Older Adults (4)
This service-learning course introduces students to the fundamentals of group work with older adults. The class provides an overview of the phases of group development and basic skills and techniques for facilitating effective groups. Theoretical perspectives from sociology and psychology are used to examine how groups function, the value they have for older adults, and common themes in groups for older adults. To enhance learning, students go to senior sites in the community to co-facilitate weekly intergenerational dialogue groups. Crosslisted with GERN 432 and SOCl 432. Prerequisite: admission to the major and junior standing.

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 class is appropriate for anyone interested in disability, whether for personal or professional reasons. Crosslisted with GERN 438.

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 380 , or consent of instructor.

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. Prerequisite: PSY 380 or permission of instructor.

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, and international relations.

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. Prerequisite: PSY 380 or consent of the instructor. Corequisite: PSY 445L.

PSY 445L Advanced Research Laboratory (2)
Compliments PSY 445 by introducing and reviewing the statistical techniques used by psychologists to analyze quantitative data. Students will 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 380 or consent of the instructor. Corequisite: PSY 445.

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. Types of conditioning, stimulus controls and reinforcement, social learning, and cognitive mediaton of emotion and behavior. Prerequisite: PSY 250. Recommended: PSY 306.

PSY 448 Cognitive Development (4)
This course covers theories and research on cognition from infancy through childhood. 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 302 or 410.

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, the effects of metabolic processes, brain lesions, and various drugs on behavior.

PSY 451 Neural Science and Biopsychology (4-8)
A study of the human and mammalian brain, covering nerve cells and how they work, synapses, neurotransmitters, pharmacology, sexuality, neuroanatomy, neurophysiology, evolution, neuropathology, sleep, language, left brain and right brain, higher consciousness, and much more.

PSY 451L Neural Science and Biopsychology Laboratory (2-4)
Demonstrations and exercises that exemplify the methods and subject matter of neuroscience and biopsychology psychology. Corequisite: PSY 451.

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 burgeoning research and technology related to health and wellness.

PSY 461 Personality (3-4)
Varied viewpoints are brought to bear in an attempt to conceptualize and understand the process and functioning of human personality. Prerequisite: junior standing.

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, and the natural environment. Prerequisite: PSY 306 and 307 or consent of instructor.

PSY 466 Jungian Psychology (4)
Examination of Jung and contemporary Jungian thinkers. Examines developmental aspects of Jungian theory such as individuation, typology, masculine and feminine development, and the transcendent function. Prerequisite: junior standing.

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 a psychological perspective.

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. A maximum of 12 units of special study and internship credit may be applied to the psychology major. Cr/NC only.
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: PSY 306 and 307 , and consent of instructor. A maximum of 12 units of special study and internship credit may be applied to the psychology major. Cr/NC only.

PSY 483 Advanced Teaching Internship (1-4)
Advanced skills in teaching internship. A maximum of 12 units of special study and internship credit may be applied to the psychology major. Prerequisites: PSY 306 and 307 , and consent of instructor.

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 in promoting a transition to an ecologically sustainable society. Field trips to be arranged.
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.
PSY 489 Applied Ecopsychology (4)
Individual, group, and community practices for healing and deepening our connection with the Earth. Approaches include meditation in nature, wilderness-based rites of passage, sensory awareness practices, and seasonal celebrations. Field trips to be arrange Cr/NC only.

PSY 490 Psychology Seminar (1-4)
Each semester one or more psychological topics will be selected for study in depth. Consult Schedule of Classes for topics to be studied 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 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 GERN 493.

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.
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. These should be completed and filed during the add/drop period. Twelve 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.
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

PSY 497 Interdisciplinary Seminar (2-4)
Exploration of basic social problems. Resource persons from other disciplines may participate. Themes and topics will vary. May be repeated for credit.

## 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. 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.

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. Crosslisted 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) 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 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.

PSY 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.

PSY 515 Psychological Writing (1-4)
Advanced instruction in the analysis, organization, style, and content of psychological writing, including personal explorations.

PSY 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.

## PSY 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.

PSY 521A Seminar (1-4)
Seminar instruction in the area indicated on the transcript.
PSY 521 B Seminar (1-4)
Seminar instruction in the area indicated on the transcript.
PSY 530A Seminar in Interpersonal Process (1-4)
A two-semester sequence in which students apply their knowledge of depth psychology to group process. Students read selected theorists and practitioners as well as participate in group process interactions within the class. Limited to students in the Depth Psychology Program.

PSY 530B Seminar in Interpersonal Process (1-4)
A two-semester sequence in which students apply their knowledge of depth psychology to group process. Students read selected theorists and practitioners as well as participate in group process interactions within the class. Limited to students in the Depth Psychology Program.

PSY 531 Personal/Interpersonal Process (1-4) Personal psychological process work and/or group process.

PSY 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.)

PSY 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.)

PSY 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.)

PSY 540A Seminar: Psychological Issues (3-4)
PSY 540B Seminar: Psychological Issues (1-3)
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, 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)
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, 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 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, eco-psychology, religion, and art history. Limited to students in the Depth Psychology Program.

PSY 543B 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, eco-psychology, religion, and art history. Limited to students in the Depth Psychology Program.

PSY 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.

PSY 544B 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.

PSY 551 Directed Reading (1-4)
PSY 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.

PSY 555A Integrated Study (1-4)
Integrated study incorporating a variety of modalities.
PSY 555B Integrated Study (1-4)
Integrated study incorporating a variety of modalities.
PSY 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.

## PSY 557 Human Systems Redesign (2-4)

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.

PSY 558 Seminar: Human Systems and Social Change (4)
The "human systems" perspective in the context of an information and communications society, as developed by general systems theory, organization development, and humanistic-transpersonal psychology. Organizational and societal leadership are explored from perspectives of values, organizational dynamics, and cultural/economic/ecological systems.
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 572A Internship and Professional Practice in Organization Development (3)
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.

PSY 572B Internship in Organization Development (3)
Supervised practical experience applying organization development concepts and methods in profit or nonprofit settings. Limited to students in the Organization Development Program only.
PSY 573 Internship in Biofeedback (1-4)
Internship is practical experience using biofeedback equipment during supervised biofeedback training sessions. Available for letter grade only. Prerequisite: PSY 454.

PSY 575 Research Seminar (1-4)
Exploration of depth and qualitative research approaches to understanding personal experience. Students learn techniques in depth processes, interviewing, and organic inquiry. Emphasis is on stimulation of students' individual research interests, and the design, conduct, and completion of an individual research study.

PSY 576 Seminar in Depth Psychology (1-5)
Selected topics in the field of depth psychology. Open to Depth 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 581A Internship (1-6)
PSY 581B 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 595 Special Studies for Grad 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. Prerequisite: graduate standing and consent of instructor. Cr/NC only.

PSY 596 Graduate Tutorial (1-4)
Seminar in selected topics. Consult semester class schedule for current offerings.
PSY 598 Culminating Paper Tutorial (1-4)
This tutorial provides specific guidance and consultation to each phase of the students' work on the culminating paper for the Psychology MA in Organization Development.

PSY 571 Practicum (1-4)
Training and applied skill development.

PSY 599A Master's Thesis: Project (1-3)
A Master's thesis or investigative project is developed by the student under the guidance of a thesis committee chair. Students develop the research proposal and write thesis introduction, methods, and literature review in the first semester. In the second semester the thesis project is completed. Limited to Depth Psychology students.

## PSY 599B Master's Thesis: Project (1-3)

A Master's thesis or investigative project is developed by the student under the guidance of a thesis committee chair. Students develop the research proposal and write thesis introduction, methods, and literature review in the first semester. In the second semester the thesis project is completed. Limited to Depth Psychology students.

## Science (SCI)

SCl 150 Intro to Careers in Hlth 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, and physical or occupational therapy, etc. Cr/NC only.

SCI 308 Knowledge and Values in Science (3)

## Sociology (SOCI)

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, category D1 (Individual and Society). CAN SOC 2.

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 305 Perspectives on the Holocaust and Genocide (4)
A weekly lecture series on the Holocaust, genocide, and human rights. Guest lecturers and SSU faculty provide a variety of sociological and interdisciplinary perspectives on the topics. The course explores the intellectual, emotional, and ethical aspects of the Holocaust 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. Requirements include written position, midterm, and final papers. Prerequisite: upper division standing. Satisfies upper-division GE, category D5. (Contemporary International Perspectives)

SOCI 306 Sociology of Career Planning (3-4)
How to identify and locate liberal arts jobs in government, business, private institutions, or self-employment. Choosing a career, job-hunting skills and techniques, and keeping a job. Study of such work-related issues as dual-career families, equal opportunity, and professionalism.

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. Crosslisted 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. Crosslisted as GERN 317. Satisfies GE, category E (Integrated Person).

SOCl 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. Crosslisted as GERN 319. Satisfies GE, category 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. Crosslisted as PSY 326. Satisfies GE 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. This is a Project Censored related class.
SOCI 331 Mass Communication Theory and Research (4)
A critical analysis of the nature and functions of mass communications in contemporary society. Overview of the history, structure, function, and influence of the mass media. Development of critical and analytic skills necessary to determine when and how 'truth' is manipulated to serve special parochial or cultural interests. Crosslisted as COMS 301.

## 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. Crosslisted 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 340 Drugs and Society (4)
Examination of the sociopsychological, political, economic, ethnic, and legal factors relating to drug use and abuse. Theories of causation and methods of rehabilitation will be critiqued. Crosslisted as CCJS 494.

SOCI 343 Women and Social Policy (4)
Explores the effects of social welfare programs and policies on women's lives. Analyzes and critiques the ideologies that shape these policies and their implementation. Considers how gender intersects with race/ethnicity, family, age, religion, and place to affect policy outcomes. Specific topics will vary by semester.

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 363 Sociology of Race and Ethnicity (4)

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.

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. Crosslisted as CCJS 497.

## SOCI 375 Classical Sociological Theory (4)

A critical examination of the writings of major 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, category 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: SOCl 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; 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. Prerequisite: SOCI 300.

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.
SOCl 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. Prerequisite: SOCI 300.
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. Prerequisite: SOCI 300 .

SOCI 430 Sociology of Leisure (4)
An examination of leisure in the United States. Topics include the uses of uncommitted time by various groups, an examination of leisure subcultures, the relation of leisure patterns to other societal values and institutions, and social issues related to the increased leisure of our society.
SOCI 431 Sociology of Religion (4)
Study of world religions (Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism), tribal beliefs, American sects, and denominations. Theories of religious development, values, change, and effects on society. Satisfies GE, category C3 (Philosophy and Values).

SOCI 432 Group Work with Older Adults (4)
This service-learning course introduces students to the fundamentals of group work with older adults. The class provides an overview of the phases of group development and basic skills and techniques for facilitating effective groups. Theoretical perspectives from sociology and psychology are used to examine how groups function, the value they have for older adults, and common themes in groups for older adults. To enhance learning, students go to senior sites in the community to co-facilitating weekly intergenerational dialogue groups. Crosslisted with GERN 432 and PSY 432.

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 and write publishable synopses of the stories with the least coverage. This is a Project Censored related class.

SOCI 436 Methods Seminar: Investigative Sociology (4)
This course is for the development of Sociology research methods 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. Prerequisite: SOCI 300.
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. Crosslisted with 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. Prerequisite: SOCI 300.

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. Crosslisted 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. Prerequisite: SOCI 300.

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.

SOCl 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. Prerequisite: SOCI 300 .

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. Prerequisite: SOCI 300.

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.
Prerequisite: SOCI 300.
SOCI 482 Sociology of Environment (4)
The 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 484 Methods Seminar: Sociology of Genocide (4)
Using the tools of comparative historical methodology, students analyze the sociological factors typifying genocide and genocidal processes. Examination of the causes and consequences of the Holocaust and the characteristics of pre-20th Century genocide, the Armenian, Rwandan, and contemporary genocides are considered, as well. Prerequisite: SOCI 300 .

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 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, but only 4 credit/no credit units of SOCI 490 or 499 may be used toward the major. Prerequisite: consent of instructor.

SOCI 495 Special Studies (1-4)
A supervised study of a particular problem or area of interest selected by the student in consultation with a sponsoring faculty member. Regular meetings will be arranged for discussions and progress evaluations, and a term paper will be submitted. Grade only. May be repeated for credit, but only 4 units may be used toward the major.

SOCI 497 Interdisciplinary Seminar (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. Past examples include women and aging, food and society, gender and politics, and the sociology of time. Check department for current offerings. Required for all majors. May be repeated for credit. Prerequisite: open only to sociology majors who have completed at least 20 upper-division units in sociology, including SOCI 300, 375, and a methods seminar.

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. Prerequisite: consent of instructor. $\mathrm{Cr} /$ NC only. May be repeated for credit, but only 4 credit/no credit units of Sociology 490 or 499 may be used toward the major.

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.

SPAN 101 Basic Spanish, 1st 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 101 L .

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, 2nd 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.

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. May be repeated for credit. 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.

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.

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 student's proficiency to the advanced level. Course will highlight selected points of grammar structure and form in the context of meaningful engagement with the language.

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.

SPAN 304 Introduction to Spanish Linguistics (4)
Introduction to the study of Spanish linguistics. Overview of different approaches to the study of language.

SPAN 305 Introduction to Literature (4)
A survey of representative literary works from a variety of genres, time periods, and regions. Introduction to concepts and principles of literary analysis. Prerequisite: SPAN 300 or permission of instructor.

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, discussion, readings, and writing.
SPAN 307 Cultures of Latin America (4)
A study of the development of the cultures and origins of Latin Ameria, and the formation of identities in its history, literature, film, and art. A survey course including lectures, readings, discussion, and writing.

SPAN 390 Spanish for Teachers (3)
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.

SPAN 400 Special Topics in Linguistics (4)
Topics in Spanish Linguistics, which may include sociolinguistics, discourse analysis, and historical and applied linguistics. Offered in spring semester. Satisfies GE, category C4 (Comparative Perspectives and Foreign Languages). Prerequisite SPAN 304 or permission of instructor.

SPAN 401 Peninsular Literature (4)
A detailed study of representative authors, genre, period, or region. Requires discussion in class and a term paper.
SPAN 402 Latin American Literature (4)
A detailed study of representative authors, genre, period, or region. Requires discussion in class and a term paper.

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. Prerequisite: 12 upper-division Spanish units or instructor consent.

SPAN 426 Sem in Modern Varieties of Spanish (4)
The phonological and morphosyntactic character of contemporary regional spoken Spanish (Caribbean, Andean, Gauchesque, Andalusian, etc.) A practical introductory sociolinguistic analysis of regional languages in Spain and Latin America (Galician, Basque, Catalan, and Indo-American languages). Prerequisites: SPAN 303 and 304.

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 490 Seminar in Linguistics (4)
Capstone seminar focusing on a representative theme in the field of linguistics. Requires completion and presentation of a final projecft as an exit assessment for graduation.

SPAN 491 Seminar in Literature (4)
Capstone seminar focusing on a representative theme in the field of literature. Requires completion and presentation of a final project as an exit assessment for graduation.

SPAN 495 Special Studies (1-4)
Directed, individual study on subjects of special interest. Students must prepare a proposal that is subject to the approval of the Spanish program.

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.
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 may include additional readings, assignments, or projects as determined by the Graduate Advisor. All courses other than 400 -level Spanish courses must be approved in writing by the Graduate Advisor prior to registering for the course. May be repeated for credit when topics vary.

## Special Major/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 Category A1. Prerequisites: completion of GE Categories 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, and Steinbeck County). Fulfills GE requirement in C 4 .
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 Calif Cultural Studies Faculty Forum (1-3)
California cultural studies faculty, students, and guests present topics for discussion on 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. Prerequisites: 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. Prerequisite 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 Calif 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; 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 Sr Project in Calif 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 $\mathrm{Cr} / \mathrm{NC}$, as determined by the student's program.
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. $\mathrm{Cr} /$ 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 $\mathrm{Cr} / \mathrm{NC}$, as determined by the student's program.
ITDS 599A Thesis and ITDS Research (2-4)
ITDS 599B Thesis and ITDS ReSearch (2-4)
ITDS 599 Master's Proect (6)
For MA 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.

## Social Science (SSCI)

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.

## SSCl 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.

## Supplementary English Language Development (SELD)

SELD 100A Supplementary English Language Development (3)
Designed for international students and other nonnative speakers of English, this course emphasizes communication for academic purposes, and concentrates on expository writing, lecture comprehension, and analytical reading. Limited enrollment. Admission by ESL Placement Test only. Students taking this course may not register for more than 14 units of academic course work.

SELD 100B Supplementary English Language Development (3)
Designed for international students and other nonactive speakers of English, this course focuses on the development of academic discourse skills, with stress on strengthening proficiency in a range of oral and written American English styles. Limited enrollment. Admission by ESL Placement Test only. Exit from SELD 100B requiries passing an exit exam.

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, category C1 (Applied Arts Combining Studio and Theory).
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 five 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 four times for credit.

THAR 120A Acting Fundamentals (2)
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 selfconfidence and trust, and reach the emotional reservoir of the actor. This class is recommended for singers. May be taken three 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. Class work is designed to stimulate the imagination, build self-confidence and trust, and reach the emotional reservoir of the actor. This class is recommended for singers. First of a seven course sequence for Acting Concentration Majors.

## 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 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 toward 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 once 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 speaking clearly, articulation, vocal muscularity, and phrasing. Prerequisite: THAR 145A. May be repeated once for credit.

## 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 to support work in modern dance. This course may be taken four times for credit.
THAR 199 Student Instructed Course (1-3)
THAR 200 Seeing Theatre Today (3)
Experience great performances created by modern and contemporary theatre artists. Students are engaged as audiences through videotaped productions of renowned and important performers, directors, choreographers, and Department of Theater and Dance productions. Post-viewing small-group discussions and on-line 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, category C4.
thar 202 Intro to the History of Drama and Dance: Origins to 1800 (3)
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, category C 1 (History of the Fine Arts).

THAR 203 Intro to the History of Drama and Dance: Origins to 1800 (3)
Part two examines theatre, drama, and dance from 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, recent trends in diversity and multiculturalism, and the theatre's relationship to electronic media. Satisfies GE, category C 1 (History of the Fine Arts).

THAR 210A 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 210B Contemporary Dance II (2)
Continuation of THAR 210A. Prerequisite: THAR 210A. 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. Prerequisite: THAR 120A or B or 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 120A or B, 220A or consent of instructor.
thar 230 Stage Management (3)
The functions of the stage manager from audition to final performance are examined. Students are trained to organize rehearsals, to record actors' movements, to create prompt books, and to manage a performance. Students serve as stage managers for Theatre and Dance productions. Prerequisites: THAR 144A and B.

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 four times for credit. Prerequisite: THAR 161 or consent of instructor.
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, Category C1 (History of the Fine Arts), for juniors and seniors only. (Also available as periodic trips to New York.) May be taken two 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 six 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 six 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 six times for credit. By audition or consent of instructor.

THAR 310A Intermediate Dance Block (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.
thar 310B Intermediate Dance Block (5)
Continuation of THAR 310A. Prerequisites: THAR 310A and consent of instructor.

## 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. Prerequisite: THAR 120A or B, 220A, 220B, 145A and 145B, and consent of instructor.
thar 320B Intermediate Acting Block (5)
Continuation of THAR 320A. See description above. Prerequisite: THAR 320A, ENGL 339 and consent of instructor.
thar 321A Intermediate Technical Block / Foundations (2)
Technical concentration students participate in foundations and script analysis portion of 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 foundations and script analysis portion of 320 B acting block. Prerequisites: THAR 143 A and B , THAR 144 A and B ,
THAR 244, 321A, 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, and musical/revue, 2) preparing audition pieces, 3) giving a winning audition, 4) evaluating performance for future guidance, and 5) resume and headshoot needs. May be taken three times for credit.

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. May be taken three times for credit. 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. May be taken three times for credit. 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 three 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 102 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. Prerequisites: THAR 103 or consent of instructor. May be taken out of sequence.

THAR 371A History of Dance A (3)
Survey of 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 history of theatrical dance in the 20th Century, including global influences on most recent dance forms. Prerequisite: THAR 371A or consent of instructor.

THAR 373 Dances of the World (3)
An examination of dance as cultural expression primarily in non-Western, but not excluding, Western dance forms. This course will focus on ways in which dance flows across cultural boundaries, reflecting and creating culture. Satisfies upperdivision GE, category C4.

THAR 374 Theatre of the World (3)
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. Required for General Theatre Degree majors. Satisfies UD C4 general elective requirement. Prerequisite: junior or senior standing.
thar 375 Contemporary Plays and Playwrights (3)
This class explores contemporary American plays and their impact 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 society and politics.

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. May be taken three times for credit. 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.

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 standing and consent of department faculty.
thar 410A Advanced Dance Block (5)
A continuation of the work begun in 310 , with the focus on increasing technical and improvisational skill and on more refined perception of the structure and meaning of movement. Prerequisites: THAR 310A and 310B and consent of instructor.

## thar 410B Advanced Dance Block (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 300, THAR 320A and B, and by consent of instructor. THAR 320 and THAR 420 are taught concurrently.
thar 420B Advanced Acting Block (2-5)
Continuation of THAR 420A. Prerequisites: THAR 420A.
THAR 421A Advanced Technical Block / Foundations (2)
Technical concentration students participate in foundations and script analysis portion of 420A acting block. Prerequisites: THAR 143A and B, THAR 144A and B, and THAR $244,321 \mathrm{~A}, 321 \mathrm{~B}$, and consent of instructor.
thar 421B Advanced Technical Block / Foundations (2)
Technical concentration students participate in foundations and script analysis portion of 420B acting block. Prerequisites: THAR 143A and B, THAR 144A and B, and THAR $244,321 \mathrm{~A}, 321 \mathrm{~B}, 421 \mathrm{~A}$, 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. May be taken two times for credit.
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 has 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 Chlldren (2)
Developing skills and resources for working with children, including creative dramatics, mime, storytelling, and scripted drama. Practical experience in working with children will be gained through master teacher observation and student teaching. May be taken three times for credit.
thar 463 Theatre Management (3)
The study of scheduling, promotion, ticketing, house and stage management, booking, budgeting, technical theatre in terms of budgeting, and marketing theatrical productions. Practical application is gained by participation in the evening performances 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 three times for credit.
thar 480 Coordinated Projects (1-3)
Involvement in on- and off-campus dance or drama projects with student directors, actors, designers, and/or technicians, all under faculty supervision. May be repeated six times for $\mathrm{Cr} / \mathrm{NC}$ 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, light, set, or costume construction, in a commercial environment where the evaluation of the work is under professional rather than faculty supervision. May be taken four times for Cr/NC only. 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.
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, scheduling, box office management, funding, sales, and budgeting. The unit value will be determined by each internship. May be taken three times for Cr/NC only.

UNIV 50 Writing Skills (4)
This course focuses on developmental and learning skills in writing, including language mechanics, sentence patterns, paragraph patterns, spelling, 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 (3) Designed to foster a supportive learning community, provide mentoring, enhance academic skills, personal skills (self-awareness, responsibility, and relationships 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, and alcohol/drug abuse), information competencies, code of conduct, and diversity/ multiculturalism. 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. Corequisite: 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. Satisfies GE categories A1 and A3.

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 categories A1 and A3.

UNIV 199 Student to Student Lecture Series (1)
UNIV 236 Choosing a Major (1)
Begin to explore and discover values, skills, interests, and lifestyle preferences related to choosing an academic major. Special focus for freshmen and sophomores. Letter grade or Cr/NC.

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, 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 examines the basic concept of leadership and the elements that comprise its practice in today's society. Through theory, discussion, and experiential learning, the course provides the foundational knowledge required for actual leadership opportunities on campus and future employment in the work world. Topics include historical and modern views on leadership; the relationship between service, followership, and leadership; motivation; environmental effects on leadership; and ethics and power. Concurrent enrollment in 238B is required.

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 crosslisted 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 to 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 310 Portfolo 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.

WGS 255 Introduction to Queer Studies (3-4)
This interdisciplinary course offers an introduction to the emergent field of Queer Studies by analyzing the role of race, ethnicity, gender, and sexuality play in the social construction of modern gay, lesbian, bisexual, transgerder, and queer (GLBTQ) identities.
WGS 280 Women's Bodies: Health and Image (3)
This course examines research and theory about the health and body image concerns of women across race, ethnicity, and class throughout the life cycle. This includes the gender politics of medical research, mental health, body image, reproductive health, and chronic illness. Students will be exposed to current theoretical work and writing about the body in society. Satisfies GE, category E.

WGS 285 Men and Masculinity (3)
This course examines construction of masculinity across axes of race, ethnicity, class, nation, and ability. Utilizing a multidisciplinary perspective, this course addresses various theories of manhood and masculinity and the impacts on men's and boys' lives in various arenas such as relationships, family, the media, sports, work, crime, and health. Satisfies GE, category 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 perspectives. There is usually a semesterlong focus on a particular topic, such as women's health. 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.

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. Crosslisted as PSY 404.

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, category E (The Integrated Person). Prerequisites: ENGL 101 or PHIL 101; and one course in sociology, psychology, American history, or women's studies; or consent of the instructor.

WGS 365 Women's History and Women's Activism (3)
This course will take an activist-historical perspective on the history of American women. The course will review historical figures and trends and the history of feminist activism, especially concerning writing women into history and the struggles for equality beginning with the Seneca Falls Convention in 1848.

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.

WGS 375 Gender, Race, and Class (3)
An overview of the interaction of race, gender, class oppression, and resistance in the historical and contemporary experience of Native American, Asian American, African American, and Latino/Chicano women and men. The course seeks to enhance understanding of how racism, sexism, and classism function in the political, social, and economic systems of the United States. Students will have an opportunity to acquire knowledge of how race, gender, and class function and intersect with other issues. Satisfies GE, category 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. Crosslisted with SOCI 497.

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.

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 releated to WGS. Cr/NC only.
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). Consult the women's studies flyer for the current semester for descriptions of course offerings. Cr/NC only.

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 and in grant writing for research funding. Students will design, execute, and report on a research project.

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. Crosslisted with SOCI 440.

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. Prerequisite: WGS 255: introduction to Queer Studies or instructor consent.

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 (for example) the production of knowledge, the implementation of theory and practice, and social change/activism. Prerequisite: WGS 280 or WGS 350 , or by instructor's consent.

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 280 or WGS 350 or WGS 375 , or consent of the instructor.

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.

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.

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 (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).


## ACADEMIC CENTERS, INSTITUTES, AND PROJECTS

## Anthropological Studies Center

ASC Building 29
(707) 664-2381

Fax: (707) 664-4155
www.sonoma.edu/ asc
e-mail: adrian.praetzellis@sonoma.edu

## Director

Adrian Praetzellis
The Anthropological Studies Center undertakes activities that benefit the students of Sonoma State University, scholarship in the field of historic preservation, and the community at large.

The Center fulfills its mission in education, research, and public service by creating the opportunity for SSU students to learn realworld skills in historic preservation through internships and the Center's professional apprenticeship program; by maintaining an Archaeological Collections Facility in which millions of artifacts are available for students and scholars to study; and by operating an Office of Interpretive and Outreach Services that provides the public with information about archaeology and historic preservation.

Since 1974, nongovernmental organizations and state and federal agencies have awarded ASC more than $\$ 40$ million in grants and contracts. The Center, which maintains more than 5,000 square feet of laboratory and administrative office space, has a staff of 15 salaried professionals and many part-time student employees. In 1999, ASC was awarded the Governor's Award for Historic Preservation by Governor Davis.

## California Institute on Human Services

## Administration and Finance

$2^{\text {nd }}$ Floor, Salazar Hall
(707) 664-2836
www.sonoma.edu/cihs/
e-mail: cihsweb@sonoma.edu

## Director

Letitia Coate
e-mail: letitia.coate@sonoma.edu
The California Institute on Human Services (CIHS) works in concert with the SSU faculty, staff, and students in developing and testing research-based solutions to "real world" problems in the fields of education and related human services. Current areas of focus include child and family violence prevention, early childhood education, language development, literacy, improvement of low-
performing schools, service learning, special education, and career vocational education.

The education, child development, and social science professionals and staff who work at CIHS possess special expertise and experience in the delivery of professional development training and technical assistance programs, in-service learning, the design and preparation of research-based written and video program materials, assessment systems, and the latest developments in computerized distance learning. CIHS is committed to work that reduces barriers to learning and opportunity and promotes a healthier and better quality of life for all individuals throughout the United States.

## California Reading and Literature Project

Rachel Carson Hall 19
(707) 664-2257

Fax (707) 664-4330

## Directors

Kathy Harris
e-mail: kathy.harris@sonoma.edu
The mission of the California Reading and Literature Project (CRLP) is to provide high quality, standards-based professional development in reading and academic language instruction. Through collaborative partnerships with schools and districts, CRLP supports and sustains continuous academic growth for all students, PreK-12.

The following goals are at the center of every CRLP program:

- Engage teachers in concrete tasks of teaching, assessment, observation, and reflection to understand processes of learning;
- Provide teachers with tools and strategies to better prepare students to meet California Content Standards and increase student achievement;
- Strengthen research-based efforts in high priority schools and districts by building bridges between the university and K-12 classroom;
- Focus effectively on the particular needs of English learners (EL) and standard English learners to help close the achievement gap;
- Strengthen high standards for academic performance that meet A-G requirements and can lead to increased student success on the California High School Exit Exam (CAHSEE); and
- Help underserved students prepare for higher education beyond high school.

CRLP professional development offerings are grounded in the READING RESULTS Model:

- Standards-based assessment
- Research-based instruction
- Teamwork and data analysis
- Teacher leadership development

The CRLP is part of the California Subject Matter Project (CSMP), a statewide professional development network comprised of the nine disciplines required for graduation from high school and admission to California universities.

## Center for Community Engagement

1102 Schulz Information Center

## Coordinator

Merith Weisman
(707) 664-3202
e-mail: merith.weisman@sonoma.edu
The Center for Community Engagement (CCE) advances communitybased programs on the Sonoma State University campus. CCE supports faculty in developing community-based teaching that integrates academic theory with community service and research that is inclusive of community partners and students to address local problems. By incorporating these projects into the curriculum, we teach students to be active citizens and that the theories taught in the classroom do apply to real-world issues.

Central to the mission of the CCE are several goals:

- To integrate service-learning and community-based research into the curriculum;
- To support and promote high quality, reciprocal communityuniversity partnerships that are firmly rooted in the curriculum; and
- To foster the development of a civic perspective in education.


## Center for Economic Education

Stevenson Hall 2026-N
(707) 664-3070

## Director

Sue Hayes
The Center for Economic Education provides school teachers and the general public in the service area with a variety of educational materials. The Center also conducts workshops for high school economics teachers as required by Senate Bill 1213.

## Center for Regional Economic Analysis

Stevenson Hall 2042B
(707) 664-4256

## Director

Robert Eyler
eyler@sonoma.edu
The Center for Regional Economic Analysis (CREA) at SSU provides research, data, and analysis for local industry and governments. Its mission is to produce and disseminate new information in the general area of economic research, and in the specific areas of business economics, economic development, regional economics, and policy. The CREA serves the business community; federal, state, and local governments; individuals; and SSU. A special emphasis is placed on businesses and governments in the SSU service area.

## Center for Reseach and Education in Science and Technology (CREST)

Darwin Hall 115
(707) 664-2171

Fax: (707) 664-3012
The Center for Research and Education in Science and Technology was established in 2002 to help facilitate and connect the School of Science and Technology to the local community and technical industries through mutually beneficial activities between the School's various departments and programs and the local community. The Center's goal is to enhance the educational experience for students in science and technology and provide faculty in the School of Science and Technology with the opportunity to interact with the local community and industry through collaborative and cooperative projects of mutual interest.

## Center for Teaching and Professional Development

Schulz 1104
(707) 664-CTPD
www.sonoma.edu/ctpd/

## Director

Brett Christie
(707) 664-2873
e-mail: ctpd@sonoma.edu
The Center for Teaching and Professional Development is funded from the budget for academic programs and is developed by University faculty to support professional development, especially excellence in teaching. It is operated by one faculty member and offers a variety of services.

Workshops and programs are designed to support faculty in areas such as instructional technology, innovative curriculum development, classroom management, and professional development. The Director consults with faculty one-on-one and in groups to develop effective tools and strategies for the enhancement of teaching. The Director
is also available for making classroom visits to provide feedback on teaching. The Center directs the orientation process for new faculty during their first years at the University and serves as a clearinghouse for dissemination of professional literature and information to faculty.

## Center for the Study of the Holocaust and Genocide

Stevenson Hall 2081
(707) 664-4296
e-mail: centerh@sonoma.edu
http://www.sonoma.edu/holocaust/center

## Director

Myrna Goodman
The Center for the Study of the Holocaust and Genocide is an academic institute constituted in February 1987 to provide education on the origins, nature, and consequences of the Holocaust. Recently, the Center has broadened and expanded its focus to include the study of other historical and modern genocides. The primary activities of the Center include the organization and coordination of the annual, nationally recognized Holocaust Lecture Series, which is offered as an upper division GE course, Sociology 305: Perspectives on the Holocaust and Genocide. The Center also develops and distributes Holocaust resource materials (publications, electronic media, etc.) for campus, school, and public use, and cooperative efforts with a community-based group, the Alliance for the Study of the Holocaust, to provide Holocaust education in the SSU service area schools.

The Center also promotes research on Holocaust themes and has sponsored conferences, film series, author presentations, and teacher training seminars. In collaboration with the Schulz Information Center and other regional libraries, the Center enhances the collection of books, videos, and other descriptive materials. The Center also supports commemorative events and the presentation of artistic and historical exhibits and offers access to information on the Holocaust and genocide across a broad range of thematic and disciplinary approaches.

## Community Counseling Center

Stevenson Hall 1001 \& 1004
For Appointments: (707) 664-4215
Information also through Dept. of Counseling: (707) 664-2544

## Director

Mark Doolittle
(707) 664-2648
e-mail: mark.doolittle@sonoma.edu
Under sponsorship of the Counseling Department, CCC's goals are:

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


## Fairfield Osborn Preserve

6543 Lichau Road
Penngrove, CA 94951
(707) 795-5069
www.sonoma.edu/org/preserve

## Site Manager and Education Coordinator

e-mail: fairfield.osborn@sonoma.edu

## Faculty Preserve Director

Nathan E. Rank
Named in honor of the pioneer ecologist Fairfield Osborn, the Preserve was donated to The Nature Conservancy by the Roth family in 1972. Owned and managed by SSU since 1998, Fairfield Osborn Preserve is dedicated to protecting and restoring natural communities and fostering ecological understanding through education and research. The Preserve offers SSU students the opportunity to deepen their educational experience to include field research and community-based environmental service learning.
The Preserve's environmental education program, offered to regional elementary school classes, is among the largest and longest running in Northern California. Thousands of elementary school children learn about nature each year by participating in this program. The Preserve offers public tours and a series of field workshops led by local experts on the biology and geology of the region.
Located on the western slope of the interior Coast Range mountains, the Preserve harbors a great diversity of natural communities on its 461 acres - oak woodland, freshwater marsh, upland vernal pool, riparian woodland, chaparral, evergreen forest, native grassland, and pond. This combination of aquatic and terrestrial habitats makes the Preserve an important refuge for wildlife, including migratory birds, rare amphibians, and aquatic invertebrates and insects. To protect these biological resources and ongoing research projects, and to ensure the safety of visitors, the Preserve is open for guided hikes only.

## Galbreath Wildands Preserve

School of Science and Technology Office (Darwin 115) (707) 664-2171
www.sonoma.edu/galbreath

## Preserve Director

J. Hall Cushman
(707) 664-2142
email: cushman@sonoma.edu
Administered by SSU's School of Science and Technology, the Galbreath Wildlands Preserve (GWP) was donated to the university in 2004 to honor the memory of Fred B. Galbreath (1901-2000), a well-known San Francisco business man, rancher, and nature enthusiast. The preserve's mission is to foster scientific understanding through environmental education and research as well as to promote the protection and effective stewardship of this diverse landscape.

GWP is located 60 miles north of campus in the Coast Range of southern Mendocino County. This 3,670 acre preserve offers a diverse range of terrestrial habitats, including grasslands, oak savannas and woodlands, riparian corridors, as well as mixed evergreen forests containing tanoak, Douglas fir, and redwood. The preserve is frequently used for a variety of university class field trips and independent student projects. In addition, a growing number of scientists from SSU and other universities are conducting field research at GWP. Facilities at the preserve are quite rustic currently, but fundraising has already begun to establish a world-class astronomical observatory on site, and there are hopes to build a field station in the coming years.

## Center for Interdisciplinary Geospatial Analysis (CIGA)

Stevenson Hall 3032
(707) 664-3067

Fax: (707) 664-3332
http://www.sonoma.edu/geography/ciga

## Director

Matthew Clark
Email: matthew.clark@sonoma.edu
(707) 664-2558

The mission of the Center for Interdisciplinary Geospatial Analysis (CIGA) is to enable and promote the application of geospatial technology to social and environmental problems through research, education, and community service. The Center 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. To accomplish these goals, the Center provides computer software and data resources; Geographic Information System (GIS) and remote sensing expertise and consulting
services; educational courses; and community outreach. Courses in the Department of Geography and Global Studies provide a solid foundation in geospatial science. Students are given a unique opportunity to broaden and refine their education by working on realworld problems in GIC research projects and service contracts.
Example projects conducted by the Center include analyzing the impact of the global economy on natural and human systems at multiple spatial scales in Latin America and the Caribbean; developing geographical models to predict the spread of sudden oak death; mapping trails in local parks; digitizing cultural resource and timber harvest plans from archival maps; using high-resolution aircraft imagery for natural resource assessment of regional state parks; and modeling spatial patterns in the abundance of invasive weeds.
The Center has a resident systems administrator and well equipped instructional and research computer labs for GIS analysis, image processing, and digital cartography. The Center also operates a base station for the global positioning system (GPS) and maintains ten GPS mobile receiver units. As a complement to this technology, the Center also houses extensive collections of maps, aerial photographs, and remotely sensed imagery, and one of the most complete historical weather libraries in California. A real-time weather station provides students and the community with current weather data in addition to historical resources.

## Hutchins Institute for Public Policy Studies and Community Action

## Rachel Carson Hall 34

(707) 664-3185

## Director

Francisco H. Vázquez
e-mail: francisco.vazquez@sonoma.edu
The mission of the Hutchins Institute for Public Policy Studies and Community Action is to promote discussions about environmental and socioeconomic issues on and off campus, and to facilitate research and projects on these topics.
In keeping with this mission, the Hutchins Institute sponsors the following programs:

- A Liberal Studies Degree Completion Program featuring Saturday seminars and weekly online discussions. Students remain in the same cohort for four semesters in the interests of creating a vibrant learning community;
- Action for a Viable Future: a master's program emphasizing the interrelationships among three themes: ecological issues, economic/social justice issues, and the moral and psychological dimensions of change. The action projects completed by Master's students add a public policy dimension to the Center;
- College Assistance Migrant Program (CAMP): recruitment and support of first year college migrant or seasonal students at Sonoma State University, Santa Rosa Junior College, and Napa Valley Community College (2002-2007);
- Center for Information and Research on Civic Learning and Engagement (CIRCLE): a research project to determine the levels of civic engagement among Latino high school students (2002-2003);
- The Student Congress: a high school-based project that promotes Socratic seminars among underserved high school students (1994-2000);
- The Association of Hutchins Alumni (AHA): a network of individuals interested in lifelong learning, featuring occasional seminar reunions and the Alumni Book Club;
- Northern California Earth Institute: to promote discussion groups based on a series of five group study guides on various topics relating to sustainability (on-going); and
- Roseland Redevelopment Project: A project to turn the Roseland Shopping Center located in Sebastopol Road (to Dutton Avenue) into a three-story building with low-income housing on the third floor, offices in the second floor, and businesses on the first floor, and to include in this urban development a multicultural center and a plaza with a kiosk and gardens (on-going).

The Hutchins Institute invites the submission of proposals to promote activities that are in keeping with its mission. Anyone interested in participating in any of the listed current activities or wishing to propose new projects should contact the Director.

## Institute for Community Planning Assistance

Rachel Carson Hall 20-A
(707) 664-3145

Fax: (707) 664-4202

## Director

Thomas Jacobson
e-mail: tom.jacobson@sonoma.edu
The Institute for Community Planning Assistance is a nonprofit research and community service center sponsored by the Department of Environmental Studies and Planning at Sonoma State University. ICPA was established in 1984 to meet the expressed needs of public agencies in the University service area, which sought affordable, often labor-intensive, planning studies, community surveys, public outreach efforts, and other projects. ICPA also offers training programs to local governments on a variety of planning and planning law topics. ICPA utilizes SSU faculty and students to staff these community projects.

ICPA's primary purposes are to:

- Engage in community service by making services available to local agencies;
- Provide a mechanism for faculty and student research in the areas of community and environmental planning;
- Further the education and professional development of Environmental Studies and Planning students by complementing their classroom and internship experiences; and
- Provide financial assistance in the form of wages to student assistants, who are hired on an as-needed basis to fill various research and support roles.


## Migrant Education Advisor Program

Nichols 241
(707) 664-2748

## Director

Giselle Perry
e-mail: gperry@bcoe.org or perryg@sonoma.edu
An urgent need exists for role models with knowledge of challenges encountered by migrant students and for advocates sensitive to their social and academic needs. Research highlights three critical areas of need:

1. Lack of sufficient school counseling services, particularly ethnically and linguistically diverse counselors;
2. High state and national high school dropout rates among migrant students; and
3. Disproportionately low numbers of migrant students enrolling in four year colleges.

The Migrant Education Advisor Program (MEAP) is a California State University collaborative project responding to these needs.
MEAP Goals:

- Promote bilingual (bicultural) college undergraduates and Counseling M.A. program graduate students as role models and future school counselors and educators, offering paid work experience and training as paraprofessional school advisors;
- Provide supplemental academic advising for migrant/EL and at-risk students to ensure high school graduation and attainment of skills for lifelong success and pursuit of postsecondary education or vocational training;
- Provide career guidance so that migrant/EL and at-risk students develop career and educational goals; and
- Support social, emotional, and academic growth of students served through fostering of self-esteem, cultural pride, and leadership development.


## North Bay International Studies Project

Rachel Carson Hall 10A
(707) 664-2409

Fax: (707) 664-2053

## Director

Miriam Hutchins
e-mail: miriam.hutchins@sonoma.edu
The North Bay International Studies Project (NBISP) is one of the grant-funded, statewide subject-matter projects that provide pedagogical and curriculum resources in History/Social Science and International Studies to the University and K-12 educational community. The Project offers workshops, seminars, lectures, and summer institutes aligned with the California State Standards for history/social science, including content programs in international studies, world and American history, teaching methodologies, and leadership development. All teachers participating in NBISP programs examine what constitutes best classroom practice in history/social science and the multifaceted roles in which teachers are engaged as facilitators of learning, researchers, and professionals. NBISP programs are also open to student teachers.

## Project Censored

Stevenson 2087
(707) 664-2500

Fax: (707) 664-3920
www.projectcensored.org

## Director

Peter Phillips
Founded by Carl Jensen in 1976, Project Censored is a media research program working in cooperation with the Media Freedom Foundation, a 501-c-3 off-campus organization. Project Censored's principle objective is training of SSU students in media research and First Amendment issues and the advocacy for, and protection of, free press rights in the United States. Project Censored has trained over 1,500 students in investigative research in the past three decades.
Through a partnership of faculty, students, and the community, Project Censored conducts research on important national news stories that are underreported, ignored, misrepresented, or censored by the US corporate media. Each year, Project Censored publishes a ranking of the top 25 most censored nationally important news stories in the yearbook, Censored: Media Democracy in Action, which is released in September. Recent Censored books have been published in Spanish, Italian, and Arabic.

The Project works in cooperation with SSU academic classes, Sociology of Media, and Sociology of Censorship, where students earn credit for their research and participate in writing the annual yearbook. Additionally, Project Censored sponsors and supervises over 60 student interns a year who do in-depth investigative research, sponsor campus events and speakers, and organize an annual national Media Accountability Conference. Students also
participate in writing the Project Censored quarterly newsletter (circulation 9,000 ) and assist with maintaining the Project Censored website www.projectcensored.org, which receives over a million views a month from all over the world.
Project Censored is administered through the SSU School of Social Science and the Sociology Department and works in cooperation with financial support from the SSU Instructionally Related Activity Fund and the Media Freedom Foundation Inc.

## Sonoma Film Institute

Ives Hall 63
(707) 664-2606

## Director

Eleanor Nichols
The Sonoma Film Institute brings to the University a broad variety of films - from silent film to the avant-garde, from contemporary American film to films from the Third World - designed to expand audience awareness of film. Sponsoring appearances of filmmakers and integrating screenings with Sonoma State University's various film studies courses, the Sonoma Film Institute is a vital and enriching program that provides its audiences with a unique viewing experience.

## Sonoma State American Language Institute

Stevenson 1038
(707) 664-2742

Fax: (707) 664-2749
www.sonoma.edu/exed/ssali/

## Director

Helen Kallenbach
e-mail: SSALI@sonoma.edu
A program of Extended Education, Sonoma State American Language Institute (SSALI) provides intensive language instruction to students, professionals, and others who need to learn English quickly to meet academic, job-related, and social needs.
Since 1979, SSALI has been providing challenging classes taught in a supportive and family-like environment. In addition to serving the needs of foreign students on $\mathrm{F}-1$ visas, the SSALI program is ideal for international employees, trainees, and their spouses and adult children on $\mathrm{B} 1, \mathrm{~J} 1, \mathrm{H1B}$, or H 4 visas, as well as for residents. Most students can study up to 24 hours per week in grammar, composition, reading, and oral communication as well as elective courses such as TOEFL preparation, American culture, business, pronunciation, conversation, and vocabulary. SSALI students enjoy a variety of extracurricular activities, including holiday celebrations, sporting competitions, and excursions to nearby places of cultural and social interest.
Short-term contracts are also available by special arrangement. For complete details on the SSALI program, contact the Institute or access its webpage.

## Sonoma State University Wine Business Program

Stevenson 2027
(707) 664-2260

Fax: (707) 664-4009
www.sonoma.edu/winebiz
Director
Linda Nowak
e-mail: linda.nowak@sonoma.edu
Created through a partnership between the University and the wine industry, Sonoma State's Wine Business Program is the only University program in the United States to focus exclusively on the business dynamic within the wine industry. While other universities have programs that emphasize grape growing and wine making, SSU's program offers a specialized undergraduate and graduate curriculum concerned with the business challenges currently facing the wine industry. For the wine industry professional, the University offers its professional development courses. These classes are designed specifically to improve the range of skills for those already employed within the wine industry.

## The Jean and Charles Schulz Information Center

LIBRARY ADMINISTRATION
(707) 664-2397

LIBRARY HOURS
(707) 664-2595
library.sonoma.edu
DEAN
Barbara Butler

## Library Faculty

Erin Bower
Karen Brodsky
Shelia Cunningham
Mary Dolan
Paula Hammett
Phil Huang
Dayle Reilly
Rick Robison
Raye Lynn Thomas

## Overview

Throughout history, libraries have been at the center of cultural and intellectual life, providing a unique place for discovery. The University Library in the Jean and Charles Schulz Information Center continues this tradition through the development of innovative programs, access to print and electronic resources, and technology designed to enhance the information seeking process.

Completed in August 2000, the Schulz Information Center offers the Sonoma State community a beautiful environment for pursuing academic endeavors. The many unique features of the three-story, 215,000-square-foot building include wireless technology; video conferencing; a 24-hour computer lab; art gallery space; a cafe; open terraces; natural and ambient lighting, including skylights; plenty of open study space and computers; and two fully accessible entrances. The infrastructure of the Information Center includes more than 2 million feet of cable, more than 100,000 feet of fiber optic cabling, nearly 5,000 network and phone jacks, a top-of-theline integrated security system and fire alarm systems, and state-of-the-art seismic features. In addition, the Information Center has a state-of-the-art automated retrieval system that provides quick access to items housed in a computer-managed shelving system.

## Collections and Services

The University Library has a collection of more than 650,000 bound volumes, with approximately 8,000 new titles added each year. Current periodical subscriptions number more than 30,000 in both print and electronic formats. The regional collection contains many current and historical materials and local documents relating to the North Bay, including a growing collection of wine-related materials. The University Library's special collections include the Carl Bernatovech collection of Jack London materials and the papers of well-known Press Democrat columnist Gaye LeBaron. The microform collection has more than 1.3 million items. The Library also enjoys extensive borrowing agreements which provide speedy access to the materials held by institutions throughout the state and the country.

The Information Commons on the first floor is a multifunctional location providing students a unique gathering space to research, study, write, and pursue other academic tasks. The Information Commons provides extensive access to the types of technology needed by today's students, including wired and wireless Internet access and productivity software.
Reference Services, located on the second floor, range from quick answers to simple questions to advanced research consultations and office hours with librarian specialists.
The Learning and Teaching Center provides trainings and workshops on information literacy and uses of information technology for students and faculty.

The Multimedia Center, also on the second floor, houses the nonprint collection, such as sound recordings, videocassettes, DVDs, and an interactive multimedia development lab. The curriculum collection for teacher education and juvenile books are also located on the second floor.
The third floor houses most of the University Library's circulating collection, SSU theses, the regional collection, and the University Archives. Within the special collections area is the Waring Jones Reading Room, which houses the Jack London materials among other unique, one-of-a-kind materials.
The Information Center was made possible through a generous gift from Jean and Charles Schulz, the Rancho-Cotati Unified School District, private donations, and the support of California taxpayers.

## INFORMATION TECHNOLOGY

Jean and Charles Schulz Information Center 1000
(707) 664-2346

SENIOR DIRECTOR
CHIEF INFORMATION OFFICER
Sam Scalise
Information Technology provides the spectrum of services needed to deliver quality academic and administrative technology. SSU/IT works with:

- The faculty and students to provide Academic Computing and Instructional Technology in support of teaching and research; and
- The administration and staff to provide Administrative Information Systems for the management of finances, human resources, student records, and other mission critical needs.

SSU/IT brings together teams of expertise across a range of technologies to provide the necessary guidance and leadership to fully implement successful efforts in instructional and administrative technology. SSU/IT specifies campuswide standards and provides consulting in order to ensure all technology systems are costeffective and architecturally sound.

SSU/IT provides e-mail, webpages, multimedia equipment, video production, instructional technology software, videoconferencing facilities, high-tech classrooms, and media services preview rooms. A fully staffed help desk provides consulting in the use of information technology. Consultants are available by phone, 664-HELP; e-mail, helpdesk@sonoma.edu; or in person, Schulz 1063.

Workstation support is provided to faculty and staff for their office-based computers. SSU/IT provides assistance to faculty in developing online, multimedia content.

Computer labs with a wide range of software are available to students, faculty, and staff. Lab consultants may be reached at 664LABS. The 24 -Hour Lab is open continuously during the semester. Other labs may be scheduled for classes. Schedules are posted outside each lab and on the Web at www.sonoma.edu/it/labs.
SSU/IT operates a high-speed campus and residential network with more than 20,000 nodes that provide access to resources from the campus and across the Internet. SSU/IT also operates a modern phone system with more than 4,000 lines for the campus and residential community.

SSU/IT is responsible for the technical operation of administrative information systems for human resources, finance, and student information systems.

Sonoma State University is a member institution of CENIC. As such, users of SSU's network facilities must follow the Acceptable Use Policy (www.sonoma.edu/it/get_connected/computing/aup. shtml).

For more information see www.sonoma.edu/it.

## STUDENT SERVICES

Once you have decided to attend Sonoma State University, how do you make sure that you take full advantage of your University experience? Answer: Get involved!

At Sonoma State University, we are committed to enhancing the quality of life for all students. The University offers a wide range of student services and co-curricular programs and activities to support our goals of student satisfaction, retention, and graduation. We encourage you to become familiar with these services and programs that enrich your college experience. They are provided by the professional staff in the division of Student Affairs and Enrollment Management.

Student Affairs and Enrollment Management includes the following units, all of which are committed to delivering high quality student services and student activities.

- Admissions
- Advising, Career, and EOP Services
- Associated Students, Inc.
- Center for Student Leadership, Involvement and Service
- Children's School
- Counseling and Psychological Services
- Disability Services for Students
- Educational Mentoring Teams
- Intercollegiate Athletics
- International Services
- Learning Skills Services
- New Student Orientation and Family Programs
- Residential Life
- SSU Writing Center
- Sonoma Student Union Corporation
- Student Conduct
- Student Health Center
- Student Records
- Testing Services
- Tutorial Center
- University Support and Preparation Services


## Student Affairs and EnrolIment Management

Salazar Hall 1018
(707) 664-4237
www.sonoma.edu/saem/
VICE PRESIDENT

## Mission Statement

Student Affairs and Enrollment Management supports the mission of Sonoma State University by promoting, through activities, programs, and services, an environment that empowers students to succeed academically and to engage life as ethical, healthy, socially responsible, and interdependent global citizens.

Our goal is to provide students with the necessary academic support services and co-curricular programs and activities to ensure that time spent pursuing their educational objectives is both productive and satisfying. By providing timely, accurate, and consistent information and academic support services to students, the division contributes to the success of students in their pursuit of their educational, career, and life goals. By providing learnercentered and developmentally appropriate programs and activities, the division promotes student self-understanding, self-esteem, and self-motivation as well as the development of leadership skills, appreciation of human diversity, responsible and healthy behavior, and respect for others. To this end, the division provides a continuum of activities, programs, and services that begin before students enter the University and continue beyond graduation. Descriptions of the activities, services, and programs within Student Affairs and Enrollment Management follow.

## Admissions

Salazar Hall 2030
(707) 664-2778
http://www.sonoma.edu/ar/

## Student Outreach

Salazar Hall 1010
664-3029
http://www.sonoma.edu/ar/prospective/
Under the direction of the Office of Admissions, the Student Outreach Office provides several services to prospective students. The Student Outreach Office coordinates student recruitment, houses our campus tour programs, provides preadmissions information, operates the East Bay Initiative Program, and plans various campus events such as Seawolf Day, the North Bay College Fair, phone campaigns, and various counselor conferences.

New Student Orientation Programs and Family Programs Salazar Hall

664-4464
http://www.sonoma.edu/saem/orientation/
New students at Sonoma State University are urged to participate in a variety of orientation activities that introduce them to the many facets of campus and community life.

Sonoma Orientation provides the opportunity for first-time freshmen students to be advised before they register for classes. During Summer Orientation first-time freshmen will meet other new students, learn about campus life and services available to them, and interact with student leaders. Parents and family members are also invited to attend and become fully informed about Sonoma and its programs, policies, and services by participating in the Family Orientation Program that is held simultaneously with the student sessions. Summer Orientation programs are offered typically in June and early July.

Transfer Orientations are held each semester for our incoming transfer students. Transfer students have the opportunity to learn how their prior course work will lead to a degree from SSU, meet with a faculty advisor in their department, and learn about the registration process, as well as various campus services and programs.

## Reentry Services

(707) 664-3029

Sonoma State University encourages all potential students in the pursuit of educational goals and personal and professional development.

Mature learners who have been away from the academic environment for some time and wish to return to school should contact the Student Outreach Office, (707) 664-3029, for information about admissions criteria.

## Advising Career and EOP (ACE) Services

Salazar Hall 1070
(707) 664-2427
www.sonoma.edu/sas/advising/

## Mission Statement

Advising, Career, and EOP Services empower Sonoma State students to be architects of their own futures through educational, career, and life planning.

We provide:

- Academic advising for undeclared and undecided students;
- Guidance and resources to all students in the areas of career development and employment;
- Access and support services for first-generation low-income EOP students; and
- Administration and interpretation of standardized admission and placement tests.

We are committed to excellence in advising, teaching, and mentoring to address the needs of the whole student. We work in collaboration with the larger University community to provide an environment in which students are respected and diversity is valued.

## Academic Advising for Undeclared Students

Undeclared students are assigned an advisor from the Advising Center. Advisors use an integrated advising and career development approach. Undeclared students are assisted in identifying appropriate general education and other coursework that will help in exploration and will meet their academic goals toward graduation. Undeclared students are encouraged to begin career development planning to identify areas of interests in order to declare a major by the end of their sophomore year.

## Career Services

Salazar Hall 1070
(707) 664-2196
www.sonoma.edu/sas/crc/
Sonoma State University's Career Services is an important link between the worlds of academia and the ever-changing environ-
ment of the work world. Career Services assists all SSU students in making informed decisions about their futures and graduating in a timely manner by providing comprehensive resources, programs, and advising on career development, job search, internships, and employment.

Career resources include assessment inventories, a career resource library, a broad array of online tools, and job listings for parttime, summer, and full-time jobs, and internships. Programs include workshops and panels, an annual career fair and a graduate school open house, classroom presentations, and on-campus recruiting. Career Services is committed to providing accurate and up-to-date resources for students, faculty, alumni, and staff.

## Career Planning and Exploration

In addition to career advising and assessment inventories, a full range of tools is available for students to use independently. They include EUREKA, an interactive, computer-assisted career planning and exploration program, online self-directed career planning, and a course on career and life planning (UNIV 237). Publications and databases on career development, occupational information, job search strategies, employers, graduate schools, and study abroad are located in the Career Library.

## Community Involvement Program

Sonoma State promotes community service as a relevant component of students' academic studies. The Community Involvement Program (CIP) is designed to facilitate experiential learning and service to the community by providing a means for students to earn academic credit for their volunteer experiences. Students volunteer in a variety of settings, including schools, hospitals, environmental and recreation programs, group homes, day care centers, and senior centers. Students with declared majors can learn more about CIP in their departmental offices or on the Career Services website, and undeclared students can come to advising drop-ins for CIP information.

## Internships

An internship is a pre-professional experience, designed in close consultation with a faculty advisor, that gives the student an opportunity to apply knowledge from the classroom in an employment setting consistent with the student's chosen career field. Internships allow students to gain in-depth, practical work experience and academic credit simultaneously. Employers increasingly seek candidates with relevant work experience and often rely on internships as an important recruitment tool.

Students can work with the Internship Coordinator in their department. Internship opportunity listings are also available in Career Services and on the career website, where a fuller description of SSU internship policies can also be found. Faculty sponsors in each department handle internship supervision, evaluation, and credit granting.

## Employment Services

Services are available to address the student's complete range of employment needs, from part-time and seasonal jobs and internship
listings to full-time, career-related employment.
Career Services works with students and employers to maximize students' success in locating employment and to satisfy employer demand for employees with up-to-date skills. We offer career advising, workshops, and class presentations on job search strategies, resume/cover letter writing, and interview preparation. Part-time and seasonal job listings are continually developed, and thousands of opportunities are posted to help students earn money to support themselves during their college years, build marketable skills, and make valuable career connections. Career Services also lists most on-campus student employment positions, including both student assistant and federal college work-study jobs.

Our annual career fair in spring semester brings employers to campus who are seeking students for part-time and summer jobs and internships as well as entry-level professional work.

## Educational Opportunity Program (EOP)

(707) 664-2427
www.sonoma.edu/sas/eop/
The Educational Opportunity Program (EOP) is charged with improving access and retention of historically low-income and educationally disadvantaged students who have the potential to perform and succeed in the California State University. Beginning with students' admission to the University, advisors provide academic, career, and transitional advising to EOP students. Advisors assist students with concerns regarding housing, financial aid, and balancing college with personal life demands while meeting graduation requirements. Both first-time freshmen and transfer applicants are considered for EOP. Students must file for FAFSA (Free Application for Federal Student Aid) to be considered for EOP. Students who are admitted to EOP will be considered for an EOP Grant.

Students who wish to apply to the EOP can apply through CSU Mentor, http://www.csumentor.edu/. Check the EOP Interest on the Undergraduate Application and complete the EOP Application on the CSU Mentor website.

First-time freshmen who are admitted to EOP participate in the week long residential Summer Bridge Program and in the EOP Academy during their freshmen year.

## EOP Academy

The Educational Opportunity Program (EOP) Academy is designed to provide academic and social support for our incoming EOP Firsttime Freshmen (FTF) through the creation of a learning community. Incoming students will enroll in a block of classes with approximately 20 other EOP FTF. It has been demonstrated that students taking part in this type of learning community tend to adapt more quickly to the challenges of college. They form a connection to the University, develop a peer support group, and receive assistance from their faculty more quickly and more effectively than do similar students who have not participated in the Academy program. During their second semester at Sonoma, EOP Academy students continue to take a group of linked classes organized for them.

EOP Summer Bridge Program
The Summer Bridge Program at Sonoma is a one-week residential program during the summer designed to facilitate the successful transition of Educational Opportunity Program students to the University setting. This transition process is developmental in nature and includes personal, social, and educational areas. All incoming EOP first-time freshmen (FTF) attend Summer Bridge.

## Alcohol and Drug Education Program

Stevenson Hall 1088
(707) 664-2850
http://www.sonoma.edu/saem/adep.shtml
The Alcohol and Drug Education Program (ADEP) at Sonoma State University is a program designed to promote the well-being of all members of our educational community by providing educational programs, educational interventions, and referral services for students, staff, and faculty. In addition, we are committed to creating an environment within SSU and the surrounding community that supports informed, lawful, and safe decision-making regarding alcohol and other drug use.

## Associated Students, Inc.

## Student Union Building

(707) 664-2815
www.sonoma.edu/AS
The Associated Students, Inc. (ASI), is a nonprofit corporation that serves to enrich the lives and education of Sonoma State University students. This mission is realized through two distinct roles. First, ASI promotes student interests through advocacy and representation. Second, as a corporation owned and governed by students for students, ASI supports and sponsors a variety of programs, services, clubs, and organizations. ASI encourages opportunities to enhance the development of students through leadership participation, community service, social interaction, and the development of individual attitudes and values.
ASI offers students the chance to represent fellow students and advocate for student interests at Sonoma State and statewide as ASI Executive Officers, as members of the ASI Board of Directors, and as Committee Representatives. All SSU students (excluding fee waiver students) are eligible to serve in these positions and students are elected or appointed to office for a one-year term. Student government allows students to develop leadership, decision-making, budget management, and policy-making skills. More than 200 students participate in our campus democracy.
The Associated Students, Inc., services for students include Transitional Housing, the Short-Term Loan program, supplemental health insurance, sports club insurance, and "banking services" for clubs. In addition, the Associated Students, Inc., partners with the Center for Student Leadership, Involvement and Services and the Sonoma Student Union Corporation to offer a variety of student activities.

# Center for Student Leadership, Involvement and Service (CSLIS) 

Student Union Building, $1^{\text {st }}$ floor
(707) 664-4405
www.sonoma.edu/CampusLife/
ocl.student@sonoma.edu

## Leadership Programs

CSLIS serves as the hub of leadership programs at SSU. Whether you're a student new to campus or about to graduate, we offer a wide variety of leadership development programs serving all students at all levels. Activities range from off-campus weekend intensive leadership retreats to workshops and programs on various topics relating to personal growth and leadership development. Students who choose to enroll in UNIV 238 - Foundations of Leadership are encouraged to apply for a number of important student leadership positions, including Peer Mentors for the First Year Experience Teams, Orientation Leaders, Summer Bridge Leaders, and Community Service Advisers for the Residential Life Community. Additionally, CSLIS collaborates with other campus entities to support a wide range of programs and services both on-campus and in the community.
www.sonoma.edu/saem/leadership

## Student Organizations

With over one hundred chartered student organizations, joining one is an excellent way to get involved, meet people, develop friendships, and gain leadership experience. Additionally, serving as an officer allows you to take your leadership skills to the next level. As a member or officer of a student organization, you'll learn about organizational issues such as membership recruitment, fundraising, running effective meetings, managing conflicts, and program planning. The relationships and experiences you gain through your involvement in a student organization will have a lasting effect on your time at SSU and after graduation.
www.sonoma.edu/campuslife/clubs

## Greek Life

What do all sororities and fraternities have in common? All chapters at Sonoma State (and internationally) share the common values of academic achievement, diversity, community service, and friendship, and provide a plethora of leadership opportunities for members. There are 13 Greek organizations on campus with a combined total membership of approximately 500 SSU students. Visit our website to learn more about the fraternities and sororities on campus and how to join. www.sonoma.edu/campuslife/greek

## SAFE Peer Education

SAFE Peer Educators offer peer-to-peer education to the campus community on health and safety issues including responsible alcohol use, sexual assault prevention, and healthy sexuality/HIV/ STI's. SAFE Peer Educators facilitate classroom discussions and plan campus and community health-related special events including Alcohol Awareness Week, World AIDS Day, SAFE Spring Break, Take Back the Night, and Clothesline project.

Studies show that people are more likely to hear and understand messages that may change attitudes and behaviors if they believe the messenger is similar to them in lifestyle and faces the same concerns and pressures. In student groups, researchers found that they relied on their peers as their most important sources of information about many topics. To learn more about becoming a peer educator, contact SAFE at safe@sonoma.edu
www.sonoma.edu/campuslife/safe

## The Children's School

Child Care Center
(707) 664-2230
www.sonoma.edu/org/cs
The Children's School is a program of the Associated Students, Inc. We provide high quality early childhood education services to children of SSU student, staff, and faculty families. Our NAEYC accredited developmental program for ages one through five years is steeped in active sensory experiences and grounded in environmental ethics. We operate as the Child Development Laboratory on campus and welcome students from many different disciplines to observe and learn from and about children. Our model school is staffed with Master Teachers who train our large SSU student staff in best practices and theory of Early Education.

## Counseling and Psychological Services

Stevenson Hall 1088
(707) 664-2153
www.sonoma.edu/couselingctr
Brief counseling is provided to enrolled students who are experiencing personal difficulties that interfere with their ability to take full advantage of the University experience. Professional counselors and graduate interns provide individual, couples, and group counseling. Our goal is to facilitate the following: personal growth and self-esteem, development of satisfying relationships, effective communication and decision-making skills, and the establishment of personal values. Counselors assist clients to express and clarify their concerns and to identify specific changes that might be helpful to them. Interventions are aimed at increasing self-awareness, utilizing existing coping strategies more effectively, and developing additional skills to deal more successfully with problems.

Counseling and Psychological Services provides individual and group intervention for students experiencing issues related to substance use and abuse. This program, Seawolf Substance Intervention Program (S.S.I.P.), is designed specifically for SSU students.

The counseling staff offers groups and workshops on a variety of themes, such as substance abuse, conflict resolution, assertiveness training, eating issues, body image, test anxiety, procrastination, and men's and women's issues. Drop-in/crisis hours are available daily. Referrals are made to community agencies and private practitioners for students requiring specialized services. For information and appointments, call (707) 664-2153.

## Disability Services for Students

Salazar Hall 1049
(707) 664-2677 (voice)
(707) 664-2958 (TDD/Text Telephone)
www.sonoma.edu/sas/dss
Disability Services for Students (DSS) ensures people with disabilities equitable opportunities for higher education and promotes the civil rights of students with disabilities. Students are challenged and supported in developing self-determination and independence as people with disabilities. DSS assists in educating the campus community about the rights of people with disabilities, as well as the contributions they make to the University. At the University, students with disabilities are considered underrepresented, educational equity students. DSS works within the University community, ensuring that it upholds its responsibilities to recognize and develop these students' competencies.

Disability Services for Students offers a coordinated, wideranging program that reflects Sonoma State University's emphasis on the autonomy and responsibility of the individual. DSS recognizes the growth-catalyzing power of disability and diversity and works closely with students in their development of self-advocacy skills.
Access will be different for each student, depending on the individual's needs. Disability Services for Students guides and encourages students to use University resources that will bring them success and independence.

## An Accessible Learning Environment

Physical accessibility is important to SSU. The campus site is flat, making it easier to travel from one location to another. Campus compliance to current structural access laws is an ongoing consideration with Facilities Planning. Campus accessibility specifically includes curb cuts, ramps, elevators, water fountains, telephones, restrooms, and power doors.

Disability Services for Students coordinates auxiliary services to ensure that the University's obligations to state and federal laws prohibiting disability discrimination are fulfilled.

## Services

The goal of Disability Services for Students is to foster student development and to promote independence and self-advocacy by offering a supportive, yet non-intrusive style of service delivery. Disability management advisors are available for personal and academic advising. After a student registers with the program, services are available to any student with a disability, including physical, psychological, sensory, learning, and temporary. Students must come into the office to provide medical verification and to register for services. The University does not provide testing for disability verification.
Disability Services for Students maintains a team approach to providing services. Liaisons are established with key staff in other departments including the Library, Admissions and Records, Financial Aid Office, Residential Life, Learning Center, Academic Advising, Career Services, Educational Opportunity Program, Counseling and

Psychological Services, and other programs.
A student club on campus, Disabled Students and Friends, meets as a support and advocacy organization on behalf of students with disabilities.
Registered students with verified disabilities may be eligible for services from DSS such as:
Educational services

- Academic advising
- Goals clarification
- Consultation and advocacy

Classroom-access services

- Readers
- Notetakers
- Interpreters
- Testing arrangements

Support services

- Liaison with the state Department of Rehabilitation
- Disability management advising
- Assistive technology assistance and training
- Liaison with other campus departments and programs
- Campus orientation
- Individual accessibility needs
- Assistive Technology Lab
- Alternative media


## Educational Mentoring Teams

The Educational Mentoring Team (EMT) program is an advising and college orientation program for incoming first-time freshmen. It represents a joint effort of the Academic Affairs and Student Affairs divisions aimed at enhancing retention of our freshmen. An EMT consists of a faculty member or a student services professional and a peer advisor. As students make the transition to Sonoma State, one of the most important roles the EMT plays is providing accurate advising to incoming students so they begin their educational career with appropriate coursework and educational and career planning.
Each EMT provides the instruction for a three-unit First Year Experience course and the academic advising for assigned freshmen. While the course is not required for graduation, most freshmen will benefit from understanding how to access the various resources on campus, such as the computer network and the Jean and Charles Schulz Information Center, as well as other topics such as:

- The meaning, value, and expectations of a liberal arts college education;
- Problem-solving and decision-making: selection of a college major and a future career choice;
- Navigating the University curriculum: how to graduate in four years;
- Learning how to learn: study skills and success in college; and
- Interpersonal relations and related student lifestyle responsibilities regarding wellness, alcohol and drug use, sexual harassment, and many other important topics.

In addition to offering the opportunity to become oriented to the many services the University has to offer, the EMT is an ideal setting for developing important connections with other students who are new to the University.

During the first year, student EMT contacts include advising, class time (Freshman Seminar), and informal social activities. The EMT program ensures that new students have at least one faculty/staff member from Sonoma to guide and advise them through their academic career and help make their University experience a satisfying one.

Each EMT consults with other campus team members to solve problems or help students receive technical assistance when needed. In addition to academic faculty, team members include staff from Admissions and Records, Residence Life, Educational Opportunity Program (EOP), Advising Center, Career Services, Learning Skills Services, and others as appropriate.

## Intercollegiate Athletics

PE Building 14
(707) 664-2521
http://www.sonomaseawolves.com
Sonoma State University is a Division II member of the NCAA and sponsors 13 intercollegiate programs, five for men-soccer, basketball, baseball, tennis, and golf- and eight for women-soccer, crosscountry, volleyball, basketball, softball, tennis, water polo, and golf. The philosophy of the institution, and specifically the intercollegiate athletic program, is to provide a positive experience for studentathlete participation while achieving academic and competitive excellence in intercollegiate athletics. SSU teams have been extremely successful at all levels, capturing two national championships and 28 conference championships since 1990. Sixty-seven studentathletes have earned All-American status while competing for SSU.

Sonoma State University competes in the California Collegiate Athletic Association, the premier Division II conference in the nation with a combined 145 NCAA national championships since 1938. Since joining the conference in 1998, Sonoma State has enjoyed much success. The baseball team has captured four CCAA championships (1999, 2001, 2003, and 2007). Men's and women's soccer have posted multiple CCAA North Division championships, highlighted by the men's soccer team winning the national championship in 2002 and their first CCAA Championship in 2005. Men's basketball earned their first CCAA Championship in 2005, and women's basketball has earned five NCAA post-season berths in the past ten years. Men's golf competed in the NCAA National Championships in 2007, and Jarin Todd from men's golf was named NCAA Division II Player of the Year.

The women's cross country team finished ninth in the 2001 NCAA National Championships. Men's and women's tennis have participated in NCAA tournaments on a regular basis. CCAA member institutions include San Francisco State University, Cal State Chico, Cal State Stanislaus, Cal State Bakersfield, Cal State Los Angeles, Cal State Dominguez Hills, Cal State San Bernardino, Cal Poly Pomona, UC San Diego, and Cal State Monterey Bay.

The athletic facilities and programs at Sonoma State University are expanding to provide students with many more opportunities to become physically active through individual and organized sports programs. The California State University is committed to providing equal opportunities to men and women students in all campus programs, including intercollegiate athletics.

```
Director of Athletics - Bill Fusco
Senior Woman Administrator - Yvonne Burbank
Faculty Athletic Representative - Dr. Duane Dove
Baseball - John Goelz, head coach
Basketball, men's - Pat Fuscaldo, head coach
Basketball, women's - Mark Rigby, head coach
Cross County, women's - Mark James, head coach
Golf, men's and women's - Val Verhunce, head coach
Softball - Jaime Wallin, head coach
Soccer, men's - Marcus Ziemer, head coach
Soccer, women's - Luke Oberkirch, head coach
Tennis, men's - Steve Cunninghame, head coach
Tennis, women's - Tracey Prince, head coach
Volleyball, women's - Bear Grassl, head coach
Water Polo, women's - Coralie Simmons, head coach
```


## International Services

International Services
Salazar Hall 1071
(707) 664-2582

Fax: (707) 664-3130
e-mail: international@sonoma.edu
www.sonoma.edu/sas/is
The SSU Office of International Services provides the SSU campus community with a variety of programs, services, and activities related to international education and exchange, including:

- Support services and social programming for matriculated international students in the University and in Sonoma State American Language Institute;
- Visa, legal status, and travel documentation services for nonimmigrant students, faculty, and research scholars;
- Support, advice, assistance, and management services for faculty-initiated international programs, and cooperative and exchange efforts with institutions of higher education abroad;
- Development, planning, and operation of study abroad programming for SSU, including the CSU International Programs; and
- Operation of the National Student Exchange.

See the Admissions section of this catalog for application and general information for international students.

## International Student Services

The international student advisor provides comprehensive advising to Sonoma's international student population including our F-1 and J-1 status students and scholars. As Primary Designated School Official, our advisor provides consultation and documentation and signs off on many immigration matters, including applications for special work permission, extensions of stay, change of visa status, maintenance of $F$ or $J$ status, passport and visa requirements, replacement of lost documents, travel documentation, transfer of schools, reinstatement for students who have fallen out of F -1 status, and the Practical Training benefit.

The International Services office also provides help understanding University policies such as the registration process, payment of fees, scholarships, orientation, housing, required health insurance, and submission of U.S. and California tax returns. Discussion or counseling are available regarding cultural adjustment to the United States, American academic differences, testing, and personal problems. The international student advisor works closely with the International Student Club, which provides a rich array of field trips and social engagements to help students round out their experience in the United States. There are just under 100 International Students at SSU and about 40 in our Language Program (see Sonoma State American Language Institute).

## Study Abroad Opportunities and the National Student Exchange

Students who want to get the most from their Sonoma educational experience should try going away! Most people in the world follow the well-worn paths of life, but some students want to explore, and "push the envelope," to excel, and to extract from their education every bit of opportunity. Study Abroad and National Student Exchange were created for these students.

## The California State University International Programs

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year. More than 15,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad. The International Programs serves the needs of students in more than 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 20 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia
Griffith University
Macquarie University
Queensland University of Technology
University of Queensland
University of Western Sydney
Victoria University
Canada
The Universities of the Province of Quebec including:
Bishop's University
Concordia University
McGill University
Université Laval
Université de Montréal
Université du Quebec system
Chile
Pontificia Universidad Católica de Chile (Santiago)
China
Peking University (Beijing)
Shanghai Tiao Tong University (Shanghai)
Denmark
Denmark's International Study Program (the international education affiliate of the University of Copenhagen)

France
Institut des Etudes Françaises pour Étudiants Étrangers, L'Académie d'Aix-Marseille (Aix-en-Provence)
Universités de Paris III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, the Institute of Oriental Languages and Civilizations, Université Evry.

## Germany

University of Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg

Ghana
University of Ghana (Legon)
Israel
Tel Aviv University
The Hebrew University of Jerusalem
University of Haifa
Italy
CSU Study Center (Florence)
Universitá degli Studi di Firenze
La Accademia di Belle Arti Firenze
Japan
Waseda University (Tokyo)

Korea
Yonsei University (Seoul)
Mexico
Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus
Querétaro
New Zealand
Lincoln University (Christchurch)
Massey University (Palmerston North)
South Africa
University of Kwazulu-Natal
Nelson Mandela Metropolitan University
Spain
Universidad Complutense de Madrid
Universidad de Granada

Sweden
Uppsala University
Taiwan
National Taiwan University (Taipei)
National Tsing Hua University
United Kingdom
Bradford University
Bristol University
Hull University
Kingston University
Sheffield University
University of Wales Swansea
Zimbabwe
University of Zimbabwe (Harare)
International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all personal costs, such as transportation, room and board, living expenses, and home campus fees. Financial aid, with the exception of Federal Work-Study, is available to qualified students.

To qualify for admission to the International Programs, students must have upper-division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in France, Germany, and Mexico. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0 , depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information and application materials may be obtained on campus, or by writing to The California State University International Programs, 401 Golden Shore, Sixth Floor, Long Beach, California 90802-4210. Visit us on the World Wide Web at www.gateway. calstate.edu/csuienet/.

## Non-CSU Study Abroad

International Services will also provide assistance to students who wish to participate in a program or attend an institution which is not a partner in the CSU International Programs.

## The National Student Exchange

The National Student Exchange is a program that provides opportunities to study through exchange in the United States and Canada.

Many opportunities will be available to you when accessing courses and programs from NSE's 182 member campuses. Think of the adventure, the diversity of people, the culture, and the geography among the 49 states, District of Columbia, 3 territories, and 4 Canadian provinces where NSE has member colleges and universities. Consider the impact this program can have on your personal and academic growth, as well as the implications for your future.

Semester and academic year exchanges are available for sophomores, juniors, and seniors who have and maintain a 2.50 grade point average. Academic courses completed as a National Student Exchange participant are considered in residence units at Sonoma State, and participants do not have to pay out-of-state non-resident fees at the host university.

Further information and application materials may be obtained in the Office of International Services.

## Residential Life

Chateau Building
(707) 664-4033
www.sonoma.edu/sas/reslife/about.shtm
The campus Residential Community provides comfortable, convenient, personalized living accommodations for approximately 2,650 single students. The residential life program is designed to be an important part of the student's overall educational experience by providing recreational, social, and educational opportunities. The professional Residential Life staff are trained as educational mentors and academic advisors.

The professional and student staff within the Residential Community provide personal support for the individual student in transitioning to the University environment. There is a diverse program of activities to create a sense of belonging in the Residential Community and the University by providing and supporting social, recreational, athletic, and cultural programming. These may include a trip to see a theatre production in San Francisco, hear Maya Angelou speak, whale watch at the ocean, play on an intramural team, or barbecue with neighbors.

The Residential Student Association (RSA), the student government for residents, is an outstanding opportunity to develop leadership skills. RSA is responsible for representing resident concerns to the University administration as well as planning major program
events within the residential community. Village Councils also provide opportunities for leadership and involvement in the residential community for even our newest students. Our Residential Life student groups are involved in regional and national organizations, enabling students to expand their skills and abilities.

Special living options enhance the student's University experience. Freshman Interest Groups (FIGS), Women in Math and Science House, International House, Upper-Division, and Substance-Free Living Environments are among the current options.

## Sonoma Student Union Corporation

Student Union
(707) 664-2382
www.sonoma.edu/union
The Sonoma Student Union Corporation is one of several entities in the division of Student Affairs and Enrollment Management.
The SSUC is comprised of three departments that serve students: Campus Recreation; the Center for Culture, Gender and Sexuality; and the Student Union. Each department is led by a staff of student affairs and recreation professionals. One hundred fifty students are employed each year in the variety of SSUC programs, services, and facilities. The SSUC is funded by the semesterly, mandatory Student Union Fee as well as income from programs and services. The SSUC is governed by a Board of Directors comprised of students, faculty, staff, and alumni.

## Missions of the SSUC Departments

Campus Recreation: Campus Recreation encourages healthy and active lifestyles, promotes student development through extracurricular activities, and pioneers a vision for a sustainable society.

Center for Culture, Gender Sexuality: CCGS fosters a campus environment of mutual respect and appreciation. CCGS provides forums for the campus and surrounding community to advance their understanding of social justice issues and their intimate complexities.

Sonoma Student Union: The Student Union is a "community living room" of the university nurturing campus life through event production, services, facilities, conveniences, and amenities. The Student Union facilitates collegiality and community life, valuing everyone as "Family."

## Student Conduct

Salazar Hall 1018
(707) 664-2838
http://www.sonoma.edu/saem/judicial.shtml
The President of the University has authority in disciplinary actions. In compliance with CSU Executive Order 970 the President may assign a campus official or officials to be the Student Conduct Administrator, whose responsibility is to determine whether to initiate disciplinary action under the Student Conduct Code. The Director of Judicial Affairs and Special Projects is the designated Student Conduct Administrator for this University.

The University is committed to maintaining a safe and healthy living and learning environment for its students, faculty, staff, and the greater campus community. Each member of the campus community has an obligation to engage in behaviors that contribute toward these common goals. Every member of this living and learning community must assume responsibility for becoming educated about the policies, procedures, and standards followed at this institution.
Students will be held accountable for their actions when their behavior goes beyond what the Sonoma State University community considers to be reasonable and responsible. Students referred to the Student Conduct Administrator will participate in a disciplinary process which emphasizes education, tolerance, integrity, and respect.

## Student Health Center

Student Health Center Building
(707) 664-2921
www/sonoma.edu/shc/
Accredited by the Accreditation Association for Ambulatory Healthcare, Inc.

Sonoma State University maintains a nationally accredited, oncampus Student Health Center (SHC) that provides outpatient primary medical care as well as public health services for regularly enrolled SSU students. The Student Health Center is located along West Redwood Circle, just north of the Schultz Information Center and East of the Zinfandel dining area of the Residence Halls. Hours are 8 a.m. to $4: 30$ p.m. M-F, excluding campus closures and holidays. A limited extended-hours clinic is currently held until $5: 30$ p.m. on Mondays when academic year classes are in session.
Staffing: The Student Health Center's professional staff includes board certified physicians as well as nurses, nurse practitioners, pharmacists, lab technologist, and X-ray technologist.
Services: The SHC provides quality outpatient medical care for acute illnesses, injuries, and basic mental health concerns. Pharmacy, lab, x-ray, travel and athletic medicine, and preventative medical services such as immunizations, Pap smears, contraception, and health education are also provided. While interim and transitional care is offered for medical stabilization and support purposes, continuing comprehensive care is not provided for chronic or complex conditions that require hospitalization, after hours monitoring, the attention of a medical specialist, or similar interventions that are beyond the scope, or hours of operation of the Student Health Center.
Most SHC medical visits are available at no additional charge to enrolled SSU students. Nominal discounted user fees are in place to cover the acquisition cost of medications, vaccines, specialized diagnostic tests, and certain other supplemental medical supplies. Nominal fees are also charged for pre-employment and pre-participation physicals and for summer services (if a continuing student services is not registered in summer session).

Regularly enrolled SSU students who have paid SSU campus registration fees may receive basic medical visit services at other California State University Student Health Centers without additional charge during their regular academic enrollment and during the summer, according to continuing student fees in place at the campus where they are seeking services.

Insurance is not required to use the Student Health Center. However, health insurance is recommended, because students are financially responsible for medical services they receive outside the SHC. A private insurance carrier that contracts directly with registered CSU students offers a moderately priced supplemental health insurance policy designed to complement SHC services by covering necessary off-campus, after-hours, and out-of-area health care. Contact the SSU Associated Students Office (707 664-2815) or check www.csuhealthlink.com for information.

Confidentiality: SHC medical records and related information are confidential and are held in a manner consistent with state and federal law as well as national accreditation standards. Parents, family members, University personnel, and other individuals who are not the healthcare providers and SHC support staff directly involved in the student's medical care do not have access to SHC medical information without the patient's consent.
Student Health Advisory Committee (SHAC): Opportunities for student involvement and advocacy relevant to campus health issues are available through the (SHAC) and health promotion projects. Those interested in serving on SHAC are encouraged to contact the Student Health Center. Those interested in health promotion projects should contact the SHC health educator.

## Testing Services

Salazar Hall 1070
(707) 664-2947
http://www.sonoma.edu/sas/testing/
Testing Services provides a variety of services to the campus community designed to assist students in their admission, placement, and graduation requirements. Tests are offered on a regularly scheduled basis. An annual test calendar is included online in the Schedule of Classes and in the Testing Office. Students must preregister for all tests. For information on all tests offered at SSU, view our website at http://www.sonoma.edu/sas/testing/.

Disabled students who require special arrangements should contact Disability Resources at (707) 664-2677 or (TDD) (707) 6642958 at least one month prior to the test date.

The following are regularly offered through Testing Services:
Undergraduate candidates for admission

- ACT-Residual (SSU only)


## Placement tests

- CSU English Placement Test (EPT)
- CSU Entry-Level Math Test (ELM)


## Graduate school candidates

- Graduate Record Exam (GRE), Subject Tests only
- Law School Admissions Test (LSAT)

Credential candidates should contact either the Credentials Office, at (707) 664-2832, or the Recruitment and Information Specialist, at (707) 664-2593, for test requirements.

Students interested in graduate work at Sonoma State University must check with their department about specific testing requirements.

## University Support and Preparation Services

University Support Services (707) 664-2698
Preparation Services (707) 664-2428
http://www.sonoma.edu/saem/sps

## Departmental Mission

The mission of University Support and Preparation Services at Sonoma State University is to empower students to access and succeed in higher education by providing a spectrum of services that promote academic, social, and personal success. The various programs assist University and pre-college students in achieving and maintaining academic excellence, facilitate college and career planning, and conduct academic advising. Some programs offer supplemental instruction, grant aid, tutoring, summer camps, activities, field trips, and college tours. Eligibility varies by program; please call individual offices for information. All programs are free of charge for eligible participants.

## Learning Skills Services

(707) 664-2698
www.sonoma.edu/lss
Learning Skills Services (LSS) provides tutoring, counseling, mentoring, supplemental instruction, and remedial courses for 350 eligible low-income, first-generation and disabled University students. LSS also includes a Grant Aid component providing supplemental grant funding for eligible students as well as graduate school preparation services and a laptop loan program. LSS is a TRIO Student Support Services federally funded project. LSS is located in Salazar 1040.

## National Graduate School Achievement Program (NoGAP)

(707) 664-2698

The NoGAP Program assists undergraduate students in preparing for graduate school with the intent of pursuing doctoral studies. Eligibility is based on a variety of factors and activities include research projects, mentoring, internships, tutoring, advising, symposium attendance and GRE preparation workshops. The NoGAP program is a federally funded TRIO McNair Scholars project and is located in Salazar 1040.

## SSU Tutorial Center

(707) 664-2429
www.sonoma.edu/sas/tutorial
The Tutorial Center provides peer-tutoring services to all enrolled SSU students free of charge. Tutoring is by appointment and is available in selected subjects; please call for availability and appointments. In some cases, SSU faculty enhance this service by organizing small group workshops or study groups led by a Tutor attached to certain courses. The SSU Tutorial Center receives supplemental funding from the Associated Students and is located in Salazar 1040.

## CSU Early Assessment Program

(707) 664-4351

All 11th-grade students in the state of California can now take the California Standards Test in mathematics and English and, upon completing additional questions and meeting a satisfactory score, will be exempt from taking college placement exams (ELM/EPT) at each CSU campus throughout California. Students are notified of their readiness for college and directed to resources to assist in college preparation. Teacher in-service training is also available. Superintendents, Principals, Counselors, Testing Coordinators, and parents wishing additional information are encouraged to contact the Early Assessment Program (EAP) or visit the website at www. calstate.edu/eap. EAP is located in Building 49.

## Academic Talent Search Program

(707) 664-3122

Academic Talent Search (ATS) is designed for 6th-12th grade Sonoma County students with academic potential. ATS outreach staff and instructors provide 700 eligible program participants with field trips, college campus tours, workshops, and information about college placement and financial aid. Program participants are lowincome and/or potential first-generation college students. ATS is a federally funded program and is located in Building 49.

## Upward Bound Programs

(707) 664-4073 Upward Bound Sonoma
(707) 664-3017 Upward Bound North
(707) 994-6471 Upward Bound Lake
(707) 664-4073 Upward Bound Math \& Science

The Upward Bound programs are designed for low-income and/ or first-generation potential college students attending targeted high schools in Sonoma, Napa, Mendocino, and Lake Counties. All Upward Bound students attend an academic year program and a Summer Academy program that emphasizes both academic and motivational skills development. Students also participate in career development, college placement, and tutorial services. The Upward Bound programs are federally funded and are located in Building 49.

## Writing Center

Schulz Information Center 1103
(707) 664-4401
www.sonoma.edu/programs/writingcenter
The Writing Center offers assistance in writing-related issues to all members of the SSU community, with the primary goal of helping students improve as academic writers. Students can request tutoring help for any writing task at any point in the writing process, from generating ideas to editing for correctness. In addition to one-onone and group tutorials, the Center offers online services available through our website.

The center also offers in-class workshops for students on writingrelated issues and consultations for instructors and academic units on improving writing across the curriculum.

Call or come to the Center to make tutoring appointments or to talk with the director about other services.

## THE ARTS AT SONOMA STATE UNIVERSITY

## Center for Performing Arts

Ives Hall 205 and Green Music Center
(707) 664-2235

ACADEMIC DIRECTOR
Jeff Langley
EXECUTIVE DIRECTOR
Floyd Ross
UNIVERSITY BOX OFFICE
Evert B. Person Theatre and Green Music Center
(707) 664-2353

The Center for Performing Arts coordinates the performance activities of the music and theatre arts departments, providing technical support in scenery, costumes, makeup, lighting and sound, as well as development, marketing and promotions, facility management, and ticketing services.

The center manages a variety of distinct performance venues:

- Evert B. Person Theatre, opened in 1990, a beautiful, state-of-the-art, fully equipped and accessible, 475-seat proscenium theatre with excellent sight lines, a complete fly system, movable thrust with orchestra lift, large stage, computerized lighting board system, well-equipped scene and costume shops, and actor-friendly dressing rooms and makeup facilities. It is used for most large-scale theatre, dance, and music theatre productions, as well as for concerts, lectures, and special events;
- Warren Auditorium, a 200-seat proscenium auditorium, the main venue for jazz concerts and other music and theatre events. Equipped as a "smart classroom" for lecture-style classes and home of the Sonoma Film Institute;
- A 125-seat flexible recital hall, used for solo recitals, chamber, choral, and student concerts, and occasionally for drama productions;
- A 50-seat black box studio theatre suited to small-scale, intimate productions;
- A 100-seat dance studio/theatre, the primary venue for the presentation of student dance work; and
- Alumni Amphitheater, a small outdoor space surrounded by trees, used for a variety of performances.

The center sponsors both on- and off-campus performances by University performing arts groups as well as a guest artist series.

The Center for Performing Arts is home to a variety of performing ensembles comprised of both students and community members, including Drama Ensemble, Dance Ensemble, University Chorus, Sonoma County Bach Choir, Chamber Singers, Music Theatre Production, Music Theatre Scenes Workshop, Vocal Jazz Ensemble,

Indian Singing Ensemble, Gospel Choir, Chamber Music Ensembles, Symphonic Wind Ensemble (Concert Band), Chamber Wind Ensemble, Brass Ensemble, Chamber Orchestra, Classical Guitar Ensemble, American Gamelan, Percussion Ensemble, Concert Jazz Ensemble, Contemporary Jazz Ensemble, Latin Jazz Ensemble, Jazz Big Band, and Jazz Piano Group. In addition, a number of studentinitiated projects in music, dance, and drama are presented each semester, including noon-hour recitals each week.
There are more than 150 performances presented each academic year, with an annual attendance of more than 16,000 people. In addition, the Center sponsors special benefit performances and the annual Performing Arts Talent Award Ceremony, the annual High School Jazz Combo Intensive Workshop, the annual choral festival for high schools and colleges, the annual NASM concert band festival, and each summer, other programs for students of all ages under the umbrella of Greenfarm, the arts education component of the Donald and Maureen Green Music Center.
Since its inception, the Center has provided venues and support for a variety of campus activities, including convocations, lectures, conferences, and events sponsored by Associated Students Productions and campus academic programs. In addition, many off-campus groups rent the Center's facilities for meetings, conferences, dance, theatre, and music performances.
The Center's box offices are located in the Evert B. Person Theatre and at the new Green Music Center. Reserved-seat tickets are available for many performances. Discount rates on all tickets for students, senior citizens, and groups are in effect for all performances. Free admission tickets are available for all SSU students.

## Green Music Center

The new Donald and Maureen Green Music Center's mission is to aim high, reach wide and educate all. The Center's concert hall is modeled after Tanglewood's renowned Seiji Ozawa Hall and brings to Northern California a world-class concert venue, establishing SSU as a major western destination for the study of music. Designed by the best architects and acousticians in the field, the Green Music Center will include a 1,400 -seat concert hall; 250 -seat recital hall; large lobby; extensive amenities for patrons, performers, and students; and the ability to accommodate 3,000-10,000 additional patrons on the lawns surrounding the facility. The Green Music Center will provide the ideal performance setting for vocal, choral, chamber, jazz, popular, instrumental, world, and symphonic music of every style and tradition, as well as for the spoken word and the exchange of ideas, and will be known for its superb acoustics and spectacular setting among the hills and vineyards of Sonoma County. The Green Music Center will be the performance home of the Santa Rosa Symphony. The first classes will be held in the Green Music Center's academic wing beginning Fall 2008.

## University Art Gallery

Art 101
(707) 664-2295

DIRECTOR
Michael Schwager
Opened in 1978 as part of SSU's new art department complex, the University Art Gallery is a large and well-equipped facility with almost 2,500 square feet of exhibition space in two adjoining galleries. The Art Gallery serves the campus and surrounding communities through ongoing presentation of exhibitions, publications, and lectures, featuring work by some of the most talented and respected local, national, and international contemporary artists.

During each academic year, the Art Gallery presents five exhibitions, including work by graduating Bachelor of Fine Arts students and the annual Juried Student Show, which is open to all SSU students and is selected by two art professionals from the off-campus art world. Work by the SSU Art Department faculty is also shown in the gallery every other year. In addition, the Art Gallery hosts a variety of programs and events, chief among them the Art from the Heart Auction, which each year features affordable works of art by more than 100 local and nationally recognized artists, the proceeds from which directly benefit the gallery's programs.

Throughout its existence, the Art Gallery has organized and displayed museum-quality exhibitions, ranging in focus from experimental installations and multimedia works to art that celebrates traditional styles and techniques. A brief list of artists featured at the Art Galley includes Seyed Alavi, Enrique Chagoya, Lowell Darling, Mineko Grimmer, Wally Hedrick, Mildred Howard, Robert Hudson, Mike Kelley, Maya Lin, Hung Liu, Judith Linhares, Manuel Ocampo, Judy Pfaff, Raymond Saunders, Peter Shelton, Katherine Sherwood, Masami Teraoka, Bill Viola, Peter Voulkos, William Wegman, and William T. Wiley, among many others.

In addition to its public programs, the Art Gallery serves as a teaching facility, providing both art history and art studio students hands-on experience in the fields of museum and gallery work and arts administration.

The Art Gallery is open 11 a.m. to 4 p.m., Tuesdays through Fridays, and noon to 4 p.m. on Saturdays and Sundays. Admission is free.

## University Library Arts and Lectures Program

Jean and Charles Schulz Information Center
(707) 664-4240
libweb.sonoma.edu/about/gallery/eventscal.html
DIRECTOR
Karen Brodsky
The Arts and Lectures Program in the University Library strives to enrich the intellectual, educational, and cultural life of the Sonoma State community. The program provides a venue for people to come together to share ideas through art, lectures, and discussions. Using a variety of locations within the Information Center, the program supports the liberal arts mission of the University. Activities are designed to explore a diversity of ideas, values, and intellectual and artistic expressions. Emphasis is placed on exposure to library collections; research interests of SSU faculty, staff, and students; and regional issues, including the support of local cultural initiatives.
The University Library Art Gallery presents exhibitions by students, professional artists, selections from the Library's unique collections, and material from traveling exhibitions. Some past exhibits include the work of local photographer John LeBaron, an annual showing of work by the Edward C. Boyle Scholarship recipient, and participation in the Sonoma County-wide celebration of work by the world-renowned Christo.

The University Library Art Gallery is located on the second floor of the Information Center and includes approximately 1,250 square feet of exhibition space. Exhibits are scheduled throughout the year. The gallery is open Mondays through Fridays, 8 a.m. to 5 p.m., and Saturday and Sunday, noon to 5 p.m., excluding holidays.

Lectures and readings organized each semester by the University Library Arts and Lectures Committee, often in collaboration with campus departments and community groups, include presentations of faculty research, author readings, and other events of interest. The public reading room (Schulz 3001) is reserved to provide a gathering place for people to come together to listen, learn, and discuss.

## REGULATIONS AND POLICIES

## Academic Regulations

Admissions \& Records
Salazar Hall 2030
(707) 664-2778

## Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes might alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature or rules and policies adopted by the Board of Trustees of The California State University, by the Chancellor or designee of The California State University, or by the President or designee of the campus. It is not possible in a publication of this size to include all of the rules, policies, and other information that pertain to students, the institution, and the California State University. More current or complete information may be obtained from the appropriate department, college, or administrative office.

This catalog does not constitute a contract or the terms and conditions of a contract between the student and the institution or The California State University. The relationship of the student to the institution is one governed by statute, rules, and policies adopted by the Legislature, the Trustees, the Chancellor, the President and their duly authorized designees.

## Registration and Enrollment

You must be either a continuing student or an admitted applicant who has paid their Enrollment Reservation Deposit (ERD) in order to be eligible for registration. You are a continuing student if you registered for one or both of the previous two semesters (summer and intersession excluded). Continuing student status will be lost if you earned your bachelor's degree, were academically disqualified, or were separated from the University for 2 semesters or more.

The University offers several opportunities for registration. At least two registration periods are held prior to the first day of instruction. Late registration, which requires payment of an additional fee, is available during the add/drop period.

New students must confirm their intention to enroll at Sonoma by paying an Enrollment Reservation Deposit (ERD). Information will be sent at the time of admission about the deposit. All eligible continuing students and all admitted applicants who have paid the deposit will be sent registration notifications at least one week prior to the registration period with the exception of first-time freshmen who register during summer orientation. This registration notification will provide a link to the Registration website, which will include information about advising, registration appointment times, important dates, and procedures for registering. Applicants admitted too late to participate in the first registration period will receive information
regarding the second registration period and late registration.
The best source for registration information is the Admissions and Records website. The Schedule of Classes is available on our online Student Information System (PeopleSoft) and is updated in real time. A PDF version of the Schedule of Classes is published electronically each semester.

## Registration

All students at Sonoma State University register online. Students will find Web registration quick and easy. Carefully read all of the registration information on the Admissions and Records website to make the registration process even simpler.

## User ID and Password

Access to Web registration requires the entry of your Seawolf User ID and password. Information on how to obtain your user ID and password can be found at the Admissions and Records website.

## Registration Fee Payment Deadline

The Customer Service website at www.sonoma.edu/customerservices/studentfee publishes the fee schedule and payment due dates. Students who fail to pay their fees by the registration fee deadline will be dropped from their classes. Credit will not be granted in any course unless all registration procedures are completed and fees are paid.

## Holds

Be sure to clear any holds before registration. Depending on the nature of the hold, access to registration may be blocked, and the student may miss his or her registration appointment. You can view your holds online. For additional information about a financial hold, contact the Customer Services Center. For non-financial holds, contact the office that placed the hold.

## Categories of Enrollment

With the exception of first-time freshmen who register at Summer Orientation, appointments are assigned by class level in descending order of units earned. The order is:

## Status

Units Completed
First-time Freshman 0
Classified Graduate and Credential n/a
Senior 90+
Junior 60-89
Sophomore 30-59
Freshman 0-29
Unclassified Graduate Students N/A
SSU reserves the right to give priority registration appointments to certain populations of students approved by the Academic Senate.

## Academic Load

A minimum of two hours preparation for each hour of regular class work should be expected; in upper-division and graduate-level courses, additional time may be required.

In order to graduate in four years, the minimum average number of units an undergraduate entering as a freshman must complete is 15.5 units per semester. Undergraduate students may register for up to 20 units without special approval of the Registrar.

Students having a 3.00 overall college grade point average may petition to enroll in more than 20 units. Maximum unit load is 23 for Undergraduate students. Students must submit a petition to the Office of Admissions and Records and receive approval before they may enroll in additional courses. A listing of the additional courses must be submitted with the petition statement.

Undergraduate students who need to be registered full-time should note that 12 units is the minimum load to qualify for full-time status. Some additional allowance is made for graduate students.

The maximum academic load recommended for graduate students is 12 units, but a student may register for up to 20 units. Students who wish to take more than 20 units must consult with their department chair or graduate advisor and the Office of Graduate Studies.

Graduate students officially accepted into master's degree programs who are taking classes that are part of their approved plan of study and need to be registered full-time should note that 8 units is the minimum load to qualify for full-time status. Other postbaccalaurate students (e.g. Credential, unclassified, etc.) follow the same rules as Undergraduate students.

## Add/Drop

Students are permitted to change their initial enrollment by following the University's add/drop procedures. A student may add, drop, or change the basis of grading of a class utilizing the University's online registration system and within the deadlines of the Registration Calendar. Students should consult the Admissions and Records website for the procedures, approvals, timelines, and fees associated with add/ drop process.

Students may add courses to their schedules up to the maximum enrollment limit during the two registration periods and the add/drop period. Students must register themselves. You may add a class only if space is available on PeopleSoft. Sitting in on a class is not equivalent to enrollment in a class. You are registered only when you successfully complete the Web transaction. Consult the Office of Admissions and Records website for appropriate dates and approvals.

Students may drop a course or courses during the two registration periods and the add/drop period. Dropping during these times will remove the course from your schedule. Once you have decided to drop a class, you should do so immediately so that another student can fill your vacated seat. After the add/drop period, you may still drop classes until Census date (which is the $20^{\text {th }}$ day of instruction); however, you will receive a grade of "W" for the course).

Failure to attend a class does not constitute a formal drop or withdrawal from a class. Students are responsible for dropping classes they are not attending during the deadlines posted on the academic calendar.

## Withdrawing from Classes

Students are responsible for attending all courses in which they have registered. Failure to do so will result in the grade of $F$, WU, or NC. Students may exit classes by either dropping or withdrawing from them. Dropping a class removes any record of the class from your student record; withdrawing results in the grade of W, which has no penalty attached. Students may freely drop classes during the Add/Drop period, using Web Registration.

In accordance with CSU Executive Order No. 792, it is the policy of Sonoma State University that:

1. Students may drop a course (or courses) online and without penalty until the drop deadline (check Academic Calendar).
2. From the drop deadline to the census date (check Academic Calendar), students may withdraw from a course (or courses) online for any reason. Students who withdraw during this period shall receive a non-punitive grade of "W."
3. From the census date to the last 20 percent of instruction, students may withdraw with a "W" from a course (or courses) only for serious and compelling reasons, which must be documented (See definition below). Students must pay a fee and file a petition (available at Admissions \& Records) for each course, stating their reasons for withdrawal and providing documentation, which must accompany the petition. Petitions shall be approved by the course instructor and the chair of the department in which the course is taught.
4. During the last 20 percent of instruction, students may withdraw from a course (or courses) only for serious and compelling reasons (See definition below) and where the assignment of an incomplete is not practicable. Procedures are the same as for \#3 above. However, for this period, petitions shall also be approved by the Registrar.
5. Total Withdrawal: A student may withdraw completely from the semester for any reason during the first 80 percent of instruction by filling out a total withdrawal form (available online or at the Office of Admissions and Records). During the last 20 percent of instruction, students who wish to withdrawal totally must file a general petition, stating serious and compelling reasons for withdrawal and providing appropriate documentation, which must accompany the petition. These petitions shall be approved by the Registrar.
6. Retroactive Withdrawal: After a given semester has ended, students may petition to retroactively withdraw from an entire semester if there are serious and compelling reasons for such a withdrawal. The student must file a petition, which must be accompanied by documentation of the serious and compelling reasons. The petition must also be supported by the
student's departmental advisor or by an academic advisor if the student is undeclared. Such petitions shall be approved or denied by the Registrar and the University Standards Committee. Students may withdraw from a single course retroactively if and only if there are serious and compelling reasons affecting a single course (such as being unable to finish a PE course due to a broken leg).
7. For the purposes of withdrawal, the University defines "serious and compelling reasons" as follows:
The standard of "serious and compelling" applies to situations, such as illness or accident, clearly beyond the student's control. The following situations are typical of those for which "serious and compelling" is appropriate justification for withdrawal. All situations require documentation.
a) An extended absence due to a verifiable accident, illness, or personal problem serious enough to cause withdrawal from the University;
b) An extended absence due to a death in the immediate family;
c) A necessary change in employment status that interferes with the student's ability to attend class;
d) Errors made by SSU; or
e) Other unusual or very special cases will be considered on their merit by the University Standards Committee.
The following situations DO NOT fall under the intent of "serious and compelling":
a) Grade anticipated in class is not sufficiently high, or student is doing failing work (including plagiarism);
b) Failure to attend class, complete assignments, or take a test;
c) Dissatisfaction with the course material, instructional method, or instructor;
d) Class is harder than expected;
e) Pressure of other classes, employment, and/or participation in extracurricular activities;
f) A change of major; or
g) Lack of awareness of the withdrawal process or procedures.
This standard shall be available to students, faculty, and administrators online and on the Petition to Withdraw from a Course form.
8. Documentation: All petitions for withdrawal after Census date must be accompanied by documentation of the "serious and compelling" reasons for withdrawal. Documentation may include: verification of accident or illness (such as a letter from the treating physician or copies of medical bills), a letter from a licensed counselor, death certificate, employer verification of change of work status, PeopleSoft records, and other like documentation as appropriate.

## Cancellation of Registration or Withdrawal from the Institution

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to follow the University's official withdrawal procedures. Failure to follow formal University procedures may result in an obligation to pay fees, as well as the assignment of failing grades in all courses and the need to apply for readmission before being permitted to enroll in another academic term.
Students who receive financial aid funds must consult with Director of Financial Aid, Salazar Hall 1000, (707) 664-2389, prior to withdrawing from the University regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.
Information concerning the refund of fees due to complete withdrawal from the University may be obtained from Customer Services.
Students who are living in Student Housing must consult with the Director of Housing to make arrangements to vacate.

## Planned Educational Leave

The Planned Educational Leave allows for leaves of one or two semesters. Continuing students should file a Planned Educational Leave form with the Office of Admissions and Records indicating the duration of the leave ( 1 or 2 semesters only) within the first two weeks of the first semester of the requested leave. Students must file a Planned Educational Leave form to be eligible for enrollment in the subsequent semester. New students may not request a Planned Educational Leave for the first semester of enrollment at the University.
For students who are on a leave of two semesters, you must participate in early registration in order to maintain enrollment eligibility. For students returning in a Fall semester, you must register in May. For students returning in a Spring semester, you must register in November. Students failing to register in early registration will have their continuins enrollment eligibility cancelled and will need to reapply for admission.

## Continuing Student Status

Once you enroll, pay fees, and attend classes at Sonoma State University, you will be in "continuing student status" for the current and subsequent semester. Reapplication to SSU is required if you take a leave of two semesters and are not on an approved Educational Leave of Absence; if you graduate with a baccalaureate from this or any other institution; or if you are a newly admitted student who enrolls, pays registration fees, and then withdraws before Census day, which is the 20th day of the semester.
The term "student" means any person taking courses at a campus, both full-time and part-time, including summer session, special session, and Extended Education.

Continuing: Student is enrolled in regular programs in one or both of the previous two semesters (summer and intersession excluded) or is resuming studies after an approved Educational Leave of Absence of no more than two consecutive semesters.

New: Student who is registering in a regular term for the first time.
Former: Student who has not registered in two previous consecutive semesters (summer and intersession excluded).
Readmitted: Student who previously attended SSU, broke continuous enrollment status, reapplied, and is readmitted to SSU in a regular program.

## Concurrent, Cross, and Visitor Enrollment Programs

Students enrolled at any CSU campus have access to courses at other CSU campuses on a space available basis unless those campuses or programs are impacted. This access is offered without students being required to be admitted formally to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus should transfer to the student's home CSU campus as at least elective credit, students should consult their home campus academic advisors to determine how such courses may apply to their degree programs before enrolling at the host campus.

## CSU Concurrent Enrollment

Matriculated students in good standing may enroll at both their home CSU campus (SSU) and a host CSU campus during the same term. Credit earned at the host campus is reported at the student's request to SSU to be included on the student's transcript at SSU. Details and applications are available from the Office of Admissions and Records, Salazar Hall 2030. Concurrent enrollment is valid for one term only.

## Concurrent Enrollment with SSU Extended Education

Matriculated students are not permitted to enroll concurrently in regular SSU courses and SSU Extension or Open University courses, nor may students who have previously attended SSU and whose current status is disqualification for either academic or administrative reasons. Neither are students who have applied and been admitted to the University, but who do not pay fees or enroll in regular University courses, eligible to enroll through Extended Education or the Open University program. There will be no exceptions to this regulation, and no refund of fees.

Extension students admitted in resident classes (through Open University) shall receive the same credit as they would receive in a matriculated class. Concurrent enrollment of extension students in regular classes does not constitute admission to the University; neither does it entitle them to student services available to regular students with the exception of library privileges. Additional information is available at the Office of Extended Education.

## CSU Visitor Enrollment

Matriculated students in good standing enrolled at SSU may enroll at another CSU campus for one term. Details and applications are available from the Office of Admissions and Records, Salazar Hall 2030.

## Cross Enrollment

The Cross Enrollment Program is designed to enhance the educational experience of California students by providing them with increased access to courses offered by campuses of other public higher education institutions. Students may speed progress toward meeting degree requirements by investigating course availability at campuses of other systems when they are unable to gain access to required courses at their home campus or are unable to find a course offered at a convenient time. Cross enrollment also expands educational horizons by providing students with opportunities to explore disciplines not offered by the home campus.
CSU full-time undergraduate students have an opportunity to enroll without formal admission and without payment of an additional State University Fee in one course each academic term at a campus of the University of California or at participating campuses of the California Community Colleges. The Cross Enrollment Program is open to California residents enrolled for a minimum of 6 units, who have completed at least one term at their home campus, and who have a cumulative grade point average of at least 2.00 . Eligibility for enrollment in a course offered by another segment is based on available space and appropriate academic preparation for the course as determined by the host campus. Although the host campus will not require the regular course fee, a $\$ 10$ administration fee may be assessed for each term, and students are expected to pay any course-related fees (lab, materials, computer use, etc.).
Sonoma also offers cross-registration for undergraduate students with the University of California, Berkeley. For more information, contact the Office of Admissions and Records, Salazar Hall 2030.

## Veterans Services

Students seeking education allowances under provisions of any Veterans Act must be eligible with the Veterans Administration to receive benefits. All students wishing to draw benefits who are enrolled for any semester must have their current program on file with the VA Certifying Official who can be reached at (707) 664-2778. This rule applies each time you register with the University.

## ROTC Programs (Reserve Officer Training Corps)

http://military.berkeley.edu
ROTC is a training program that prepares college students to become officers in the U.S. Army or Air Force. Sonoma State University students wishing to pursue ROTC training may do so by participating in ROTC programs offered at the University of California at Berkeley. For more information on enrollment requirements, procedures, and scholarship information, visit the website listed above.

## Provisional Unclassified Graduate Status for Senior Students

Students who plan to complete upper-division or graduate-level courses in their final semester may petition for provisional unclassified graduate credit for such courses. Courses required for the baccalaureate will not be granted this provisional status. The petition must be filed at the same time as the application for award of the degree. Teaching credential candidates should consult the Education Department regarding the advisability of such a petition.

Provisional unclassified postbaccalaureate credit can only be granted for upper-division and graduate-level courses in the semester prior to graduation and will be recorded in the student's academic record as earned prior to the award of the baccalaureate. Such credit is applicable to graduate objectives at the discretion of the relevant academic department. Should requirements for the baccalaureate not be completed by the date specified on the application, the petition for postbaccalaureate credit becomes null and void

## Special Studies Courses

The University makes arrangements through Special Studies 495 and 595 for advanced or exceptionally talented students who want to pursue academic interests beyond the scope of the regular curriculum. Such course work is subject to the following conditions and restrictions:

1. Special studies courses are limited to upper-division students who have a) a cumulative GPA of 3.00 or better, and b) an appropriate background for undertaking the proposed topic.
2. Special studies are confined principally to on-site academic study and research projects (see internship and research assistant credit courses for other kinds of credited course work).
3. No more than 8 units of special studies work - with a maximum of 4 units per course - may be taken in any department.
4. No more than 12 units of special studies may count toward the baccalaureate.
5. Special studies may not duplicate a course that is listed in the catalog and that is normally offered within a two-year period.
6. Meetings between instructor and student should be scheduled at intervals appropriate to the topic and the number of units assigned.
7. Each unit of credit requires a minimum of 45 hours of academic work.
8. Approval for registration must be obtained from the advisor, instructor, department chair, and dean.

## Advising

All students must be advised prior to registering. Continuing students with a declared major should have met with their academic advisors during the early advising period (see your major depart-
ment for dates). Students who have not been advised should contact their academic departments. Continuing undergraduates who have not declared a major will be advised at the Academic Advising Center, Salazar Hall, (707) 664-2442. Undergraduate students who have not declared a major after 60 semester units must be advised each semester. New students should contact their declared major department, or if undeclared, the Academic Advising Center, to make an advising appointment. Students who have not been advised may have holds placed on their records that will prevent them from registering.

## Declaring or Changing a Major

Enrolled SSU undergraduate students in good standing may, with prior departmental approval, change their major. A Change of Major form must be submitted to the Office of Admissions and Records with the appropriate departmental approvals. Students should contact their intended department for major change requirements and change of major periods.

## Catalog Year Requirement

Undergraduate students remaining in continuous attendance and continuing in the same major at Sonoma, at any other California State University, or in any California community college, or any combination of California community and state colleges may elect to meet the Sonoma graduation requirements in effect at the time of their entering the major or at the time of their graduation from Sonoma. Substitutions for discontinued courses may be authorized or required by the proper campus authorities. The continuous attendance policy allows interruptions in enrollment so long as the student is enrolled at least one semester or two quarters each calendar year.

## Auditing

At Sonoma State, auditing is an informal arrangement between an auditor and a faculty member. With the permission of the instructor and if space is available, an auditor may attend a course on an informal basis. The auditor and the instructor must agree upon the extent to which the auditor will participate, and whether the auditor's work will be required and evaluated. Students do not register for these classes and no official records are maintained of these informal audits.

## Transcripts of SSU Courses

Students may obtain transcripts of their Sonoma State University records from the Office of Admissions and Records only upon written request. Include your name, date of birth, Social Security number or SSU ID number, the dates you attended SSU, where you wish the transcripts mailed, and any special instructions (e.g., hold for degree or a grade change, or whether the transcripts should be mailed in individual, sealed envelopes). All transcript requests must include a signature. The University reserves the right to withhold issuing the transcript of any student not in good financial standing with the University. Transcripts may be ordered by mail, or by fax,
at (707) 664-2060. There is no charge for SSU transcripts. Please allow $5-10$ business days for processing.

## Grading

## Identification of Grades

The University uses a combination of traditional and nontraditional grading options, as follows:

## Traditional Grades (A, B, C, D, F)

Letters A, B, C, and D are passing grades; F means failure. Additional + (plus) and - (minus) supplements add or subtract 0.30 grade points per unit. These apply to the A, B, C, and D grades; there is no $\mathrm{A}+$.

## Nontraditional Grades (Cr/NC)

Credit (Cr) may be awarded in undergraduate classes (499 and below) for work equivalent to a letter grade of C - or better, and for graduate-level classes ( 500 ) for work equivalent to a B - or better. NC, indicating No Credit, is given for work equivalent to $\mathrm{D}+$ and below for undergraduate classes and $\mathrm{C}+$ and below for graduatelevel classes.
In classes in which there is an option between traditional and nontraditional grading modes, the mode must be declared using Web Registration by Census day. (See www.sonoma.edu/ar or the appropriate Schedule of Classes for instructions.) Undergraduate students may count a maximum of 24 units of Cr (credit) grades toward their undergraduate degree.
For students applying for degrees under catalog years beginning in Fall 1988, only courses graded A-F may be applied toward major and minor requirements, except for courses not available in the A-F mode. Thus, a course taken $\mathrm{Cr} / \mathrm{NC}$ when the alternative is available can be counted only as an elective or toward the general education requirements. This provision is enforced only when the student applies for graduation rather than upon each class enrollment. Students taking more than the maximum number of Cr units will be required to complete more than the minimum number of units required for the degree.
All nontraditionally graded units earned at other institutions that have been accepted for transfer will be accepted toward the bachelor's degree. If fewer than 24 such units are transferred, they will count toward the 24 -unit limit. If 24 or more such units have been accepted, no additional $\mathrm{Cr} / \mathrm{NC}$ course may be taken unless it is offered $\mathrm{Cr} / \mathrm{NC}$ only and is required for the major.
All lower-division general education units earned in the Hutchins School will be acceptable for graduation, irrespective of their number, up to the 48 units that constitute the Hutchins School general education program. A student who completes at least $24 \mathrm{Cr} / \mathrm{NC}$ units in the Hutchins School general education program may not take other $\mathrm{Cr} / \mathrm{NC}$ courses unless the units are earned in a course that is available only on a $\mathrm{Cr} / \mathrm{NC}$ grading basis and is required for the major. Graduate students may, at the discretion of the depart-
ment, take up to one-third of the total units applied to their master's degree in a nontraditional grading mode. Each department will designate those courses that may be graded only in the Cr/NC mode.

## Definitions of Grading Symbols

The accompanying grade chart indicates grade symbols and their numerical equivalents for evaluating coursework. In addition, more complete definitions of administrative grades are provided.

## Grades

Symbol

A
A-
B+
B
B-
C+
C
C-
D+
D Minimum Performance
D-
F Failure
$\mathrm{Cr} \quad$ Credit
NC No Credit
I
IC Incomplete Charged
RP Report in Progress
W Withdrawal
WU
RD
PRV Provisional Graduate Credit

## Grade Points

4.0 per unit value of course
3.7 per unit value of course
3.3 per unit value of course
3.0 per unit value of course
2.7 per unit value of course
2.3 per unit value of course
2.0 per unit value of course
1.7 per unit value of course
1.3 per unit value of course

1 per unit value of course
0.7 per unit value of course

0 per unit value of course
Not applicable
Not applicable
Not applicable
0 per unit value of course
Not applicable
Not applicable
0 per unit value of course
Not applicable
Not applicable

## Incomplete (I)

The symbol "l" indicates that a portion of required course work has not been completed and evaluated in the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements that must be satisfied to remove the Incomplete. A final grade is assigned when the work agreed upon has been completed and evaluated.
An Incomplete shall be converted to the appropriate grade or symbol within one year following the end of the term during which it was assigned provided; however, an extension of the one-year time limit may be granted by petition for contingencies such as intervening military service and serious health problems. Where campus policy requires assignment of final grades on the basis of numerous demonstrations of competency by the student, it may be appropriate for a faculty member to submit a letter grade to be assigned in the event the Incomplete is not made up within one year. If the Incomplete is not converted within the prescribed time limit, it shall be counted as a failing grade in calculating grade point average and
progress points unless the faculty member has assigned a grade in accordance with campus policy.

## Incomplete Charged (IC)

This limitation prevails whether or not the student maintains continuous enrollment. Failure to complete the assigned work will result in an "I" being converted to an "IC" symbol, unless the faculty member assigns a specific letter grade at the time the Incomplete is assigned, which would replace the "I" in the student's record at the end of the calendar year deadline. If the Incomplete is not converted within the prescribed time limit, it shall be counted as a failing grade (if the course was registered as a graded course) in calculating grade point average and progress points unless the faculty member has assigned a grade in accordance with campus policy. If the course was registered as $C R / N C$, a NC will be assigned as the final grade.

## Report in Progress (RP)

The "RP" symbol is used in connection with courses that extend beyond one academic year. It indicates that work is in progress but that assignment of a final grade must await completion of additional work. Work is to be completed within one year except for graduate degree theses.

Enrollment for more units of credit than the total number of units that can be applied to the fulfillment of the student's educational objective is prohibited. Work is to be completed within a stipulated time. This may not exceed one year, except for graduate degree theses, for which the time may be up to two years, but may not exceed the overall time limit for completion of all master's degree requirements. Any extension of time limits must receive prior authorization by the Associate Vice President for Academic Programs and Graduate Studies.

## Report Delayed (RD)

The " RD " symbol is an administrative grade used when a grade has not yet been determined for the student or has been delayed in the grade reporting process.

## Withdrawal (W)

"W" indicates that the student withdrew from the course after the end of the add/drop period but before the end of the eighth week of instruction. It carries no connotation of quality of student performance and is not used in calculating grade point.

## Withdrawal Unauthorized (WU)

The symbol "WU" indicates that an enrolled student did not withdraw from the course and failed to complete course requirements. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. For purposes of grade point average and progress point computation, this symbol is equivalent to an " $F$."

## Credit (Cr)

"CR" grades are not included in the calculation of grade point average.

## No Credit (NC)

" NC " grades are not included in the calculation of grade point average.

## Grade Reporting

Approximately two weeks following the end of finals, grades will be available to view online. Any discrepancies should be reported directly to the instructor so that they may be promptly investigated. No changes to the permanent record will be made after a degree has been awarded.

## Dean's List

Undergraduate students who earn at least a 3.50 GPA in a minimum of 12 units of letter-graded work will be awarded Dean's List recognition. Courses taken from Extended Education or credit by examination will not be included in this calculation. Only the grades for one semester will be used in the computation of the GPA for purposes of granting this recognition.

## Academic Records

Student academic records are maintained by the Office of Admissions and Records. These records are considered confidential and, while available to faculty members for advising purposes, the information contained is subject to very strict control. Parents of minor students have authorized access to the academic records of their children. All other persons requesting access to academic records, including governmental investigators and parents of students 18 years old or older, must have the student's written permission.
A student's permanent academic record cannot be changed except where an error in recording has occurred or by approval of the proper University authority. One year is allowed for errors to be identified by a student and corrected by the Office of Admissions and Records or for a petition to be submitted. Records will not be changed once a degree has been awarded.
Individuals may have access to their official records by appointment with the Office of Admissions and Records. Records of work done at other institutions cannot be copied; students' files will be kept for no more than five years after the semester last attended.

## Diplomas

When students apply for graduation, they will be asked how they wish their name to appear on the diploma. The name must be legally and verifiably their own as it appears on an appropriate form of identification, such as a driver's license or Social Security card. Family names and nicknames cannot be used. The policy applies for reissued diplomas and certificates as well.
Diplomas are mailed approximately eight weeks after the graduation date. A replacement copy of a lost diploma may be purchased for $\$ 10$.

## Scholastic Status

Grade point average (GPA), used as a measurement of satisfactory scholarship, is calculated by dividing the number of grade points by
the number of units attempted for the grades of $A, B, C, D, F, W U$, and IC. CR and NC are not used in this calculation.

## Academic Standing

Academic standing refers to the quality of a student's academic work at the University. Students falling below acceptable standards are placed on academic probation and become subject to academic disqualification should the quality of their academic work not improve to meet minimum standards. Academic Standing is calculated for all college units attempted (cumulative GPA) and for all units attempted at Sonoma State University (resident GPA).

## Good Standing

Any student who is eligible to enroll in the University is considered to be in good standing. This means that undergraduate students who have maintained satisfactory scholarship with at least a 2.00 cumulative grade point average and their SSU resident GPA, as well as those who are on probation, are in good standing. Post-baccalaureate and Graduate students who have maintained satisfactory scholarship with at least a 3.0 cumulative grade point average, as well as those who are probation, are in good standing. Students who are disqualified are not eligible to enroll and are therefore not considered in good standing.

## Academic Probation and Academic Disqualification

There are two probationary and disqualification statuses to which students may be subject: academic or administrative.

## Academic Probation

An undergraduate student is subject to academic probation if at any time the cumulative grade point average in all college work attempted or cumulative grade point average at the campus where enrolled falls below 2.0 (Title 5. California Code of Regulations, Section 41300 (a)).
An undergraduate student shall be removed from academic probation when the cumulative grade point average in all college work attempted and the cumulative grade point average at the campus where enrolled is 2.0 or higher.

Probation and Disqualification of post-baccalaureate and graduate students are subject to Section 41300 (d), (e), and (f) of Title 5 and criteria established by the campus.

## Undergraduate 2.00

Post-baccalaureate Student (credential, graduate, etc.)

## Academic Disqualification

As authorized by Section 41300 (b) of Title 5, undergraduate students on academic probation are subject to academic disqualification when they fall below a 2.00 (C) average by the number of grade points indicated either for all units attempted or for all units attempted at Sonoma State University.

## Class Level

## Minimum GPA

Freshmen (0-29 units completed)

Sophomores (30-59 units completed)
Juniors (60-89 units completed) $\quad 1.85$
Seniors ( 90 or more units completed) 1.95

Undergraduate students who have been disqualified may not apply for immediate reinstatement. Students who have been disqualified and who have been separated from the University for at least one semester may apply to the University Standards Committee for reinstatement. The Committee shall take into consideration qualitative and quantitative evidence of the student's ability to overcome his/her grade point deficit (SSU or cumulative); lower-division students shall normally be expected to complete enough transferable college-level course work elsewhere to raise their cumulative average to at least 2.0 before applying for reinstatement.
During the time you are away from SSU, you should (a) plan to retake any course(s) for which you received grades of C-, D, F, WU, or IC and (b) examine the circumstances that led to your unsatisfactory performance and make appropriate adjustments to ensure that the circumstances do not recur.
As a disqualified student, you are not eligible to take classes at Sonoma State University, including Extended Education or Open University courses.
As authorized by Section 41300 c of Title 5, SSU may disqualify an individual not on probation when the following circumstances exist:
A. At the end of any term, the student has a cumulative grade point average below 1.0 and
B. The cumulative grade point average is so low that in view of the student's overall educational record, it seems unlikely that the deficiency will be removed within a reasonable period.
Graduate and other Post-baccalaureate students: Minimum GPA 3.0. A graduate student on academic probation who fails to earn sufficient grade points for removal from probationary status is subject to academic disqualification.
Notice of Disqualification: Students who are disqualified at the end of an enrollment period under any of the provisions of Executive Order 823 will be notified before the beginning of the next consecutive regular enrollment period. Students disqualified at the beginning of a summer enrollment break should be notified at least one month before the start of the fall term.

## Administrative-Academic Probation

A student may be placed on administrative-academic probation for withdrawal from a substantial portion of a program in two successive terms, for 1) repeated failure to progress toward a degree; 2) repeated failure to progress toward the stated degree objective or other program objective, including that resulting from assignment of 15 units of NC; and 3) failure to comply with an academic requirement or regulation that is routine for all students or for a defined group of students.

## Administrative-Academic Disqualification

Students may be placed in administrative-academic disqualified status for continued failure to remedy the condition resulting in their being on administrative academic probation. Additionally, the President may designate a campus official to act for him or her in the disqualification of students not on probation when: 1) a student has, at the end of any term, fewer cumulative grade points than cumulative units attempted; and 2) the cumulative grade point deficiency is so great that, in view of the student's overall educational program, it seems unlikely that the deficiency will be corrected within a reasonable period of time. A student disqualified from the University may be reinstated only by special action.

## Reinstatement after Disqualification

No student is academically disqualified from the University on the basis of a single semester of unsatisfactory work unless eligible for Administrative-Academic Disqualification. However, a student who has been at the University for more than one semester and whose SSU grade point average results in disqualification will not be allowed to apply for readmission to the University until he/she has been away from the University for a period of time (generally a minimum of one semester) and has demonstrated academic success (or an equivalent experience) in another environment.

Disqualified students may be considered for reinstatement by petitioning to the University Standards Committee (in care of the Office of Admissions and Records). Petitions must be accompanied by evidence (such as satisfactory academic work elsewhere) that would justify reinstatement and a letter of support from the student's SSU major department. Petitions are reviewed and approved or denied by the University Standards Committee. Disqualified students who are reinstated will be on a probationary basis until all grade point deficiencies have been removed or until they are again disqualified. Students who have been reinstated after disqualification and then disqualified again will not be reinstated except under exceptional circumstances.

## Course Repeat

Undergraduate students may repeat a maximum of 24 units of courses taken at SSU. This maximum does not apply to courses that can be taken repeatedly for credit, such as certain P.E. and music courses (e.g. Kinesiology 101 or Music 325). Courses repeatable for credit are so indicated in the course catalog.

Up to the maximum of 24 units:

1. Students may, with permission of the department offering the course, repeat an SSU course. Courses must be repeated in the same grade mode (grade or credit/no credit) in which they were originally taken. Courses may also be repeated at another college campus as long as the department offering the course at SSU agrees, in advance and in writing (see "Course Repeat" form), that the course is an exact replacement for the relevant SSU course or a substantially equivalent course.
2. Students must file a "Course Repeat" form each time a course is repeated, no later than the Add/Drop deadline for the semester in which the course is repeated. Failure to file a course repeat form on time may affect the student's academic standing at the end of the semester. Please note that some departments limit the number of times a specific course may be repeated. See the course catalog for details.
3. A student may repeat a course to replace the grade ONLY if the first attempt resulted in a grade of $C-, D+, D, D-, F, W U$, NC, or IC. In this case, only the grade (even if it is lower) and units earned in the second attempt will be used in the SSU calculation of grade point average. The grade earned in the first attempt will be replaced on the student's transcript by the symbol "RPT." A student may repeat a given course to replace the grade only once, even if the second attempt results in a grade of C - or lower.
4. A student may also repeat a course without replacing the grade if the first attempt resulted in a grade of C , Credit, or better OR if a student chooses to retake a course in which the student has already replaced a grade. In this case, all grades for the course (excluding RPT) will be calculated in the Sonoma State grade point average. However, units from a repeated course will only count once toward graduation. (Thus a 3-unit course repeated once will only contribute 3 units, not 6 units, toward graduation.)
5. In any course or program where enrollment demand exceeds the resources to offer sufficient openings or sections to meet that demand, the academic unit may give enrollment priority to students taking the course for the first time.

## Excessive Enrollment

If a student enrolls in the same course beyond catalog limitations, units earned will not be counted toward a baccalaureate. The grades and any grade points earned, however, will be averaged with the student's other grades.

## Academic Renewal

The trustees of the California State University have established a program of academic renewal whereby students who are having difficulty meeting graduation requirements due to a grade point deficiency may petition to have up to two semesters or three quarters of previous college work discounted from all considerations associated with meeting requirements for the baccalaureate. Academic renewal is intended only to facilitate graduation from SSU and is not applicable for individuals who already possess a baccalaureate or who meet graduation requirements without the approval of a petition for academic renewal.

Conditions: To qualify for academic renewal, all of the following conditions established by the trustees must be met:

1. The student must present evidence in the petition that the coursework to be disregarded was substandard and not representative of the student's present scholastic ability and level of performance, because of extenuating circumstances.
2. The student must present evidence that if the petition is denied, it would be necessary for the student to enroll in additional coursework involving one or more additional terms in order to qualify for graduation. The student should include the specific coursework or requirements involved. Normally students should have completed 90 units prior to filing the petition.
3. Five years must have elapsed since the term or terms to be disregarded were completed. Terms taken at any institution may be disregarded.
4. Subsequent to the completion of the term(s) to be disregarded, the student must have completed the following coursework at Sonoma State University: 15 semester units with at least a 3.00 GPA , or 30 semester units with at least a 2.50 GPA, or 45 semester units with at least a 2.00 GPA.

If and when the petition is granted, the student's permanent academic record will be annotated so that it is readily evident to all users of the record that no work taken during the disregarded term(s), even if satisfactory, will apply toward baccalaureate graduation requirements. However, all work will remain legible on the record to ensure a true and complete academic history.

A final decision on the petition will be made by the University Standards Committee. The Committee will review petitions only if all of the basic requirements (indicated above) are met. Normally, students will be notified of the decision within 30 days after the completed petition is submitted.

## Class Attendance

Students should not miss classes except for valid reasons, such as illness, accidents, or participation in officially approved University activities. When students are absent from classes, it is their responsibility to inform the instructor of the reason for absence and to arrange to make up missed assignments and class work. Students should be cautioned that even though absences may be for valid reasons, such absences can impair performance and result in a lower grade.

## Graduate and Postbaccalaureate Regulations

1. No fewer than one-half of the units shall be in graduate (500level) courses.
2. A classified student must continue to demonstrate, throughout enrollment in the graduate program, the level of competence required to be successful in the completion of the requirements. This evaluation of competence is primarily the responsibility of faculty actively teaching in the program.
3. The master's program contract advances the student to candidacy and must be filed no later than the time the student files for graduation.
4. At least 21 semester units shall be completed in residence.
5. At least 18 semester units shall be completed in the major.
6. No more than 6 semester units shall be allowed for a thesis.
7. No more than 9 units of Extension or transfer credit (or combination of the two) may be allowed, subject to the approval of the department concerned.
8. No credit toward a master's degree will be given for student teaching in a credential program.
9. The candidate must complete a thesis, project, or comprehensive exam as required by the department. Culminating projects that are published by the library require review by the Graduate Studies Office, as well as the student's faculty committee. A public defense of the thesis or project is required.
10. Graduate students at Sonoma State University may, at the discretion of the department, take up to one-third of the total units applied to the master's degree in a nontraditional grading mode.
11. The student may take three semesters to complete the thesis/project following initial enrollment in the units. The SP grade will remain until the student submits the culminating project. Projects taking more than four semesters to complete will require approval by the Associate Vice Provost for Academic Programs and Graduate Studies, the appropriate campus authority, or re-enrollment in units.

## Change in Graduate Standing

Many students are admitted to the University in conditionally classified standing with contingencies to remove prior to becoming a classified student. This admission does not guarantee a space in the graduate program. Such a guarantee is obtained by a change in graduate standing to classified status verified by the program in question. Each department has its own procedures for granting the student a place in its program. At the time this status is confirmed, a Change in Graduate Status form is filed with the Admission and Records Office and the Graduate Studies Office confirming the department's approval of this change in status. Changes to graduate status may not be processed until the end of the semester.
Students who were graduated with a bachelor's degree from a foreign institution and change from working toward a second bachelor's to a graduate program must submit a TOEFL score of at least 550.

## Student Policies

## Privacy Rights of Students in Education Records

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) and regulations adopted thereunder (34 C.F.R. 99) set out requirements designed to protect students' privacy in their records maintained by the campus. The statute and regulations govern access to student records maintained by the campus and the release of such records. The law provides that the campus must give students access to records directly related to the student, and
must also provide opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statute and the regulations. Among the types of information included in the campus statement of policies and procedures are (1) the types of student records maintained and the information they contain; (2) the official responsible for maintaining each type of record; (3) the location of access lists indicating persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) student access rights to their records; (6) the procedures for challenging the content of student records; (7) the cost to be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is Family Policy Compliance Office, U.S. Department of Education, Washington, D.C. 20202-4605.
The campus is authorized under the Act to release "directory information" concerning students. "Directory information" may include the student's name; address; telephone listing; electronic mail address; photograph; date and place of birth; major field of study; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; grade level; enrollment status; degrees, honors, and awards received; and the most recent previous educational agency or institution attended by the student. The above-designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying information which the student requests not be released. Written objections should be sent to the Office of Admissions and Records.
The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in the campus's academic, administrative, or service functions and have reason for using student records associated with their campus or other related academic responsibilities. Student records may also be disclosed to other persons or organizations under certain conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; or to other institutions to which the student is transferring).
It is the policy of Sonoma State University to comply fully with the provisions of the Family Educational Rights and Privacy Act. That act requires educational institutions to define as "directory information" that information "contained in an education record that would generally not be considered harmful or an invasion of privacy if disclosed." Sonoma State University considers the following to be directory information:

Name
Address*
Telephone listing*
E-mail address*
Major field of study
Dates of attendance
Grade level
Enrollment status (e.g., graduate or undergraduate; full-time or part-time)
Participation in intercollegiate athletics
Degrees received
Most recent educational agency or institution attended.
*Verify only, and for valid educational reasons.
(Note that FERPA allows schools to disclose educational records, including but not limited to directory information, without consent to school officials with legitimate educational interests.)
It is the policy of Sonoma State University to disclose or verify the directory information regarding its students as listed above if requested to do so, unless an individual student has indicated in the student record system that he or she does not wish to have information disclosed or verified. Students are responsible for maintaining an accurate record of their FERPA intentions in the student record system.
In accordance with FERPA, information other than this directory information is released to third parties only when a valid written consent to disclose, signed by the student, is presented.

## Career Placement

Sonoma State University may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University System.

## Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act (PRAWORA) of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants as well as benefits for all illegal immigrants.
Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the new Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure.

## Pre-Enrollment Immunization Requirements

## Measles and Rubella (MMR)

The CSU System requires students born after 1956 to show official medical proof of immunization against measles and rubella prior to the start of their first semester of University classes. Two doses of appropriately timed measles and rubella vaccine (usually given as MMR) with the second shot after 1979 constitute appropriate immunization. Individuals who were immunized before 1979 or who have received only one dose of measles vaccine during their lifetime should receive an additional MMR immunization prior to enrollment. If the student is unable to locate proof of the first MMR, and he or she received K-12 schooling in California, the University will accept proof of one MMR on or after 4 years of age and after 1979, and presume this represents the second dose.

## Hepatitis B

The State of California also requires all students who are under age 19 at the time of first enrollment at a public university, to show proof of a series of three Hepatitis B immunizations or immunity to Hepatitis B prior to the start of their first semester of classes. Appropriate Hepatitis B immunization consists of a series of three shots over a minimum four-to six-month period, so prospective students should initiate and complete this series as soon as possible.

Entering students should locate documentation of previous immunizations and seek needed immunizations from their regular health care providers or local public health clinics ASAP.

Photocopies of official medical documentation of all required immunizations (or lab tests confirming immunity, or documentation of a need for medical or religious waiver) must be submitted as far in advance of enrollment as possible to:

## Sonoma State University

Office of Admissions and Records
ATTN: Immunization Requirements
1801 E. Cotati Ave.
Rohnert Park, CA, 94928
MMR and Hepatitis B shots are available at reduced cost at the Student Health Center to immediately entering, conditionally registered SSU students who have been unable to complete immunizations elsewhere. Students should not delay in meeting these pre-enrollment immunization requirements, as those who do not comply in a timely fashion will be prohibited from registering for subsequent classes or making course adjustments until the requirements have been met.

## Student Conduct / Judicial Affairs

Salazar Hall, 1018
(707) 664-2838

The President of the University has authority in disciplinary actions. In compliance with CSU Executive Order 970 the President may assign a campus official or officials to be the Student Conduct Administrator, whose responsibility is to determine whether to initiate disciplinary action under the Student Conduct Code. The Assistant Vice President for Student Affairs is the designated Student Conduct Administrator for this University.

## Philosophy

The University is committed to maintaining a safe and healthy living and learning environment for its students, faculty, staff, and the greater campus community. Each member of the campus community has an obligation to engage in behaviors that contribute toward these common goals. Every member of this living and learning community must assume responsibility for becoming educated about the policies, procedures, and standards followed at this institution.
Students will be held accountable for their actions when their behavior goes beyond what the Sonoma State University community considers to be reasonable and responsible. Students referred to the Student Conduct Administrator will participate in a disciplinary process which emphasizes education, tolerance, integrity, and respect.

Please refer to the Student Affairs and Enrollment Management website located at http://www.sonoma.edu/saem/ for additional information.

## Student Disciplinary Procedures

Inappropriate conduct by students or by applicants for admission is subject to disciplinary action by the University as provided in sections 41301 through 41304 of Title 5 of the California Code of Regulations. The purpose of the code is to provide procedures that are fair and just, both to the student charged and to the institution, by which it can be determined whether violations of conduct have occurred. A complaint against a student for an alleged violation of conduct (as defined in Sections 41301 through 41304 of Title 5) may be filed by a student, faculty member, staff member, University police officer, or community member. The complaint should be filed with the Student Conduct Administrator, who will investigate the alleged violation. The administrator will hold a conference with the student to obtain his or her response to the alleged misconduct and to determine if the complaint may be dealt with informally by mutual consent through a student discipline settlement agreement. If the allegations of misconduct have not been resolved informally by conference and the Student Conduct Administrator determines that formal disciplinary action should be taken, the Student Conduct Administrator shall initiate the disciplinary action process by written

Notice of Hearing. This notice shall be served in person or served by certified mail return receipt requested to the student charged at the last known address on campus records. For detailed information about the Notice of Hearing process and requirements, please refer to CSU Executive Order 970. At any point in the process, the student may waive a hearing and accept a sanction without admitting that he or she engaged in the conduct charged. The hearing will be conducted by a hearing officer, who will be an administrative officer of the University appointed by the President. The hearing officer will submit a report and recommendations to the President, who will decide the matter, notify the student, and take action as appropriate. Discipline that may be imposed includes, but is not limited to, probation, suspension, and expulsion.

## Student Discipline

Inappropriate conduct by students or by applicants for admission is subject to discipline as provided in Sections 41301 through 41304 of Title 5, California Code of Regulations. These sections are as follows:

## s 41301. Standards for Student Conduct

The University is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community must choose behaviors that contribute toward this end. Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.
(a) Student Responsibilities

Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their University, to be civil to one another and to others in the campus community, and to contribute positively to student and University life.
(b) Unacceptable Student Behaviors

The following behavior is subject to disciplinary sanctions:
(1) Dishonesty, including:
(A) Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.
(B) Furnishing false information to a University official, faculty member, or campus office.
(C) Forgery, alteration, or misuse of a University document, key, or identification instrument.
(D) Misrepresenting one's self to be an authorized agent of the University or one of its auxiliaries.
(2) Unauthorized entry into, presence in, use of, or misuse of University property.
(3) Willful, material, and substantial disruption or obstruction of a University-related activity, or any on-campus activity.
(4) Participating in an activity that substantially and materially disrupts the normal operations of the University, or infringes on the rights of members of the University community.
(5) Willful, material, and substantial obstruction of the free flow of pedestrian or other traffic, on or leading to campus property or an off-campus University related activity.
(6) Disorderly, lewd, indecent, or obscene behavior at a University related activity, or directed toward a member of the University community.
(7) Conduct that threatens or endangers the health or safety of any person within or related to the University community, including physical abuse, threats, intimidation, harassment, or sexual misconduct.
(8) Hazing, or conspiracy to haze, as defined in Education Code Sections 32050 and 32051:
"Hazing" includes any method of initiation or pre-initiation into a student organization, or any pastime or amusement engaged in with respect to such an organization which causes, or is likely to cause, bodily danger, physical harm, or personal degradation or disgrace resulting in physical or mental harm, to any student or other person attending any school, community college, college, university, or other educational institution in this state; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
A group of students acting together may be considered a "student organization" for purposes of this section whether or not they are officially recognized. Neither the express or implied consent of a victim of hazing, nor the lack of active participation while hazing is going on is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act and is also a violation of this section.
(9) Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia (except as expressly permitted by law and University regulations), or the misuse of legal pharmaceutical drugs.
(10) Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and University regulations), or public intoxication while on campus or at a University related activity.
(11) Theft of property or services from the University community, or misappropriation of University resources.
(12) Unauthorized destruction, or damage to University property or other property in the University community.
(13) Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the campus President) on campus or at a University related activity.
(14) Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.
(15) Misuse of computer facilities or resources, including:
(A) Unauthorized entry into a file, for any purpose.
(B) Unauthorized transfer of a file.
(C) Use of another's identification or password.
(D) Use of computing facilities, campus network, or other resources to interfere with the work of another member of the University community.
(E) Use of computing facilities and resources to send obscene or intimidating and abusive messages.
(F) Use of computing facilities and resources to interfere with normal University operations.
(G) Use of computing facilities and resources in violation of copyright laws.
(H) Violation of a campus computer use policy.
(16) Violation of any published University policy, rule, regulation, or Presidential order.
(17) Failure to comply with directions of or interference with, any University official or any public safety officer while acting in the performance of his/her duties.
(18) Any act chargeable as a violation of a federal, state, or local law that poses a substantial threat to the safety or well-being of members of the University community, to property within the University community, or poses a significant threat of disruption or interference with University operations.
(19) Violation of the Student Conduct Procedures, including:
(A) Falsification, distortion, or misrepresentation of information related to a student discipline matter.
(B) Disruption or interference with the orderly progress of a student discipline proceeding.
(C) Initiation of a student discipline proceeding in bad faith.
(D) Attempting to discourage another from participating in a student discipline matter.
(E) Attempting to influence the impartiality of any participant in a student discipline matter.
(F) Verbal or physical harassment or intimidation of any participant in a student discipline matter.
(G) Failure to comply with the sanction(s) imposed under a student discipline proceeding.
(20) Encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.
(c) Procedures for Enforcing This Code

The Chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the University imposes any sanction for a violation of the Student Conduct Code.
(d) Application of This Code

Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the University, is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with Education Code Section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.
Note: Authority cited: Sections 66017, 66452, 66600, 69810, 89030, and 89035, Education Code. Reference: Sections 66450, 69813 et seq. and 89030, Education Code.

## 41302. Disposition of Fees: Campus Emergency; Interim Suspension

The President of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such student for the semester, quarter, or summer session in which he or she is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension.

During periods of campus emergency, as determined by the President of the individual campus, the President may, after consultation with the Chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The President may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the President or designated representative, enter any campus of the California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

## 41303. Conduct by Applicants for Admission

Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302 . Admission or readmission may be qualified or denied to any person who, while a student, commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

## 41304. Student Disciplinary Procedures for the California State University

The Chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302 , and for qualified admission or denial of admission under Section 41303; the authority of the campus President in such matters; conduct related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a Hearing Officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The Chancellor shall report to the Board actions taken under this section.

## Compliance

For information on Sonoma State University's compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and the Drug Free Schools and Communities Act, please visit the Police and Parking Services website at www.sonoma.edu/ps/

## Student Grievance Procedures

Fairness Board
Stevenson 1071
(707) 664-2801
www.sonoma.edu/senate/FairnessBoard/FairnessBoard.html
A grievance may arise out of a decision or action reached or taken in the course of official duty by a member of the faculty, staff, or administration of Sonoma State University. The purpose of the grievance procedures is to provide a process for an impartial review and to ensure that the rights of students are properly recognized and protected. A student who wishes to initiate the grievance process should read the Grievance Policy, the Formal Dispute Resolution Policy, and may contact the current chair of the Fairness Board or the Academic Senate Office. The above mentioned policies can be found online at www.sonoma.edu/senate/FairnessBoard/FairnessBoard.html

In order to protect the rights of students and faculty, principles of due process are incorporated into the grade appeal procedures. A student who wishes to initiate a grade appeal procedure should read the Grade Appeal Policy, the Formal Dispute Resolution Policy, and may contact the current chair of the Fairness Board or the Academic Senate Office. The above mentioned policies can be found online at www.sonoma.edu/senate/FairnessBoard/FairnessBoard.html.

## Financial Aid Appeal Policy

Students have the right to appeal their financial aid award or any other financial aid decision that they feel affects them adversely and that falls outside of the jurisdiction of federal, state, or Chancellor's office regulations. This right includes answers to questions, explanations of financial aid policies and procedures, and a request for reconsideration. The initial appeal is made to the student's financial aid representative. After subsequent review by the Director of Financial Aid, the student's case may ultimately be presented to the Financial Aid Advisory Committee.

## Other Campus Policies

## Campus Smoking Policy

Sonoma State University has a responsibility to its employees and students to provide a safe and healthful environment. Research findings show that smoking and the breathing of secondhand smoke constitute a significant health hazard. In addition to direct health hazards, smoking contributes to institutional costs in other ways, including cleaning and maintenance costs and costs associated with employee absenteeism, health care, and medical insurance.

It is, therefore, the policy of Sonoma State University to prohibit smoking in campus buildings and certain other areas of the campus where nonsmokers cannot avoid exposure to smoke. Specifically, smoking is prohibited in all campus buildings, including classrooms, lecture halls, laboratories, offices, work areas, study areas, reception areas, meeting rooms, lobbies, hallways, stairwells, elevators, eating areas, lounges, and restrooms, and within 20 feet of all campus buildings. Furthermore, smoking is prohibited in all partially enclosed areas such as covered walkways, breezeways, walkways between sections of buildings, bus stop shelters, exterior stairways, and landings. Smoking is also prohibited in all state vehicles.

Smoking is permitted generally in outside grounds areas beyond 20 feet of all campus buildings except decks and patios associated with dining facilities, or if it unavoidably exposes people entering and leaving adjacent buildings to smoke, or when it is explicitly prohibited during a particular event or activity scheduled in the area (such as in bleachers or row seating at Commencement or athletic events).

Lit tobacco products must be extinguished, and tobacco residue must be placed in an appropriate ash can or other waste receptacle located outside of nonsmoking areas.

The sale or promotional distribution of tobacco products on campus is prohibited.

In addition to instituting the regulations above, the University on an ongoing basis makes available to employees and students information about the effects of smoking and secondhand smoke and about smoking-cessation programs-primarily through the Personnel Office, the Student Health Center, and the Alcohol and Drug Education Program.

Effective implementation of the Smoking Policy depends upon the courtesy, sensitivity, and cooperation of all members of the campus community. It is a normal and reasonable duty of all employees of Sonoma State University and its auxiliaries, and expected conduct by all students, to comply with this policy.

The Smoking Policy applies to all campus buildings and grounds owned, rented, or leased by Sonoma State University, including the Residential Community, Student Union Building, Commons, and Physical Education/Athletics facilities. All members of the campus community—students, faculty, and staff—as well as campus visitors are expected to comply with the provisions of the policy. The policy is made known to members of the campus community and visitors through the University Catalog, posted signs, and notices in campus publications.

## Nondiscrimination Policy

## Race, Color, and National Origin

The California State University complies with the requirements of Title VI and Title VII of the Civil Rights Act of 1964 as amended and the regulations adopted thereunder. No person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program of the California State University.

## Disability

The California State University does not discriminate on the basis of disability in admission or access to, or treatment or employment in, its programs and activities. Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder and the Americans with Disabilities Act of 1990 prohibit such discrimination. The Manager of Employee Relations and Diversity has been designated to coordinate the efforts of Sonoma State University to comply with these Acts and their implementing regulations. Inquiries concerning compliance may be addressed to this person at Salazar Hall 2078A and/or (707) 664-2281.

## Sex/Gender

The California State University does not discriminate on the basis of sex or gender in the educational programs or activities it conducts. Title IX of the Education Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of sex in education programs and activities operated by Sonoma State University. Such programs and activities include admission of students and employment. Inquiries concerning the application of Title IX to programs and activities of Sonoma State University may be referred to the Manager of Employee Relations and Diversity, the campus officer(s) assigned the administrative responsibility of reviewing such matters, or to the Regional Director of the Office of Civil Rights, Region IX, 50 United Nations Plaza, Room 239, San Francisco, California 94102.

The California State University is committed to providing equal opportunities to male and female CSU students in all campus programs, including intercollegiate athletics.

## Sexual Orientation

By CSU Board of Trustees policy, the California State University does not discriminate on the basis of sexual orientation.

For policies and procedures specific to Sonoma State University, visit these websites:

SSU Nondiscrimination Policy
www.sonoma.edu/UAffairs/policies/non-discrimination.htm
SSU Discrimination Complaint Procedures
www.sonoma.edu/hs/erc/docs/dis_complaint_proced.doc

## Discrimination Complaint Procedures

Students, staff, faculty, and administrators are regularly informed of the University's policies and procedures regarding discrimination and sexual harassment/sexual assault policies and complaint procedures. In addition, all supervisors are regularly informed of their responsibility regarding complaints made against those whom they supervise.
All employees and students, female or male, who believe they have been subjected to discrimination, including sexual harassment and sexual assault, have several ways to make their concerns known. Regardless of the means selected for resolving allegations of discrimination (including sexual harassment and sexual assault), the initiation of a complaint will not cause any reflection on the reporting party nor will it affect such person's future business dealings with the University, his or her employment, compensation or work assignments, or in the case of students, grades, class selection, or other matters pertaining to his or her status as a student at the University. Every effort should be made to resolve any incident as soon as possible while the facts and potential testimony of witnesses, if any, are current.

Any complaint alleging discrimination, including sexual harassment or sexual assault, will be investigated according to the SSU affirmative action and nondiscrimination policy and discrimination complaint procedures. This investigation will result in findings being made and if necessary, recommendations for sanctions, and will serve as the investigation normally carried out prior to deciding to initiate discipline. Facts gathered and any findings made during an informal or formal resolution process may be sufficient to obligate the University to take disciplinary action against a faculty member, staff member, or student, or for the University to initiate a criminal investigation. If the University pursues disciplinary action against an alleged violator, a hearing may be required. In cases alleging sexual harassment/sexual assault, if both housing discipline and student discipline are initiated and require a hearing, the housing and student discipline hearings will be combined into one hearing. Due process guarantees exist under the student discipline process and the appropriate employee disciplinary procedures.

Complaints of discrimination and/or sexual harassment/sexual assault will be investigated promptly and thoroughly. The University recognizes that under certain circumstances, it has an independent duty to ascertain where discrimination or sexual harassment/sexual assault exists irrespective of whether a complaint is actually filed (for example, concerns of sexual harassment involving physical contact, recurrent or systematic patterns of discrimination, and/or sexual assault involving a University employee or student).

Sonoma State University's sexual assault guidelines, which are included in the discrimination complaint procedures, describe the support available to a victim, reporting procedures and University disciplinary procedures, and sanctions for students. Sexual assault is a form of sexual harassment and is also a violation of the criminal code. If a sexual assault report is made to any campus officer, the Sexual Violence Prevention Educator and the Director of Employee Diversity and University Compliance will be notified. If possible, the reporting party will be provided with the option of participating in an initial meeting to be held that includes the Sexual Violence Prevention Educator, the Director of Employee Diversity and University Compliance, and an officer from the University Police to advise the victim of various reporting options.

It is the policy of Sonoma State University that retaliation against reporting parties is prohibited. The University acts vigorously to prevent any retaliation being taken against those initiating inquiries or filing complaints; retaliation constitutes separate grounds for filing a complaint with these procedures and for potential disciplinary action against the alleged violator.

Where discrimination or sexual harassment/sexual assault has been found to occur, the University and its auxiliary organizations will impose sanctions on the individual determined to have engaged in sexually harassing or discriminatory conduct or communication at a level appropriate to the scale and scope of the violation.

Those who are considering taking action are urged to meet with the Director of Employee Diversity and University Compliance prior to filing a complaint. Discussions at this stage can be confidential and are meant to assist in the process of determining which
reporting options are most appropriate. Every effort will be made to resolve potential complaints at the lowest level possible and consistent with the desires of the person bringing forward the complaint. All current faculty, students, staff, and administrators may use the discrimination complaint process for resolving sexual harassment, sexual assault, and discrimination complaints and/or documenting that the individual has resolved a complaint. All students, faculty, or staff who believe that they may have been discriminated against, sexually harassed, or sexually assaulted should obtain a copy of the SSU discrimination complaint procedures by contacting Human Services, AFC \#1, (707) 664-2664, or through our webpage at www. sonoma.edu/Hs/aa.html.

## Course Policy

The University Course Outline Policy states faculty shall provide students with course outlines that are compatible with course descriptions in the university catalog. Course outlines shall be provided to students in writing or electronic format within the first full week of classes and must include the following items:

1. Name of instructor, office location, office hours, office telephone number, and email address.
2. Course number, title, and general course description including the course format, materials, and prerequisites, if any.
3. Course goals and objectives.
4. Course requirements such as written work, exams, quizzes, projects, labs, fieldwork, attendance, etc., and a tentative schedule of assignments and exams.
5. Grading policy (the relative weight of course requirements).
6. Indicate the G.E. area of the course, if applicable.

In addition, faculty are strongly encouraged to include the following items:

- Courses listed as General Education courses should print or provide URL reference to the Mission Goals and Objectives (MGOs) of General Education at SSU.
- As a reminder to the students, language such as the following is strongly recommended: "There are important University policies that you should be aware of, such as the add/drop policy; cheating and plagiarism policy, grade appeal procedures; accommodations for students with disabilities and the diversity vision statement. (Go to this URL to find them: http:// www.sonoma.edu/uaffairs/policies/studentinfo.shtml)

Changes in the course outline should be communicated to students in a timely manner. Activities scheduled outside of regular class meetings, e.g. fieldtrips, may not be added as required course work after the add/drop deadline. Faculty shall inform students that it is their responsibility to read the course outline and to request any clarification of course policies. If the student adds the course after the first full week of class, it is the student's responsibility to obtain information about the course.

## UNIVERSITY SUPPORT SERVICES

Alumni Association
Stevenson Hall 1027
(707) 664-2426

## DIRECTOR OF ALUMNI RELATIONS AND DEVELOPMENT

 Kate McClintockThe Sonoma State University Alumni Association develops and maintains interaction with alumni, students, faculty, staff, and the community. The association provides membership services, programs, and special events for its alumni, and supports the University through direct contributions and the resources of its broad network of alumni. The association awards the Ambrose R. Nichols Scholarship and the Ronald 0. Logsdon Jr. Scholarships. In addition, the association sponsors the annual Distinguished Alumni Awards.

Membership in the Alumni Association is open to any individual who has attended Sonoma State University; associate membership is available for non-graduates. New graduates receive a complimentary one-year membership and the second year at a discounted rate. Membership benefits include: No annual fee and low percentage rate on Bank of America WorldPoints® card; access to group medical, dental, and vision insurance; library privileges at SSU and all 23 CSU campuses; discounts for auto and home insurance; student loan consolidation opportunities; discounts for SSU athletics and performing arts events; discounts on Lifelong Learning and Excel youth program courses; Alumnotes and E-Connection newsletters; special rates at the campus Recreation Center; access and discounted annual fee for Career Services; and much more. Life, annual, and family memberships are available. Please visit our website at www.ssualumni.org

## Office of Development

Stevenson Hall 1024
(707) 664-2712

VICE PRESIDENT
Patricia McNeill
The Office of Development is responsible for coordinating private philanthropic support for Sonoma State University among its many constituents. Fundraising efforts are carried out through comprehensive campaigns, an annual fund drive, a planned giving program, and a memorial giving program. Contributions are sought for unrestricted purposes, scholarships, student talent awards, faculty development, departmental funds, and capital campaigns. Donors may designate their gifts to be used for immediate purposes or to establish or add to permanently endowed funds.

## Office of Research and Sponsored Programs

Stevenson 1041
(707) 664-2448

## VICE PROVOST OF ACADEMIC AFFAIRS <br> Carol Blackshire-Belay

The Office of Research and Sponsored Programs (ORSP) provides assistance and resources to SSU faculty and staff pursuing internal and external funding for educational and academic activities. ORSP's mission is to provide a wide range of services to help identify funding sources and craft competitive proposals. The office also provides guidance on University policies and handles all aspects of the internal endorsement process. Specific services include the following:

- Disseminating information on grants available from government and private sponsors;
- Assisting in developing projects, writing proposals, and formulating budgets;
- Managing the campus approval process to ensure compliance with agency guidelines as well as with University policies related to grants;
- Supporting the Faculty Subcommittee on Sponsored Programs in developing requests for proposals for the grant programs that are managed internally by SSU, reviewing those proposals, recommending funding, and administering the eventual awards;
- Reviewing submissions to the Institutional Review Board of protocols for research involving human subjects; and
- Conducting faculty workshops on grant writing.


## Sonoma State Enterprises, Inc.

(707) 664-4068

CHIEF OPERATING OFFICER
Neil Markley
Sonoma State Enterprises, Inc., is a not-for-profit, auxiliary corporation of Sonoma State University, established to provide services that are not eligible for state funding, but are nonetheless crucial to the life of the campus. Sonoma State Enterprises operates retail, dining, and general service functions including Seawolf Shops, Ameci's Pizza and Pasta, Charlie Brown's Café, The Commons, The Pub, Toast, the University Club, Zinfandel Dining Hall, Zinfandel Marketplace, Reprographics, Koda Copy Center, Zinfandel Post Office, and refrigerator rentals. Enterprises' net proceeds, after establishment of appropriate reserves, are provided to the University in support of the educational mission. The corporation is governed by a policymaking board of directors comprised of faculty, staff, students, administrators, and community members.

## Sonoma State University Academic Foundation

VICE PRESIDENT AND CHIEF OPERATING OFFICER
Lawrence Furukawa-Schlereth
The Sonoma State University Academic Foundation, Inc., is a public service, not-for-profit corporation established in 1974 to promote the development programs of the University. The foundation's principal mission is to receive and administer gifts, endowments, scholarships, and planned giving that enhance and promote Sonoma State University's educational mission. The activities of the foundation are directed by a board of community, student, faculty, and administrative representatives. The foundation is a CSU auxiliary organization, as defined in Title 5 of the California Code of Regulations.

## University Affairs

Stevenson Hall 1064
(707) 664-2732

VICE PRESIDENT
Dan Condron
The University Affairs Office coordinates the public, media, and government relations for SSU, and it provides communications, marketing, creative, and event planning services to the University community. One of its primary functions is to communicate information about the University to students, faculty, staff, alumni, and the community. The office responds to media inquiries and actively works to place stories about the University in local, regional, and national publications and broadcasts. It also oversees the faculty and staff newsletter, NewsBytes, the Experts Guide, the University magazine Insights, the Schedule of Classes, and the University catalog, as well as various special communications projects for academic and administrative areas. In conjunction with Information Technology, staff members develop content and design for the SSU website.

Additional responsibilities include maintaining relations with government leaders and public agencies, maintaining several websites for the campus, and working closely with the Development Office and the Alumni Association in support of University advancement and community outreach efforts.

## THE CALIFORNIA STATE UNIVERSITY

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became the California State University and Colleges, and in 1982 the system became the California State University. Today the campuses of the CSU include comprehensive and polytechnic universities and, since July 1995, the California Maritime Academy, a specialized campus.

The oldest campus-San José State University-was founded in 1857 and became the first institution of public higher education in California. The newest-CSU Channel Islands-opened in fall 2002, with freshmen arriving in fall 2003.

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

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

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

The CSU offers more than 1,800 bachelor's and master's degree programs in some 240 subject areas. Many of these programs are offered so that students can complete all upper division and graduate requirements by part-time, late afternoon, and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California. In 2005, the CSU was authorized to independently offer educational doctorate (Ed.D.) programs, and seven CSU campuses launched their Ed.D. programs in fall 2007.
Enrollments in fall 2005 totaled 417,000 students, who were taught by some 23,000 faculty. The system awards about half of the bachelor's degrees and a third of the master's degrees granted in California. Nearly 2 million persons have been graduated from CSU campuses since 1961.

## TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

## EX OFFICIO TRUSTEES

The Honorable Arnold Schwarzenegger
Governor of California
The Honorable John Garamendi
Lieutenant Governor of California
The Honorable Fabian Núñez
Speaker of the Assembly
The Honorable Jack O'Connell
State Superintendent of Public Instruction
Dr. Charles B. Reed
Chancellor of The California State University

State Capitol

Sacramento 95814
State Capitol
Sacramento 95814
State Capitol
Sacramento 95814
721 Capitol Mall
Sacramento 95814
401 Golden Shore
Long Beach
90802-4210

## OFFICERS OF THE TRUSTEES

The Honorable Arnold Schwarzenegger
Roberta Achtenberg
Jeffrey L. Bleich
Christine Helwick
Richard P. West

President
Vice Chair Chair
Secretary
Treasurer

## APPOINTED TRUSTEES

Appointments are for a term of eight years, except student, alumni, and faculty trustees, whose terms are for two years. Terms expire in the year in parentheses. Names are listed alphabetically.

Roberta Achtenberg (2015)
Jeffrey Bleich (2010)
Herbert L. Carter (2011)
Carol Chandler (2012)
Debra S. Farar (2014)
Kenneth Fong (2013)
George Gowgani (2010)
Melina Guzman (2012)
William Hauck (2009)
Raymond W. Holdsworth, Jr. (2011)
Ricardo F. Icaza (2008)
Bob Linscheid (2009)
Peter Mehas (2015)
Henry Mendoza (2008)
Lou Monville (2014)
Jennifer Reimer (2008)
Craig Smith (2009)
Glen Toney (2013)
Kyriakos Tsakopoulos (2009)

Correspondence with Trustees should be sent to:
c/0 Trustees Secretariat
The California State University
401 Golden Shore
Long Beach, California 90802-4210

## OFFICE OF THE CHANCELLOR

The California State University
401 Golden Shore
Long Beach, California 90802-4210
(562) 951-4000

| Dr. Charles B. Reed | Chancellor - CSU System |
| :--- | :--- |
| Dr. Gary Reichard | Executive Vice Chancellor and <br> Chief Academic Officer |
| Mr. Richard P. West | Executive Vice Chancellor and <br> Chief Financial Officer |
| Ms. Gail Brooks | Interim Vice Chancellor, Human Resources |
| Ms. Christine Helwick | General Counsel |
| Dr. Keith Boyum | Associate Vice Chancellor, |
|  | Academic Affairs |

## CAMPUSES - THE CALIFORNIA STATE UNIVERSITY

California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, CA 93311-1099
Dr. Horace Mitchell, President
(661) 654-2782
www.csub.edu
California State University, Channel Islands
One University Drive
Camarillo, CA 93012
Dr. Richard Rush, President
(805) 437-8400
www.csuci.edu
California State University, Chico
400 West First Street
Chico, CA 95929-0150
Dr. Paul J. Zingg, President
(530) 898-4636
www.csuchico.edu
California State University,
Dominguez Hills
1000 East Victoria Street
Carson, CA 90747-0005
Dr. Mildred Garcia, President
(310) 243-3300
www.csudh.edu

California State University, East Bay
25800 Carlos Bee Boulevard
Hayward, CA 94542
Dr. Mohammad Qayoumi, President
(510) 885-3000
www.csueastbay.edu
California State University, Fresno
5241 North Maple Avenue
Fresno, CA 93740
Dr. John D. Welty, President
(559) 278-4240
www.csufresno.edu
California State University, Fullerton
800 N. State College Boulevard
Fullerton, CA 92834-9480
Dr. Milton A. Gordon, President
(714) 278-2011
www.fullerton.edu
Humboldt State University
One Harpst Street
Arcata, CA 95521-8299
Dr. Rollin C. Richmond, President
(707) 826-3011
www.humboldt.edu
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-0115
Dr. F. King Alexander, President
(562) 985-4111
www.csulb.edu
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
Dr. James M. Rosser, President
(323) 343-3000
www.calstatela.edu
California Maritime Academy
200 Maritime Academy Drive
Vallejo, CA 94590
Dr. William B. Eisenhardt, President
(707) 654-1000
www.csum.edu
California State University, Monterey Bay
100 Campus Center
Seaside, CA 93955-8001
Dr. Dianne Harrison, President
(831) 582-3330
www.csumb.edu

California State University, Northridge
18111 Nordhoff Street
Northridge, CA 91330
Dr. Jolene Koester, President
(818) 677-1200
www.csun.edu
California State Polytechnic University, Pomona
3801 W. Temple Avenue
Pomona, CA 91768
Dr. J. Michael Ortiz, President
(909) 869-2290
www.csupomona.edu
California State University, Sacramento
6000 J Street
Sacramento, CA 95819
Dr. Alexander Gonzalez, President
(916) 278-6011
www.csus.edu
California State University, San Bernardino
5500 University Parkway
San Bernardino, CA 92407-2397
Dr. Albert K. Karnig, President
(909) 880-5000
www.csusb.edu
San Diego State University
5500 Campanile Drive
San Diego, CA 92182
Dr. Stephen L. Weber, President
(619) 594-5000
www.sdsu.edu
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132
Dr. Robert A. Corrigan, President
(415) 338-1111
www.sfsu.edu

San José State University
One Washington Square
San Jose, CA 95192-0001
Mr. Don Kassing, President
(408) 924-1000
www.sjsu.edu
California Polytechnic State University, San Luis Obispo
One Grand Avenue
San Luis Obispo, CA 93407
Dr. Warren J. Baker, President
(805) 756-1111
www.calpoly.edu
California State University, San Marcos
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-0001
Dr. Karen S. Haynes, President
(760) 750-4000
www.csusm.edu
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928-3609
Dr. Ruben Armiñana, President
(707) 664-2880
www.sonoma.edu
California State University, Stanislaus
One University Circle
Turlock, CA 95382-0299
Dr. Hamid Shirvani, President
(209) 667-3122
www.csustan.edu

## MAP OF CSU CAMPUS LOCATIONS

## CSU A world of information is just a click away.

Check out the admission website for the entire California State University: www.csumentor.edu. You will find helpful hints, frequently asked questions, campus tours, and general information about all 23 campuses.


1 California State University, Bakersfield • Q
9001 Stockdale Highway, Bakersfield, CA 93311-1022 (661) 654-3036 • www.csubak.edu

2 California State University, Channel Islands.S One University Drive, Camarillo, CA 93012 (805) 437-8500 • www.csuci.edu

3 California State University, Chico - S 400 W. First Street, Chico, CA 95929-0722 (530) 898-6321 • www.csuchico.edu

4 California State University, Dominguez Hills • S 1000 East Victoria Street, Carson, CA 90747 (310) 243-3696 • www.csudh.edu

5 California State University, East Bay • Q 25800 Carlos Bee Blvd., Hayward, CA 94542-3035 (510) 885-2784 • www.csueastbay.edu

6 California State University, Fresno - S 5150 North Maple Avenue, Fresno, CA 93740-0057 (559) 278-2261 • www.csufresno.edu

7 California State University, Fullerton - S 800 N. State College Blvd., Fullerton, CA 92831-3599 (714) 278-2300 • www.fullerton.edu

8 Humboldt State University • S
1 Harpst Street, Arcata, CA 95521-8299 (707) 826-4402 • (866) 850-9556 • www.humboldt.edu

[^8]9 California State University, Long Beach •S 1250 Bellflower Blvd., Long Beach, CA 90840-0106 (562) 985-5471 • www.csulb.edu

10 California State University, Los Angeles • Q 5151 State University Drive, Los Angeles, CA 90032-8530 (323) 343-2752 • www.calstatela.edu

11 California Maritime Academy •S 200 Maritime Academy Drive, Vallejo, CA 94590-8181 (800) 561-1945 • www.csum.edu

12 California State University, Monterey Bay •S 100 Campus Center Drive, Seaside, CA 93955-8001 (831) 582-3518 • www.csumb.edu

13 California State University, Northridge • S 18111 Nordhoff Street, Northridge, CA 91330-8207 (818) 677-3700 • www.csun.edu

14 California State Polytechnic University, Pomona - Q 3801 West Temple Avenue, Pomona, CA 91768-4003 (909) 869-3210 • www.csupomona.edu

15 California State University, Sacramento - S 6000 J Street, Sacramento, CA 95819-6112 (916) 278-3901 • www.csus.edu

16 California State University, San Bernardino - Q 5500 University Parkway, San Bernardino, CA 92407-2397 (909) 537-5188 • www.csusb.edu

17 San Diego State University •S 5500 Campanile Drive, San Diego, CA 92182-7455 (619) 594-6336 • www.sdsu.edu

18 San Francisco State University •S 1600 Holloway Avenue, San Francisco, CA 94132-4002 (415) 338-1113 • www.sfsu.edu

19 San José State University • S One Washington Square, San José, CA 95192-0016 (408) 283-7500 • www.sjsu.edu

20 California Polytechnic State University, San Luis Obispo - Q San Luis Obispo, CA 93407 (805) 756-2311 • www.calpoly.edu

21 California State University, San Marcos • S Office of Admissions, 333 S . Twin Oaks Valley Road San Marcos, CA 92096-0001 (760) 750-4848 • www.csusm.edu

22 Sonoma State University •S 1801 East Cotati Avenue, Rohnert Park, CA 94928 (707) 664-2778 • www.sonoma.edu

23 California State University, Stanislaus • 4-1-4 One University Circle, Turlock, CA 95382 (209) 667-3070 • www.csustan.edu

## ADMINISTRATION \& FACULTY



## ADMINISTRATION

## President

Ruben Armiñana
Provost and Vice President for Academic Affairs
Eduardo M. Ochoa, Ph.D.
DEAN, SCHOOL OF ARTS AND HUMANITIES
William Babula, Ph.D.
DEAN, SCHOOL OF BUSINESS AND ECONOMICS
William Silver, Ph.D.
DEAN, SCHOOL OF EDUCATION
Mary Gendernalik-Cooper, Ph.D.
DEAN, SCHOOL OF EXTENDED EDUCATION
Mark Merickel, Ph. D.
DEAN, SCHOOL OF SCIENCE AND TECHNOLOGY
Saeid Rahimi, Ph.D.
DEAN, SCHOOL OF SOCIAL SCIENCES
Elaine Leeder, Ph.D.
DEAN OF THE LIBRARY
Barbara Butler, M.L.I.S.
INTERIM VICE PROVOST FOR ACADEMIC AFFAIRS
Melinda Barnard, Ph.D.
DIRECTOR, ACADEMIC PERSONNEL
Sally Sacchetto, B.S.
ASSOCIATE VICE PRESIDENT FOR ACADEMIC RESOURCES Kathleen R. Pierce, B.A.

ASSOCIATE VICE PRESIDENT FOR INSTITUTIONAL RESEARCH L. Rose Bruce, Ph.D.

INTERIM DIRECTOR OF RESEARCH AND SPONSORED PROGRAMS
Barbara Crandell, B.S.
ASSOCIATE VICE PROVOST FOR ACADEMIC PROGRAMS
Elaine Sundberg, M.A.
DIRECTOR, ACADEMIC SCHEDULING
Vanessa Franklin
Vice President for Administration and Finance
Laurence Furukawa-Schlereth, M.B.A.
ASSOCIATE VICE PRESIDENT FOR ADMINISTRATION AND FINANCE
Letitia Coate, B.A., C.P.A.
SENIOR DIRECTOR, CAPITAL PLANNING, DESIGN, AND
CONSTRUCTION
Christopher Dinno, B.A.

UNIVERSITY TREASURER
William Ingels, B.B.A., M.P.A.
SENIOR DIRECTOR, POLICE AND PARKING SERVICES AND CHIEF OF POLICE
Nate Johnson, Ed.D.
SENIOR DIRECTOR, RISK MANAGEMENT
Richard Ludmerer, J.D.
SENIOR DIRECTOR, FACILITIES SERVICES
Richard Marker, B.S.
SENIOR DIRECTOR, ENTREPRENEURIAL SERVICES Neil Markley, M.B.A.

SENIOR DIRECTOR, UNIVERSITY BUSINESS SERVICES Gloria 0gg, B.A.

SENIOR DIRECTOR, UNIVERSITY BUDGET
Janice Peterson
EXECUTIVE DIRECTOR, DONALD AND MAUREEN GREEN MUSIC CENTER
Floyd Ross, B.A.
SENIOR DIRECTOR, INFORMATION TECHNOLOGY AND CHIEF INFORMATION OFFICER
Sam Scalise, M.S.
INTERIM SENIOR DIRECTOR, COMMON MANAGEMENT SYSTEMS
Jason Wenrick, M.A.
Interim Vice President for Student Affairs and Enrollment Management
Matthew Lopez-Phillips, M.S.
ASSISTANT VICE PRESIDENT FOR STUDENT AFFAIRS AND
ENROLLMENT MANAGEMENT - STUDENT ACADEMIC
SERVICES
Chuck Rhodes, M.S.
DIRECTOR, ADMISSIONS
Gustavo Flores, B.A.
MANAGING DIRECTOR, ADVISING, CAREER \& EOP SERVICES
Joyce Chong, M.A.
EXECUTIVE DIRECTOR, ASSOCIATED STUDENTS, INC.
Erik Dickson, M.A.
DIRECTOR, ATHLETICS
William Fusco, M.A.
DIRECTOR, CENTER FOR STUDENT LEADERSHIP,
INVOLVEMENT, AND SERVICE
Heather Howard, M.P.A.

DIRECTOR, CHILDREN'S SCHOOL
Lia Thompson-Clark, M.A.
DIRECTOR, COUNSELING AND PSYCHOLOGICAL SERVICES
Lisa Wyatt, Ph.D.
DIRECTOR, DISABILITIES SERVICES FOR STUDENTS
Lisa Wyatt, Ph.D.
DIRECTOR, MARKETING/COMMUNICATIONS
Sandra Bannister, B.A.
DIRECTOR, RESIDENTIAL LIFE
Cyndie Morozumi, M.S.
EXECUTIVE DIRECTOR, SONOMA STUDENT UNION, CORP.
Peter Neville, M.S.
MEDICAL DIRECTOR, STUDENT HEALTH CENTER
Georgia Schwartz, M.D.
UNIVERSITY REGISTRAR
Lisa Noto, B.A.
EXECUTIVE DIRECTOR, UNIVERSITY SUPPORT AND PREPARATION SERVICES
D. Matthew Benney, M.Ed.

## Vice President for University Affairs

Dan Condron, M.S.E.E.
ASSOCIATE VICE PRESIDENT FOR MARKETING AND
COMMUNICATIONS
Susan Kashack, M.A.
DIRECTOR, CREATIVE SERVICES
Sandra L. Destiny, M.A.J.
SPECIAL EVENTS MANAGER, EXECUTIVE DIVISION
Jill Voelker, B.A.

## Vice President for Development \& Alumni Relations

Patricia McNeill, M.A.
ASSOCIATE VICE PRESIDENT FOR DEVELOPMENT
Robin Draper, B.A.
DIRECTOR, ALUMNI RELATIONS AND DEVELOPMENT Kate McClintock, M.A.

DIRECTOR, DEVELOPMENT
Kristin Berger, M.A.

## FACULTY LISTING

Dates listed in parentheses indicate year of appointment to Sonoma State University.
List As of March 2008
Judith E. Abbott (1991)
Professor, History
B.A. 1970, University of Minnesota
M.A. 1977, Ph.D. 1989, University of Connecticut

Leslie K. Adler (1970)
Professor, Hutchins School of Liberal Studies
B.A. 1963, University of New Mexico
M.A. 1965, Ph.D. 1970, University of California, Berkeley

## Jagannath P. Agrawal (2001)

Professor, Computer and Engineering Science
B.E. 1966, University of Allahabad
M.S. 1969, University of Cincinnati

Ph.D. 1972, North Carolina State University
Theresa Alfaro Velcamp (2003)
Associate Professor, History
B.A. 1989, California Polytechnic State University, San Luis Obispo
M.S. 1990, London School of Economics and Political Science
M.A. 1995, Ph.D. 2001, Georgetown University

Sherri C. Anderson (1980)
Professor, Business Administration
B.A. (Art) 1973, B.A. (Management) 1977, Sonoma State University C.P.A. 1980, M.B.A. 1983, San Francisco State University

## Anthony Apolloni (1990)

Professor, Political Science
B.S. 1968, M.A. 1969, Memphis State University

Ph.D. 1975, George Peabody College

## Ruben Armiñana (1992)

President, Sonoma State University; Professor, Political Science
A.A. 1966, Hill College
B.A. 1968, M.A. 1970, University of Texas at Austin

Ph.D. 1983, University of New Orleans

## Thomas S. Atkin (2001)

Associate Professor, Business Administration
B.A. 1970, M.B.A. 1980, Ph.D. 2001, Michigan State University

## Carlos C. Ayala (2002)

Associate Professor, Curriculum Studies and Secondary Education
B.A. 1985, University of California, Santa Cruz
M.A. 1995, San Diego State University

Ph.D. 2002, Stanford University

Emiliano C. Ayala (2000)
Associate Professor, Educational Leadership and Special Education
B.A. 1986, University of California, Santa Cruz
M.S. 1989, San Diego State University

Ph.D. 2000, San Diego State University/Claremont Graduate University

## William Babula (1981)

Dean, School of Arts and Humanities; Professor, English
B.A. 1965, Rutgers University
M.A. 1967, Ph.D. 1969, University of California, Berkeley

Chiara D. Bacigalupa (2007)
Assistant Professor, Literacy Studies and Elementary Education
B.A. 1987, University of California, Santa Cruz
M.A. 1991, California State University, Northridge

Ph.D. 2005, University of Minnesota
Melinda C. Barnard (1990)
Professor, Communication Studies
B.A. 1975, Stanford University
M.A. 1976, Harvard University

Ph.D. 1986, Stanford University

## William J. Barnier (1969)

Professor, Mathematics and Statistics
B.A. 1961, M.S. 1963, San Diego State College

Ph.D. 1967, University of California, Los Angeles

## Edward J. Beebout (2007)

Assistant Professor, Communication Studies
B.A. 1981, Humboldt State University
M.S. 1983, Iowa State University

Roger V. Bell, Jr. (1995)
Professor, Philosophy
A.B. 1966, University of California, Berkeley
M.A. 1971, San Francisco State University

Ph.D. 1975, State University of New York at Stony Brook
Carlos A. Benito (1990)
Professor, Economics
C.P.A. 1962, Licenciado 1964, Universidad Nacional de Cuyo, Argentina
M.A. 1971, Ph.D. 1973, University of California, Davis

Anthony Bish (1995)
Professor, Theatre Arts
B.A. 1984, Indiana University
M.F.A. 1989, Temple University

Stephen Bittner (2002)
Associate Professor, History
B.A. 1993, University of Michigan
M.A. 1994, Ph.D. 2000, University of Chicago

Barbara E. Bloom (2000)
Associate Professor, Criminology and Criminal Justice B.A. 1979, M.S.W. 1981, San Francisco State University M.A. 1993, Ph.D. 1996, University of California, Riverside

Wanda L. Boda (1994)
Professor, Kinesiology
B.S. 1982, University of California, Irvine
M.A. 1986, University of Texas at Austin

Ph.D. 1991, University of Massachusetts at Amherst
Florence G. Bouvet (2007)
Assistant Professor, Economics
B.A. 2000, Institut D'Etudes Politiques
M.A. 2002, Ph.D. 2006, University of California, Davis

## N. Samuel Brannen II (1999)

Associate Professor, Mathematics and Statistics
B.A. 1993, University of California, Berkeley
M.A. 1991, Ph.D. 1994, University of California, Davis

Glenn Brassington (2002)
Associate Professor, Psychology
B.A. 1985, St. Joseph's College Seminary
M.A. 1993, San Jose State University

Ph.D. 2000, University of Missouri-Columbia
Karen J. Brodsky (1999)
Associate Librarian
B.A. 1987, University of California, Berkeley
M.L.S. 1997, Simmons College

Brantley L. Bryant (2007)
Assistant Professor, English
B.A. Swarthmore College
M.A. 2000, Ph.D. 2007, Columbia University

## Maureen A. Buckley (1998)

Professor, Counseling
B.A. 1987, Bates College
M.A. 1990, Ph.D. 1995, Boston College

Eric Bullock (2005)
Assistant Professor, Chemistry
B.A. 1980, B.S. 1980, University of Washington

Ph.D. 1988, University of Hawaii

## Elizabeth Ann Burch (1998)

Associate Professor, Communication Studies
B.A. 1985, California State University, Hayward
M.A. 1991, San Francisco State University

Ph.D. 1997, Michigan State University

## Barbara Butler (1994)

Dean, University Library; Librarian
B.A. 1966, McGill University, Canada
M.L.I.S. 1971, University of Hawaii, Honolulu

Noel T. Byrne (1978)
Professor, Sociology
B.A. 1971, Sonoma State College
M.A. 1975, Ph.D. 1987, Rutgers University

## Sharon L. Cabaniss (1990)

Professor, Mathematics and Statistics
B.A. 1968, University of California, Berkeley
B.A. 1981, San Jose State University
M.A. 1984, Ph.D. 1986, University of California, Santa Cruz

## Marco Calavita (2003)

Associate Professor, Communication Studies
B.A. 1992, University of California, Santa Cruz
M.A. 1996, Ph.D. 2001, New York University

Richard Camphell, Jr. (2005)
Assistant Professor, Business Administration
B.S. 1990, St. Mary's College
M.A. 1996, University of San Francisco

Ph.D. 2002, University of Oregon
Ellen B. Carlton (1990)
Professor, Kinesiology
B.A. 1975, University of California, Berkeley
M.S. 1982, California State University, Hayward

Ph.D. 1989, University of California, Berkeley
Edward D. Castillo (1991)
Professor, Native American Studies
B.A. 1969, University of California, Riverside
M.A. 1977, University of California, Berkeley

Anita J. Catlin (2003)
Professor, Nursing
B.S.N. 1979, California State University, Stanislaus
M.S.N. 1989, Sonoma State University
D.N.Sc. 1998, Rush University School of Nursing

## Jean Bee Chan (1973)

Professor, Mathematics and Statistics
B.S. 1960, M.S. 1961, University of Chicago

Ph.D. 1971, University of California, Los Angeles

Kathleen C. Charmaz (1973)
Professor, Sociology
B.S. 1962, University of Kansas
M.A. 1969, San Francisco State College

Ph.D. 1973, University of California, San Francisco

## Caroline Christian (2006)

Assistant Professor, Environmental Studies and Planning
B.A. 1994, University of California, Santa Cruz

Ph.D. 2002, University of California, Davis

## Brett A. Christie (2000)

Associate Professor, Curriculum Studies and Secondary Education A.A. 1988, Diablo Valley College
B.A. 1991, M.A. 1995, California State University, Chico

Ph.D. 1997, University of New Mexico, Albuquerque
James L. Christmann (1982)
Professor, Biology
B.S. 1968, Arizona State University
M.A. 1969, Ph.D. 1976, Johns Hopkins University

## Matthew L. Clark (2006)

Assistant Professor, Geography
B.A. 1993, University of California, Berkeley
M.S. 1998, University of Washington, Seattle

Ph.D. 2005, University of California, Santa Barbara

## T. K. Clarke (1987)

Interim Dean, School of Business and Economics
Professor, Business Administration
B.S. 1969, California Maritime Academy

Ph.D. 1979, University of Illinois

## Elizabeth L. Close (1997)

Chair, Nursing
Professor, Nursing
B.S. 1971, University of California, Davis
B.S. 1975, M.S. 1977, Ph.D. 1994, University of California, San Francisco

## Michael Cohen (2005)

Assistant Professor, Biology
B.A. 1990, California State University, Northridge

Ph.D. 1996, University of California, Davis

## Robert Coleman-Senghor (1972)

Professor, English
B.A. 1967, San Francisco State College
M.A. 1978, San Francisco State University

Lynn R. Cominsky (1986)
Professor, Physics and Astronomy
B.A. 1975, Brandeis University

Ph.D. 1981, Massachusetts Institute of Technology

Gillian F. Conoley (1994)
Professor, English
B.F.A. 1977, Southern Methodist University
M.F.A. 1983, University of Massachusetts at Amherst

Katharyn W. Crabbe (1990)
Professor, English
B.A. 1967, M.A. 1969, Ph.D. 1975,

University of Oregon, Eugene
Eleanor C. Criswell (1969)
Professor, Psychology
B.A. 1961, M.A. 1962, University of Kentucky

Ed.D. 1968, University of Florida
Daniel E. Crocker (1999)
Associate Professor, Biology
B.S. 1987, Georgia Institute of Technology
M.S. 1992, Ph.D. 1995, University of California, Santa Cruz

Paul L. Crowley (1991)
Professor, Literacy Studies and Elementary Education
B.S. 1978, M.Ed. 1980, Ph.D. 1991, University of Missouri, Columbia

Steven Cuellar (2001)
Associate Professor, Economics
B.S. 1988, San Jose State University

Ph.D. 1998, Texas A and M University
Sheila Lyn Cunningham (2007)
Assistant Librarian
B.A. 1993, San Francisco State University
M.L.I.S. 2003, San Jose State
J. Hall Cushman (1994)

Professor, Biology
B.S. 1982, Marlboro College
M.S. 1986, University of Arizona, Tucson

Ph.D. 1989, Northern Arizona University
Kristen Daley (2003)
Assistant Professor, Theatre Arts
B.F.A. 1992, M.F.A. 2003, University of Washington

## Erin Daniels (2005)

Assistant Librarian
B.A. 1998, University of Portland
M.L.S. 2000, Simmons College
F. Victor Daniels (1968)

Professor, Psychology
B.A. 1962, San Francisco State College
M.A. 1964, Ph.D. 1966, University of California, Los Angeles

Tania de Miguel Magro (2005)
Assistant Professor, Modern Languages and Literatures
M.A. 2000, Universidad Complutense de Madrid

Ph.D. 2005, State University of New York at Stony Brook
James Dean (2005)
Assistant Professor, Sociology
B.A. 1997, Pomona College

Ph.D. 2005, State University of New York, Albany
Mary P. Dingle (2000)
Associate Professor, Educational Leadership and Special Education
A.A. 1977, Santa Rosa Junior College
B.A. 1981, M.A. 1987, Sonoma State University

Ph.D. 2001, University of California, Los Angeles
Donald A. Dixon (1972)
Professor, Political Science
B.A. 1966, Sonoma State College

Ph.D. 1975, University of California, Santa Barbara

## Randall A. Dodgen (1995)

Professor, History
B.A. 1979, San Francisco State University
M.A. 1981, University of California, Davis

Ph.D. 1989, Yale University
Mark J. Doolittle (1980)
Professor, Counseling
B.A. 1970, University of Washington
M.A. 1975, Ph.D. 1979, University of California, Berkeley
L. Duane Dove (1989)

Professor, Business Administration
B.A. 1965, Manchester College
M.A. 1967, Western Michigan University

Ph.D. 1971, Florida State University
Paul J. Draper (1998)
Associate Professor, Theatre Arts
B.S. 1982, Northwestern University
M.F.A. 1990, Columbia University

## Helen D. Dunn (1970)

Professor, English
B.A. 1962, Mount Mary College
M.A. 1965, Fordham University

Ph.D. 1980, University of California, Berkeley

## Stephanie Dyer (2003)

Assistant Professor, Hutchins School of Liberal Studies
B.A. 1990, University of California, Davis
M.A. 1993, Ph.D. 2000, University of Pennsylvania
C. Douglas Earl (1969)

Professor, Kinesiology
B.A. 1961, M.A. 1963, Chapman College

Ph.D. 1968, University of New Mexico
Charles A. Elster (2005)
Associate Professor, Literacy Studies and Elementary Education
B.A. 1976, Yale University
M.A. 1982, Ph.D. 1988, University of California, Berkeley

## Kirsten Ely (2005)

Associate Professor, Business Administration
A.B. 1979, University of California, Berkeley
M.B.A. 1982, Ph.D. 1988, University of Chicago

## Carolyn Epple (2003)

Associate Professor, Anthropology
B.S. 1980, Duke University
M.S. 1983, University of Missouri-Columbia

Ph.D. 1994, Northwestern University
Steve Estes (2002)
Associate Professor, History
B.A. 1994, Rice University
M.A. 1996, University of Georgia

Ph.D. 2001, University of North Carolina, Chapel Hill
Kelly Estrada (2005)
Assistant Professor, Curriculum Studies and Secondary Education
B.A. 1988, University of California, San Diego
M.A. 1991, Ph.D. 1997, University of California, Los Angeles

## Robert Eyler (1998)

Associate Professor, Economics
B.A. 1992, California State University, Chico
M.A. 1994, Ph.D. 1998, University of California, Davis

## Michael Ezra (2003)

Assistant Professor, American Multicultural Studies
B.A. 1994, Union College
M.A. 1997, Ph.D. 2001, University of Kansas

Steven C. Farmer (2006)
Assistant Professor, Chemistry
B.S. 1994, University of California, Davis
M.S. 1996, California State University, Sacramento

Ph.D. 2002, University of California, Davis
Ian Feinhandler (2007)
Assistant Professor, Geography
B.A. 1988, Trinity College

MA. 1995, University of Colorado
Ph.D. 2006, University of Colorado

Johanna Filp-Hanke (1996)
Professor, Literary Studies and Elementary Education
B.A. 1968, M.A. 1970, University of British Columbia

Ph.D. 1987, Albert-Ludwig Universität, Germany
Benjamin J. Ford (1998)
Associate Professor, Mathematics and Statistics
B.A. 1986, New College
M.S. 1989, Ph.D. 1993, University of Oregon

## James Fouché (1992)

Professor, Curriculum Studies and Secondary Education
B.A. 1968, M.A. 1972, Louisiana State University, New Orleans

Ph.D. 1978, University of Florida

## Dorothy E. Freidel (1995)

Professor, Geography
B.A. 1987, Sonoma State University
M.A. 1989, Ph.D. 1993, University of Oregon

## Benjamin Frymer (2005)

Assistant Professor, Hutchins School of Liberal Studies
B.A. 1991, University of California, Berkeley
M.A. 1995, Ph.D. 2003, University of California, Los Angeles

## James B. Gale (1969)

Professor, Kinesiology
B.S. 1962, M.Ed. 1964, Miami University

Ph.D. 1970, University of Wisconsin

## Stephen Galloway (2003)

Associate Professor, Art and Art History
B.A. 1991, M.F.A. 1994, San Francisco State University

## Ajay Gehlawat (2007)

Assistant Professor, Hutchins School of Liberal Studies
B.A. 1998, University of Berkeley
M.A. 2000, New York University

Ph.D. 2007, City University of New York
Nicholas R. Geist (1999)
Associate Professor, Biology
B.A. 1992, University of California, Santa Barbara

Ph.D. 1999, Oregon State University
Mary Gendernalik-Cooper (2005)
Dean, School of Education
Professor, Educational Leadership
B.A. Michigan State, Ph.D. Wayne State University

## Armand Gilinsky (1998)

Professor, Business Administration
B.A. 1975, M.A. 1980, Stanford University
M.B.A., Finance, Golden Gate University, 1983

Ph.D. 1988, Brunel University, London, England

Robert K. Girling (1976)
Professor, Business Administration
B.A. 1967, University of California, Berkeley
M.A. 1968, University of Essex, England

Ph.D. 1974, Stanford University

## Derek J. Girman (1998)

Professor, Biology
B.S. 1989, Ph.D. 1996, University of California, Los Angeles

Anne E. Goldman (1998)
Professor, English
B.A. 1982, Stanford University
M.A. 1986, University of California, Davis

Ph.D. 1993, University of California, Berkeley
Mary E. Gomes (1994)
Professor, Psychology
B.A. 1984, Harvard University

Ph.D. 1989, Stanford University
Myrna Goodman (2002)
Associate Professor, Sociology
B.A. 1988, Sonoma State University
M.A. 1990, Ph.D., 2002, University of California, Davis

## Karen Grady (2001)

Associate Professor, Curriculum Studies and Secondary Education
B.A. 1975, Santa Clara University
M.A. 1985, University of San Francisco

Ph.D. 2001, Indiana University
Diana R. Grant (2000)
Associate Professor, Criminology and Criminal Justice
B.A. 1984, University of California, Santa Cruz

Ph.D. 1996, University of California, Irvine
C. Mel Graves, Jr. (1994)

Professor, Music
B.M. 1969, San Francisco Conservatory of Music
M.A. 1976, University of California, San Diego

James E. Gray (1970)
Professor, American Multicultural Studies
B.A. 1967, M.A. 1975, San Francisco State College

Ph.D. 1984, University of California, San Francisco

## Michaela Grobbel (2005)

Assistant Professor, Modern Languages and Literatures
M.A. 1987, Ph.D. 1995, University of California, Los Angeles

## Nathan Haenlein (2003)

Assistant Professor, Art and Art History
B.F.A. 1998, University of Toledo
M.A. 2001, M.F.A. 2002, University of Iowa

Mary H. Halavais (2000)
Associate Professor, History
B.A. 1971, University of Maryland, College Park
M.A. 1994, Ph.D. 1997, University of California, San Diego

Paula C. Hammett (1992)
Librarian
B.A. 1978, Sonoma State University
M.L.I.S. 1985, University of California, Berkeley

Debora Hammond (1996)
Professor, Hutchins School of Liberal Studies
B.A. 1974, Stanford University
M.A. 1991, Ph.D. 1997, University of California, Berkeley

## Katharine Hatch (2006)

Student Services Professional, Counseling and Psych Services
B.A. 1997, Pomona College
M.A. 2003, Ph.D. 2005, University of Texas at Austin

Sue E. Hayes (1974)
Professor, Economics
B.A. 1965, Stanford University
M.S. 1973, Ph.D. 1975, University of California, Berkeley

Carole L. Heath (1994)
Professor, Nursing
A.S., R.N. 1972, Ventura College
B.S.N. 1975, Sonoma State University
M.S. 1978, San Jose State University

Ed.D. 1996, University of San Francisco

## Susan K. Herring (1992)

Professor, Mathematics and Statistics
B.A. 1985, M.A. 1987, California State University, Fullerton

Ph.D. 1992, Claremont Graduate School
Janet Hess (2002)
Assistant Professor, Hutchins School of Liberal Studies
J.D. 1988, M.A. 1992, University of Iowa
M.A. 1993, Columbia University

Ph.D. 1999, Harvard University

## Maria Hess (2003)

Assistant Professor, Psychology
B.A.-Social Welfare, B.A.-Psychology 1981, California State

University, Chico; M.A. 1984, The Sonoma Institute
Ph.D. 2000, California Institute of Integral Studies
Kim Hester-Williams (1999)
Associate Professor, English
B.A. 1989, University of California, Santa Cruz
M.A. 1997, Ph.D. 1999, University of California, San Diego

Bryant Hichwa (2002)
Professor, Physics and Astronomy
B.S. 1968, Georgetown University

Ph.D. 1973, University of Notre Dame

## Adam Louis Hill (1998)

Associate Professor, Counseling
A.B. 1988, Ohio University
M.S.Ed. 1993, Youngstown State University

Ph.D. 1998, Kent State University

## Susan M. Hillier Ferreira (1991)

Professor, Psychology
B.S. 1975, M.Ed. 1979, Ph.D. 1988, University of California, Davis

David M. Horowitz (2007)
Assistant Professor, Business Administration
B.S. 2000, Stanford University

MBA 2003, San Diego State University
Ph.D. 2007, The Florida State University
Aidong Hu (2002)
Assistant Professor, Business Administration
B.A. 1990, Nankai University, China
M.A. 1997, Northeastern University

Ph.D 2002, University of Houston, Texas
Phil S. Huang (1992)
Librarian
B.A. 1981, Fudan University, China
M.L.S. 1983, State University of New York, Buffalo

## Ada Jaarsma (2005)

Assistant Professor, Philosophy
B.A. 1997, University of Waterloo
M.A. 2000, Trent University

Ph.D. 2005, Purdue University
Patrick G. Jackson (1989)
Professor, Criminology and Criminal Justice
A.B. 1973, California State University, Fresno
M.A. 1975, Ph.D. 1980, University of California, Davis
M. Thomas Jacobson (1994)

Professor, Environmental Studies and Planning
B.A. 1976, Sonoma State University
M.A. 1987, University of California, Berkeley
J.D. 1987, University of California, Hastings College of the Law

Karin Enstam Jaffe (2002)
Assistant Professor, Anthropology
B.A. 1994, University of California, San Diego
M.A. 1997, Ph.D. 2002, University of California, Davis

Sherril A. Jaffe (2001)
Associate Professor, English
B. A. 1967, University of California, Berkeley
M.A. 1970, San Francisco State College
M.F.A. 2001, Bennington College

Matthew J. James (1990)
Professor, Geology
B.S. 1977, University of Hawaii, Manoa

Ph.D. 1987, University of California, Berkeley

## William T. Johnson (1969)

Professor, Music
B.A. 1964, Princeton University
M.A. 1966, University of California, Berkeley

Michelle E. Jolly (2000)
Associate Professor, History
A.B. 1988, Stanford University
M.A. 1993, Ph.D. 1998, University of California, San Diego

## Douglas Jordan (2002)

Associate Professor, Business Administration
B.S. 1981, M.S. 1982, Georgia Institute of Technology

Ph.D. 2001, University of Texas at Arlington
Izabela Kanaana (2003)
Assistant Professor, Mathematics and Statistics
M.A. 1997, Adam Mickiewiez University, Poznan, Poland

Ph.D. 2003, Michigan Technological University

## Hee-Won Kang (1995)

Professor, Literacy Studies and Elementary Education
B.A. 1976, Duk Sung Women's College, Seoul
M.A. 1981, San Francisco State University

Ph.D. 1991, University of California, Berkeley

## Daniel Karner (2003)

Associate Professor, Geology
B.S. 1992, Sonoma State University

Ph.D. 1997, University of California, Berkeley

## Mira-Lisa Katz (2002)

Assistant Professor, English
B.A. 1988, Mills College
M.A. 1993, Ph.D. 1999, University of California, Berkeley

## Nelson R. "Buzz" Kellogg (1991)

Professor, Hutchins School of Liberal Studies
B.A. 1980, Brigham Young University

Ph.D. 1986, Johns Hopkins University

## Kurt J. Kemp (1990)

Professor, Art and Art History
B.A. 1979, Marycrest College
M.A. 1982, M.F.A. 1984, University of Iowa

## Chong-Uk Kim (2007)

Assistant Professor, Economics
B.A. 1993, Hankuk University of Foreign Studies
M.A. 2004, University of Oregon

Ph.D. 2006, University of Oregon
Patricia Kim-Rajal (2003)
Assistant Professor, Chicano and Latino Studies
B.A. 1994, University of California, Berkeley
M.A. 1997, Bowling Green State University

Ph.D. 2003, University of Michigan

## Deborah Kindy (2000)

Professor, Nursing
B.S. 1977, Indiana University, Bloomington

Ph.D. 1996, University of Arizona, Tucson
Amy M. Kittelstrom (2007)
Assistant Professor, History
B.A. 1994, Rice University
M.A. 1998, Boston University

Ph.D. 2004, Boston University

## Ali A. Kooshesh (2002)

Professor, Computer Science
B.S. 1976, Iran College of Science and Technology
M.S 1984, University of Arkansas, Fayetteville
M.S. 1987, Ph.D. 1992, University of New Mexico

## H. John Kornfeld (1995)

Professor, Curriculum Studies and Secondary Education
A.B. 1975, Princeton University
M.A. 1991, Sonoma State University

Ph.D. 1996, Indiana University

## Jeanette A. Koshar (1995)

Professor, Nursing
B.A. 1974, San Diego State University
M.S.N. 1979, Ph.D. 1996, University of California, San Francisco

John F. Kramer (1970)
Professor, Political Science
B.A. 1959, Miami University
M.S. 1961, University of Illinois

Ph.D. 1969, Massachusetts Institute of Technology
Cathy Kroll (2005)
Assistant Professor, English
A.B. 1978, Vassar
M.A. 1980, Ph.D. 1986, University of California, Berkeley

John Kunat (2004)
Associate Professor, English
B.S. 1983, Cornell University
M.A. 1996, Ph.D. 2004, University of Virginia

Brigitte Lahme (2002)
Assistant Professor, Mathematics and Statistics
M.S. 1995, Ph.D. 1999, Colorado State University

Heidi K. La Moreaux (1999)
Associate Professor, Hutchins School of Liberal Studies
B.S. 1990, M.S. 1991, University of Utah

Ph.D. 1999, University of Georgia

## Paula Lane (2003)

Associate Professor, Literacy Studies and Elementary Education
B.S. 1977, University of California, Los Angeles

Ph.D. 2002, Michigan State University

## Rheyna M. Laney (1999)

Associate Professor, Geography
B.A. 1986, University of California, Berkeley
M.A. 1995, Ph.D. 1999, Clark University

## C. Jeffrey Langley (1997)

Professor, Music
B.Mus. 1979, M.Mus. 1980, D.M.A. 1984, The Juilliard School

Terry Lease (2002)
Professor, Business Administration
B.S, 1983, Wake Forest University
M.A.T. 1985, Baylor University

Ph.D. 1996, University of Southern California
George Ledin Jr. (1984)
Professor, Computer Science
B.S. 1967, University of California, Berkeley
J.D. 1982, University of San Francisco

Elaine Leeder (2001)
Dean, School of Social Sciences;
Professor, Sociology
B.A. 1967, Northeastern University
M.S.W. 1969, Yeshiva University, New York
M.P.H. 1975, University of California, Berkeley

Ph.D. 1985, Cornell University
Jennifer Lillig (2003)
Assistant Professor, Chemistry
B.S. 1996, Harvey Mudd College
M.S. 1998, Ph.D. 2001, University of California, San Diego

Michael G. Litle (1985)
Professor, Communication Studies
B.A. 1967, Dartmouth College
M.A. 1970, Stanford University

Ph.D. 1977, Union for Experimental Colleges and Universities

Ronald Lopez (2005)
Assistant Professor, Chicano and Latino Studies
B.A. 1988, University of California, Los Angeles
M.A. 1992, Ph.D. 1999, University of California, Berkeley

Frederick W. Luttmann (1970)
Professor, Mathematics and Statistics
B.A. 1961, Amherst College
M.S. 1963, Stanford University

Ph.D. 1967, University of Arizona
Nancy E. Lyons (1971)
Professor, Theatre Arts
B.A. 1966, University of California, Berkeley
M.A. 1968, Mills College

Jayamala Madathil (2006)
Assistant Professor, Counseling
B.A. 1997, Pomona College
M.A. 2003, University of Texas

Ph.D. 2005, University of Texas

## Jennifer Mahdavi (2005)

Assistant Professor, Educational Leadership and Special Education
B.A. 1990, California State Polytechnic University, Pomona
M.A. 1996, Ph.D. 2000, University of California, Riverside

Daniel Melero Malpica (2007)
Assistant Professor, Chicano \& Latino Studies
B.A. 1990, Whittier College
M.A. 1992, Ph.D. 2008, University of California, Los Angeles

## Perry M. Marker (1991)

Professor, Curriculum Studies and Secondary Education
B.S. 1973, M.S. 1978, Bowling Green State University

Ph.D. 1986, Indiana University, Bloomington
Richard L. Marks Jr. (1989)
Professor, Curriculum Studies and Secondary Education
B.A. 1972, University of California, Berkeley
M.A. 1975, San Francisco State University

Ph.D. 1990, Stanford University
Elizabeth C. Martinez (1995)
Professor, Modern Languages and Literatures
B.A. 1983, Portland State University
M.A. 1991, New York University

Ph.D. 1995, University of New Mexico, Albuquerque
Laurel M. McCabe (1994)
Professor, Psychology
B.A. 1976, Wesleyan University
M.A. 1987, Ph.D. 1994, University of California, Berkeley

## Barbara Lesch McCaffry (2000)

Professor, Hutchins School of Liberal Studies
B.A. 1968, Brooklyn College
M.A. 1970, University of Maryland

Ph.D. 1979 University of Wisconsin, Madison

## David S. McCuan (2003)

Associate Professor, Political Science
B.A. 1991, Sonoma State University
M.A. 1992, Ph.D. 2002, University of California, Riverside

## Eric A. McGuckin (1998)

Associate Professor, Hutchins School of Liberal Studies
B.A. 1983, M.A. 1987, San Francisco State University

Ph.D. 1997, City University of New York

## B. Elaine McHugh (1995)

Professor, Kinesiology
B.A. 1969, Oberlin College
M.A. 1973, University of California, Los Angeles

Ph.D. 1995, Texas Women's University

## Susan R. McKillop (1975)

Professor, Art and Art History
A.B. (English), B.J. (Journalism), 1951, University of Missouri, Columbia
M.A. 1953, University of California, Berkeley

Ph.D. 1966, Harvard University

## Robert E. McNamara (1989)

Professor, Political Science
B.A. 1978, University of California, Santa Cruz
M.A. 1985, San Francisco State University

Ph.D. 1988, University of Geneva

## Edith P. Mendez (1998)

Associate Professor, Mathematics and Statistics
B.A. 1964, Mount Holyoke College
M.A., 1992, San Francisco State University

Ph.D. 1998, Stanford University
Mark L. Merickel (2008)
Dean, School of Extended Education
Ph.D. 1989, Oregon State University

## Andrew S. Merrifield (1992)

Professor, Political Science
B.A. 1971, Oregon State University
M.A. 1975, Portland State University
M.A. 1986, Sonoma State University

Ph.D. 1993, University of California, Davis
Charles H. Merrill (1969)
Professor, Psychology
B.S. 1961, M.S. 1962, East Texas State University

Ed.D. 1968, University of Florida

Scott L. Miller (1997)
Student Services Professional
Director, Writing Center
B.A. 1985, M.A. 1988, Humboldt State University

Ph.D. 1995, Ohio State University
Melinda Milligan (2003)
Associate Professor, Sociology
B.A. 1989, M.A. 1991, Ph.D. 1998, University of California, Davis

## Matthew "Strine" Mookerjee (2006)

Assistant Professor, Geology
B.A. 1999, Oberlin College
M.S. 2001, University of Rochester

Ph.D. 2005, University of Rochester

## Jeremy Morris (2003)

Assistant Professor, Mathematics and Statistics
B.S. 1992, South Dakota School of Mines and Technology
M.S. 1994, Ph.D. 1999, Colorado State University

## Katherine Morris (2003)

Assistant Professor, Literacy Studies and Elementary Education
B.A. 1987, University of California, Berkeley
M.A. 1995, San Francisco State University

Ph.D. 2003, University of Michigan

## Lynne Morrow (2002)

Associate Professor, Music
B.A. 1976, Stanford University
M.A. 1997, California State University, Hayward
D.M.A. 2002, Indiana University, Bloomington

Susan G. Moulton (1971)
Professor, Art and Art History
B.A. 1966, University of California, Davis
M.A. 1969, Ph.D. 1977, Stanford University
J. Anthony Mountain (1970)

Professor, Hutchins School of Liberal Studies
B.A. 1961, Columbia University
M.A. 1966, Ph.D. 1970, University of Washington

## Mutombo M'Panya (2003)

Associate Professor, Hutchins School of Liberal Studies
B.S. 1971, Ecole de Commerce Solvay, Belgium
B.A. 1975, Bethel College
M.A. 1977, University of Notre Dame

Ph.D. 1982, University of Michigan-Ann Arbor
Judy L. Navas (1977)
Professor, Theatre Arts
B.A. 1970, University of California, Berkeley
M.A. 1973, San Francisco State University

## Cora Neal (2006)

Assistant Professor, Mathematics and Statistics
B.S. 1991, Brigham Young University
M.S.1992, Brigham Young University

Ph.D. 2001, Utah State University

## Catherine Nelson (1991)

Professor, Political Science
B.A. 1976, University of California, Santa Cruz
M.A. 1983, California State University, Sacramento

Ph.D. 1990, University of California, Davis

## Elaine T. Newman (1998)

Associate Professor, Mathematics and Statistics
B.A. University of California, Berkeley
M.A. 1994, Ph.D. 1998, University of California, Los Angeles

Sandra K. Newton (2006)
Assistant Professor, Business Administration
B.S. 1983, University of Maryland
M.A. 1987, Webster University

Ph.D. 2006, University of South Florida

## Mary Ann T. Nickel (1996)

Associate Professor, Literacy Studies and Elementary Education
B.A. 1973, M.Ed. 1976, University of Missouri-St. Louis

Ph.D. 1998, Indiana University

## Karina Nielsen (2003)

Assistant Professor, Biology
B.S. 1992, City University of New York, Brooklyn College

Ph.D. 1998, Oregon State University
Kathleen M. Noonan (2000)
Associate Professor, History
B.A. 1977, Georgetown University, Washington D.C.
M.A. 1980, Ph.D. 1989, University of California, Santa Barbara

## Stephen A. Norwick (1974)

Professor, Environmental Studies and Planning
B.A. 1965, Pomona College
M.A. 1967, Dartmouth College

Ph.D. 1971, University of Montana

## Linda I. Nowak (1996)

Professor, Business Administration
B.S. 1974, California Polytechnic State University, San Luis Obispo
M.B.A. 1991, Mercer University

Ph.D. 1996, St. Louis University

## Jann Nunn (2000)

Associate Professor, Art and Art History
B.F.A. 1988, University of Alaska, Anchorage
M.F.A. 1992, San Francisco Art Institute

Eduardo M. Ochoa (2003)
Provost, Vice President for Academic Affairs, and
Chief Academic Officer;
Professor, Economics
B.A. 1973, Reed College
M.S. 1976, Columbia University
M.A. 1980, Ph.D. 1984, New School University

Janeen E. Olsen (2000)
Professor, Business Administration
B.A. 1981, M.B.A. 1984, Ph.D. 1987, University of Utah, Salt Lake City

Gerryann Olson (2001)
Associate Professor, Psychology
B.A. 1971, M.A. 1972, Sonoma State University

Ph.D. 1976, Saybrook Institute, San Francisco

## Steven C. Orlick (1982)

Professor, Environmental Studies and Planning
B.A. 1969, University of California, Santa Barbara
M.U.P. 1971, Ph.D. 1975, University of Washington

## Wendy L. Ostroff (2000)

Associate Professor, Hutchins School of Liberal Studies
B.A. 1995, University of Connecticut, Storrs
M.S. 1998, Ph.D. 2000, Virginia Polytechnic Institute and State University

## Noelle Oxenhandler (2001)

Associate Professor, English
B.A. 1973, University of California, Santa Cruz
M.A. 1978, University of Toronto
M.A. 1991, State University of New York at Brockport

John Palmer (2007)
Assistant Professor, Music
M.A. 1991, University of California, Davis

Ph.D. 1996, University of California, Davis

## S. Gillian Parker (1995)

Associate Professor, Philosophy
B.A. 1986, University of Manchester, United Kingdom
M.A. 1989, Ph.D. 1994, Indiana University, Bloomington

Diane L. Parness (1991)
Professor, Political Science
B.A. 1976, University of San Francisco
M.A. 1979, George Washington University

Ph.D. 1988, Georgetown University
Mark A. PerIman (1988)
Professor, Art and Art History
B.F.A. 1974, Eastern Michigan University
M.F.A. 1978, West Virginia University

Peter M. Phillips (1994)
Professor, Sociology
B.A. 1970, University of Santa Clara
M.A. (Cultural Anthropology) 1975, California State University, Sacramento
M.A. (Sociology) 1991, Ph.D. 1994, University of California, Davis

Muralidharan C. Pillai (1994)
Professor, Biology
B.S. 1977, University of Kerala, India
M.S. 1980, University of Poona, India
M.Phil. 1982, University of Calicut, India

Ph.D. 1988, University of California, Davis

## William H. Poe (1970)

Professor, History
B.A. 1963, Duke University
B.D. 1966, Princeton Theological Seminary
M.A. 1969, Ph.D. 1971, Brandeis University

Jorge E. Porras (1990)
Professor, Modern Languages and Literatures
Bachiller 1961, Colegio Miguel Jimenez Lopez, Columbia
Licenciado 1965, Universidad Pedagogica de Colombia
M.A. 1973, Ohio State University

Ph.D. 1984, University of Texas at Austin
Paul Porter (2002)
Associate Professor, Educational Leadership and Special Education B.S. 1969, UC, Davis
M.S. 1972, CSU, Sacramento

Ed.D. 1977, Brigham Young University

## Adrian C. Praetzellis (1992)

Professor, Anthropology
B.A. 1981, Sonoma State University
M.A. 1982, Ph.D. 1991, University of California, Berkeley

Margaret S. Purser (1991)
Professor, Anthropology
B.A. 1979, College of William and Mary

Ph.D. 1987, University of California, Berkeley

## Jeremy Qualls (2007)

Assistant Professor, Physics and Astronomy
B.S. 1994, East Tennessee State University
M.S. 1997, Florida State University

Ph.D. 1999, Florida State University
Saeid Rahimi (1982)
Dean, School of Science and Technology;
Professor, Physics and Astronomy
B.S. 1971, M.S. 1973, Pahlavi University, Iran

Ph.D. 1981, Pennsylvania State University

Nathan E. Rank (1995)
Professor, Biology
B.A. 1979, Kalamazoo College

Ph.D. 1990, University of California, Davis

## Jonah Raskin (1988)

Professor, Communication Studies
B.A. 1963, M.A. 1964, Columbia College

Ph.D. 1967, University of Manchester
Balasubramanian Ravikumar (2001)
Professor, Computer Science
B.E. 1981, India Institute of Science
M.S. 1983, Indian Institute of Technology

Ph.D. 1987, University of Minnesota

## Jeffrey T. Reeder (1998)

Associate Professor, Modern Languages and Literatures
B.A. 1990, M.A. 1993, University of Texas, Arlington

Ph.D. 1998, University of Texas, Austin
Christine B. Renaudin (1998)
Professor, Modern Languages and Literatures
D.E.U.G. 1979, Paris IV-Sorbonne

Licence, 1980, Paris IV-Sorbonne
M.A. 1981, Paris IV-Sorbonne

Ph.D. 1993, Cornell University
Vincent Richman (2002)
Professor, Business Administration
B.S. Biology 1976, B.S. Science 1980,

Massachusetts Institute of Technology
M.B.A. 1986, Dalhousie University
M.P.I. 1997, Ph.D. 1997, Columbia University

## Jennifer Roberson (2007)

Assistant Professor, Art and Art History
B.A. 1993, Bowdoin College
M.A. 1998, University of Minnesota

Ph.D. 2004, University of Minnesota
Deborah Roberts (2007)
Associate Professor, Nursing
B.S. 1980, California State University, Chico
M.S. 1991, California State University, Chico

Ph.D. 2002, University of LaVerne
Gregory Roberts (2001)
Associate Professor, Art and Art History
B.F.A. 1991, Alfred University
M.F.A. 1994, Mills College

James Robertson (2004)
Professor, Business Administration
B.S. 1959, University of Colorado
M.B.A. 1960, University of Denver

Ph.D. 1963, University of Washington, Seattle

Richard Robison (2003)
Senior Assistant Librarian
B.A. 1994, University of California, Berkeley
M.L.I.S. 2003, University of Maryland, College Park

Walter J. "Rocky" Rohwedder (1981)
Professor, Environmental Studies and Planning
B.A. 1976, University of California, Irvine
M.S. 1978, University of Michigan

Ph.D. 1987, University of California, Berkeley

## Carolyn I. Saarni (1980)

Professor, Counseling
B.A. 1967, M.A. 1969, Ph.D. 1971,

University of California, Berkeley

## Michael Santos (2005)

Assistant Professor, Business Administration
B.A. 1985, University of Ankara, Turkey
M.A. 1991, University of San Francisco

Ph.D. 2000, Boston College
Shailendhar "Shally" Saraf (2007)
Assistant Professor, Engineering Science
M.S. 1983, University of Hawaii

Ph.D. 2005, Stanford University

## Greg Sarris (2005)

Graton Rancheria Endowed Chair and Professor, Native American
Studies
Ph.D. 1989, Stanford University
Michael R. Schwager (1994)
Professor, Art and Art History
B.F.A. 1975, California College of Arts and Crafts
M.A. 1982, John F. Kennedy University

## Richard J. Senghas (1998)

Professor, Anthropology
B.A. 1982, University of Massachusetts at Amherst
M.A. 1994, Ph.D. 1997, University of Rochester

## Scott Severson (2007)

Assistant Professor, Physics and Astronomy
B.S. 1990, University of Wisconsin

Ph.D. 2000, University of Chicago

## Samuel M. Seward (1989)

Professor, Business Administration
B.S. 1967, Oregon State University
M.B.A. 1968, Portland State University
D.B.A. 1976, University of Colorado

Jennifer L. Shaw (1999)
Associate Professor, Art and Art History
B.A. 1986, University of California, Berkeley,
M.A. 1989, Courtauld Institute of Art, University of London

Ph.D. 1994, University of California, Berkeley

## Hongtao Shi (2004)

Assistant Professor, Physics and Astronomy
B.S. 1989, M.S. 1992, Nanjing University, China
M.S. 1998, Ph.D. 2002, West Virginia University

Heather J. Smith (1997)
Professor, Psychology
B.A. 1984, Wellesley College
M.S. 1986, University of St. Andrews

Ph.D. 1992, University of California, Santa Cruz

## Michael Smith (2007)

Assistant Professor, Geology
B.A. 1999, Carleton College
M.S. 2002, University of Wisconsin

Ph.D. 2007, University of Wisconsin
Wendy A. Smith (1995)
Professor, Nursing
B.S. 1979, M.S. 1986, Sonoma State University
D.N.Sc. 1995, University of California, San Francisco

## Gordon G. Spear (1974)

Professor, Physics and Astronomy
B.A. 1966, Ph.D. 1973, University of Pennsylvania

Elizabeth P. Stanny (1999)
Professor, Business Administration
B.A. 1987, Reed College
M.B.A. 1991, University of California, Berkeley

Ph.D. 1996, University of Chicago
Lynn M. Stauffer (1995)
Professor, Computer Science
B.S. (Mathematics) 1986, B.S. (Information and Computer Science)

1986, M.S. 1990, Ph.D. 1994, University of California, Irvine
Cindy A. Stearns (1995)
Professor, Sociology
B.A. 1980, M.A. 1983, Ph.D. 1988

University of California, Davis

## Thaine Stearns (2003)

Associate Professor, English
B.A. (Business Administration) 1985, B.A. (English) 1992, M.A. 1995,

Ph.D. 1999, University of Washington

Susan A. Stewart (1991)
Professor, Psychology
B.A. 1969, M.A. 1971, Sonoma State University

Ph.D. 1973, California School of
Professional Psychology

## Elenita Strobel (2003)

Associate Professor, American Multicultural Studies
B.A. 1974, University of the Philippines
M.A. 1993, Sonoma State University

Ed.D. 1996, University of San Francisco
Meng-Chih Su (2006)
Associate Professor, Physical Chemistry
B.S. 1976, Soochow University
M.S. 1981, Emporia State University

Ph.D. 1986, University of Arkansas
John P. Sullins (2003)
Assistant Professor, Philosophy
B.S. 1989, M.A. 1996, San José State University

Ph.D. 2002, Binghamton University
Janejira Sutanonpaiboon (2006)
Assistant Professor, Business Administration
B.E. 1995, Khon Kaen University
M.B.A. 2001, Indiana State University

Ph.D. 2006, Southern Illinois University

## Joseph S. Tenn (1970)

Professor, Physics and Astronomy
B.S. 1962, Stanford University
M.S. 1966, Ph.D. 1970, University of Washington

## Laxmi G. Tewari (1994)

Professor, Music
M.A. 1961, Hindi Sahitya Sammelan, India
B. M. 1967, Prayag Sangit Samiti, India
D. M. 1967, Banaras Hindu University, India
M.A. 1971, Ph.D. 1974, Wesleyan University

Elizabeth C. Thach (2001)
Professor, Business Administration
B.A. 1983, College of Notre Dame
M.A. 1987, Texas Tech University

Ph.D. 1994, Texas A and M University
Eileen F. Thatcher (1989)
Professor, Biology
B.A. 1977, University of California, San Diego

Ph.D. 1988, University of California, Davis

## Raye Lynn Thomas (1994)

Librarian
B.A. 1985, San Francisco State University
M.L.I.S. 1988, University of California, Berkeley

Karen J. Thompson (2000)
Associate Professor, Business Administration
B.S. 1989, California State Polytechnic University, Pomona
M.A. 1993, Claremont Graduate University

Ph.D. 1999, State University of New York, Buffalo
Sunil K. Tiwari (1966)
Professor, Mathematics and Statistics
B.A. 1983, M.A. 1985, University of Allahabad
M.S. 1991, New Mexico Institute of Mining and Technology

Ph.D. 1997, Montana State University

## Suzanne C. Toczyski (1998)

Professor, Modern Languages and Literatures
B.A. 1987, State University of New York, Buffalo
M.Phil. 1990, Ph.D. 1994, Yale University

Robert Train (2002)
Assistant Professor, Modern Languages and Literatures
B.A. 1989, Ph.D. 2000, University of California, Berkeley

Dale B. Trowbridge (1969)
Professor, Chemistry
B.A. 1961, Whittier College
M.S. 1964, Ph.D. 1970, University of California, Berkeley

Charlene Tung (2001)
Associate Professor, Women's and Gender Studies
B.A. 1991, Grinnell College
M.A. 1996, Ph.D. 1999, University of California, Irvine

John C. Urbanski (2007)
Assistant Professor, Business Administration
B.A. 1979, College Misericordia
M.B.A. 1983, Hofstra University

Ph.D. 2000, University of South Carolina
Melissa Vandeveer (2002)
Associate Professor, Nursing
B.S.N. 1966, University of Evansville
M.S.N. 1975, Indiana University

Ph.D. 1993, University of Texas at Austin
Francisco H. Vázquez (1992)
Professor, Hutchins School of Liberal Studies
B.A. 1972, Claremont Men's School

Ph.D. 1977, Claremont Graduate School
Elisa R. Velásquez-Andrade, (1998)
Professor, Psychology
B.S. 1978, National University of Mexico
M.A. 1988, Ph.D. 1992, University of Texas at Austin

Walter R. Vennum (1971)
Professor, Geology
B.A. 1964, University of Montana

Ph.D. 1971, Stanford University

Ricardo Villarreal de Silva (2006)
Assistant Professor, Business Administration
B.B.A. 1992, University of the Incarnate Word
M.B.A. 1996, Texas A \& M

Ph.D. 2004, University of Texas at Austin

## Michael Visser (2005)

Assistant Professor, Economics
B.A. 2000, Western Washington University
M.S. 2002, Ph.D. 2005, University of Oregon

## Catharine Greta Vollmer (2000)

Associate Professor, English
B.A. 1975, Miami University
M.A. (French) 1977, New York University
M.A. (English) 1981, San Francisco State University

Ph.D. 2000, University of California, Berkeley
Alexandra Von Meier (1999)
Associate Professor, Environmental Studies and Planning
B.A. 1986, M.A. 1990, Ph.D. 1995, University of California, Berkeley

## Andrew I. Wallace (1998)

Associate Professor, Philosophy
B.A. 1982, University of Washington
M.A. 1988, Boston College

Ph.D. 1996, University of California, San Diego
Timothy J. Wandling (1997)
Associate Professor, English
B.A. 1988, University of California, Berkeley
M.A. 1993, Ph.D. 1997, Stanford University
L. Arthur Warmoth (1970)

Professor, Psychology
B.A. 1959, Reed College

Ph.D. 1967, Brandeis University

## Laura A. Watt (2006)

Assistant Professor, Environmental Studies and Planning
B.A. 1988, University of California, Berkeley
M.E.M. 1992, Duke University

Ph.D. 2001, University of California, Berkeley

## Marcia R. "Tia" Watts (2001)

Professor, Computer Science
B.S. 1973, Indiana University of Pennsylvania
M.S. 1982, Villanova University

Ph.D. 1997, University of Pittsburg, PA

## Gisela Wendling (2006)

Assistant Professor, Psychology
B.A. 1992, Sonoma State University

MA. 1994, Sonoma State University
M.A. 2003, Fielding Graduate University

Ph.D. 2005, Fielding Graduate University

Richard Whitkus (1999)
Professor, Biology
B.A. 1978, Rutgers University
M.S. 1981, University of Alberta, Canada

Ph.D. 1988, Ohio State University
Mary Ellen Wilkosz (2005)
Assistant Professor, Nursing
B.S. 1985, San Francisco State University
M.S. 1992, Sonoma State University

Ph.D. Candidate 2008, University of California, San Francisco
Brian S. Wilson (2001)
Associate Professor, Music
B.M. 1985, New England Conservatory
M.A. 1987, University of Chicago
D.M.A. 1992, University of Arizona, Tucson

John Wingard (2001)
Associate Professor, Anthropology
B.A. 1980, Pennsylvania State University
M.S. (Anthropology) 1982, University of Oregon
M.S. (Agricultural Economics) 1988, Ph.D. 1992, Pennsylvania State University

## Steven V. Winter (1989)

Professor, Kinesiology
B.A. 1983, University of California, Los Angeles
M.S. 1984, University of Arizona

Ed.D. 1995, University of San Francisco

## Chingling Wo (2005)

Assistant Professor, English
B.A. 1996, National Central University, Taiwan

Ph.D. 2004, State University of New York at Stony Brook

## Zachary Wong (2001)

Professor, Business Administration
B.S. 1988, California State University, Fresno
M.B.A 1993, University of Dubuque

Ph.D. 2000, University of Mississippi
Tryon P. Woods (2007)
Assistant Professor, Criminology and Criminal Justice
B.A. 1995, Wesleyan University
M.S. 2000, Arizona State University

Ph.D. 2007, University of California, Irvine
Carmen Works (2001)
Associate Professor, Chemistry
B.A. (Chemistry), B.A. (Psychology) 1996, San Francisco State University
Ph.D. 2000, University of California, Santa Barbara

Robert W. Worth (1994)
Professor, Music
B.A. 1980, Sonoma State University
M.A. 1982, University of California, Berkeley

## Jingxian Wu (2005)

Assistant Professor, Engineering Science
B.E. 1998, Bejiing University of Aeronautics and Astronautics
M.S. 2001, Tsinghua University

Ph.D. 2005, University of Missouri, Columbia

## David A. Ziblatt (1969)

Professor, Political Science
B.A. 1959, Reed College
M.A. 1961, Ph.D. 1965, University of Oregon

Richard A. Zimmer (1971)
Professor, Hutchins School of Liberal Studies
B.A. 1962, University of Michigan
M.A. (History) 1964, University of California, Berkeley
M.A. (Anthropology) 1969, Ph.D. 1976, University of California, Los Angeles

## Sandra H. Zimmermann (1998)

Associate Professor, Counseling
B.A. 1966, University of California, Santa Barbara
M.A. 1971, University of California, Los Angeles

Ph.D. 1998, Walden University

## Emeritus Faculty

Dates listed in parentheses indicate year of tenure-track appointment to Sonoma State University and year of appointment to emeritus status.

* $=$ Emeritus status pending

Marsha Adams $(1985,2001)$
Professor, Art and Art History
B.F.A. 1970, M.F.A. 1973, University of California, Irvine

Harold G. Alderman $(1969,1998)$
Professor, Philosophy
B.A. 1961, University of Florida
M.A. 1965, Ph.D. 1967, Tulane University

Chester L. Allen (1985, 2002)
Professor, Business Administration
B.B.A. 1963, University of Texas at Austin
M.B.A. 1969, Texas A and I University
D.B.A. 1973, Texas Tech University

Julia M. Allen $(1990,2004)$
Professor, English
B.A. 1969, University of California, Riverside
M.A. 1976, Portland State University

Ph.D. 1988, University of Texas at Austin

Patricia Allen $(1989,2006)$
Student Services Professional
Office of Campus Life
A.A. 1981, Northern New Mexico Cc
B.A. 1994, Sonoma State University

Gerald J. Alves $(1965,1986)$
Professor
Office of Testing Services
A.B. 1958, M.A. 1960, Chico State College

Luiza Amodeo $(1987,1992)$
Professor, Education
B.S. 1959, Sacramento State University
M.A. 1971, Western New Mexico University

Ph.D. 1977, University of California, Los Angeles
Ellen I. Amsterdam-Walker $(1969,1999)$
Professor, Music
A.B. 1957, A.M. 1959, Smith College

Ph.D. 1968, University of California, Berkeley
Thomas Anderson $(1968,2007)$
Professor, Geology
B.S. 1961, Yale University
M.S. 1965, Ph.D. 1969, University of Colorado

Kathryn Armstrong $(1966,2001)$
Professor, Art and Art History
B.F.A. 1955, University of Colorado
M.F.A. 1958, California College of Arts and Crafts
M.A. 1965, University of California, Berkeley

David O. Arnold $(1970,1994)$
Professor, Sociology
B.A. 1960, University of Chicago
M.A. 1962, University of Iowa

Ph.D. 1966, University of California, Berkeley
Michael E. Baldigo $(1975,2003)$
Professor, Business Administration
M.B.A. 1966, University of Chicago
M.B.A. 1971, Indiana University
B.A. 1976, B.S. 1978, State University of New Jersey

Ph.D. 1977, California Coast University
Marlene Ballaine $(1973,1997)$
Student Services Professional
Enrollment Services
Susan V. Barnes $(1972,2004)$
Professor, Hutchins School of Liberal Studies
B.A. 1965, Rutgers University
M.S. 1971, University of Oklahoma

Ph.D. 1973, California School of Professional Psychology, San Francisco

Joel Beak $(1987,2001)$
Professor, Business Administration
B.A. 1963, Miami University
M.A. 1964, University of Illinois

Ph.D. 1969, Case Western Reserve University
Phillip H. Beard $(1969,2005)$
Professor, Modern Languages and Literatures
B.A. 1965, M.A. 1966, Ph.D. 1971, Stanford University

Jan Beaulyn $(1973,2007)$
Student Services Professional, International Services
B.A. 1971, Sonoma State University
M.A. 2002, Sonoma State University

Timothy A. Bell $(1968,1999)$
Professor, Geography
B.A. 1958, Stanford University
M.A. 1964, Ph.D. 1971, University of Oregon

Richard Bellamy $(1969,1988)$
Librarian
B.S. 1947, Northwestern University
M.L.S. 1966, University of California, Berkeley
P. Sterling Bennett $(1967,1999)$

Professor, Foreign Languages
B.A. 1961, Harvard University
M.A. 1964, Ph.D. 1970, University of California, Berkeley

## Barry Ben-Zion $(1969,2000)$

Professor, Economics
B.A. 1965, Sonoma State College
M.A. 1968, Ph.D. 1973, University of Oregon

Aaron Berman $(1970,1992)$
Professor, Foreign Languages
B.Ed. 1961, University of Miami
A.M. 1964, University of Michigan

Barbara A. Biebush $(1962,1995)$
Librarian
B.A. 1954, Stanford University
M.L.S. 1956, University of California, Berkeley

Dorothy M. Blake $(1973,1995)$
Professor, Nursing
B.S. 1956, M.Ed. 1958, University of Minnesota
M.H.S. 1976, University of California, Davis

## Maurice Blaug $(1970,1998)$

Professor, Hutchins School of Liberal Studies
B.S. 1959, The City University of New York
M.S. (Physics) 1962, M.S. (Zoology) 1966, Ph.D. 1970, University of Minnesota, Minneapolis

Martin S. Blaze $(1968,1996)$
Professor, English
B.A. 1959, Queens College
M.A. 1960, Ph.D. 1970, New York University

David M. Bromige $(1970,1992)$
Professor, English
B.A. 1962, University of British Columbia
M.A. 1964, Ph.D. 1970, University of California, Berkeley
F. Leslie Brooks, Jr. $(1968,2005)$

Professor, Chemistry
B.S. 1957, University of California, Berkeley

Ph.D. 1961, University of Washington
Robert F. Brown $(1967,1992)$
Professor, History
B.A. 1952, Johns Hopkins University

Doctorat de l'Université 1963, University of Paris, France
Phillip Brownell $(1970,2001)$
Student Services Professional, Counseling and Psychological Services
B.A. 1961, University of California, Berkeley
M.S. 1971, California State University, Hayward

Joe H. Brumbaugh $(1964,1992)$
Professor, Biology
B.S.Ed. 1952, Miami University
M.S. 1956, Purdue University

Ph.D. 1965, Stanford University
David O. Butcher $(1985,2000)$
Professor, Computer Science
A.B. 1972, University of California, Los Angeles
M.A. 1977, Ph.D. 1978, Stanford University

Libby Byers $(1970,1992)$
Professor, Education
B.A. 1943, Hunter College
M.A. 1968, San Francisco State University

Ph.D. 1973, University of California, Berkeley
Marilyn Cannon $(1981,2004)$
Lecturer in Biology
M.A. 1983, Sonoma State University

William Clopton $(1988,2000)$
Student Services Professional,
Disabled Student Services
B.S. 1969, M.S. 1979, San Diego State University

Galen E. Clothier $(1962,1995)$
Professor, Biology
B.A. 1955, Fresno State College
M.S. 1957, Ph.D. 1961, Oregon State University

Thomas P. Cooke (1974, 2004)
Professor, Educational Leadership and Special Education
B.A. 1970, M.A. 1971, University of South Florida

Ph.D. 1974, George Peabody College, Vanderbilt University
Gregory L. Crow $(1992,2004)$
Professor, Nursing
B.S. 1983, M.S. 1984, University of California, San Francisco

Ed.D. 1990, University of San Francisco
William Crowley $(1969,2007)$
Professor, Geography
B.A. 1964, University of California, Riverside
M.A. 1966, University of Cincinnati

Ph.D. 1972, University of Oregon
Carole Curtis $(1976,2003)$
Student Services Professional,
Financial Aid Office
B.A. 1970, M.A. 1975, Humboldt State University

Sandra A. DeBella Bodley $(1975,2004)$
Professor, Nursing
B.S. 1968, University of San Francisco
M.S. 1973, San Jose State University

Ed.D. 1985, University of San Francisco
Jayne A. DeLawter $(1974,2004)$
Professor, Literacy Studies and Elementary Education
B.S. 1964, Ball State University
M.A. 1967, Ed.D. 1970, Teachers College, Columbia University

Nirmal-Singh Dhesi $(1964,2000)$
Professor, English
B.A. 1950, M.A. 1954, Punjab University, India

Ph.D. 1968, Michigan State University
Jeffrey Dickemann $(\mathbf{1 9 6 8}, 1990)$
Professor, Anthropology
B.A. 1950, University of Michigan

Ph.D. 1958, University of California, Berkeley
Marvin Dillon $(1962,1979)$
Professor, Office of Testing Services
B.A. 1949, M.A. 1950, Ph.D. 1955,

University of Denver
Margaret A. Donovan-Jeffry (1964, 2000)
Professor, Music
B.A. 1955, M.A. 1959, University of California, Berkeley
D.M.A. 1964, Stanford University

Melanie Dreisbach $(1997,2007)$
Associate Professor, Educational Leadership and Special Education
B.A. 1970, Connecticut College
M.A. 1972, Trenton State College

Ph.D. 1980, University of California, Los Angeles

Donald Duncan $(1963,1991)$
Professor, Mathematics and Statistics
B.A. 1942, M.A. 1944, University of British Columbia

Ph.D. 1951, University of Michigan
John R. Dunning (1969, 2006)
Professor, Physics and Astronomy
B.S. 1960, M.S. 1961, Yale University

Ph.D. 1965, Harvard University

## Wesley W. Ebert $(1964,1992)$

Professor, Biology
B.S. 1961, University of Minnesota
M.S. 1963, Ph.D. 1964, University of California, Davis

David L. Eck $(1970,2006)$
Professor, Chemistry
B.A. 1963, University of Montana

Ph.D. 1967, Washington State University
Saul Eisen* $(1977,2008)$
Professor, Psychology
B.S. 1962, M.B.A. 1963, University of California, Los Angeles

Ph.D. 1969, Case-Western Reserve University
Rolfe C. Erickson (1966, 2005)
Professor, Geology
B.S. 1959, Michigan Technological University
M.S. 1962, Ph.D. 1968, University of Arizona

Clement E. Falbo $(1964,1999)$
Professor, Mathematics and Statistics
B.A. 1956, M.A. 1958, Ph.D. 1963 ,

University of Texas
Jean A. Falbo $(1974,1999)$
Professor, Environmental Studies and Planning
B.A. 1961, University of Utah
M.A. 1966, San Jose State University

Ph.D. 1972, University of Pittsburgh
Yvette M. Fallandy $(1964,1999)$
Professor, Foreign Languages
B.A. 1948, University of California, Los Angeles
M.A. 1949, University of Oregon

Ph.D. 1958, University of California, Los Angeles
Joann E. Feldman $(1966,2002)$
Professor, Music
B.A. 1963, Queens College
M.A. 1966, University of California, Berkeley

Norman Feldman $(1967,2007)$
Professor, Mathematics and Statistics
B.S. 1959, M.S. 1961, McGill University, Canada

Kenneth W. Flynn $(1968,2000)$
Professor, Kinesiology
B.S. 1956, Springfield College
M.S. 1961, Ithaca College

Ed.D. 1967, University of Oregon
Herbert Fougner (1960, 1986)
Professor, Education
B.S. 1943, Bemidji State College
M.Ed 1949, Ed.D 1956, University of California, Los Angeles

David A. Fredrickson $(1967,1992)$
Professor, Anthropology
B.A. 1948, University of California, Berkeley
M.A. 1967, Ph.D. 1973, University of California, Davis

Laurel A. Freed $(1972,2001)$
Professor, Nursing
B.S. 1966, California State College, Los Angeles
M.N. 1970, University of California, Los Angeles
P.N.P. 1976, University of California, Los Angeles Extension

Johanna Fritsche $(1963,1982)$
Librarian
B.A. 1936, Hunter College
B.S.L.S. 1939, Columbia University, School of Library Service

Vivian A. Fritz $(1972,1998)$
Professor, Kinesiology
B.A. 1963, Southwest Texas State University
M.A. 1964, Ball State University

Robert Y. Fuchigami $(1968,1992)$
Professor, Education
B.A. 1956, M.A. 1958, San Jose State College

Ed.D. 1964, University of Illinois
Francisco Gaona $(1964,2004)$
Professor, Modern Languages and Literatures
B.A. 1953, Yale University

Ph.D. 1963, Tubingen University, Germany
Susan B. Garfin $(1970,2004)$
Professor, Sociology
B.A. 1964, Stanford University
M.A. 1965, The Fletcher School of Law and Diplomacy

Ph.D. 1973, University of California, Berkeley
Victor Garlin (1970, 2006)
Professor, Economics
B.A. 1956, M.A. 1961, Ph.D. 1965, University of California, Berkeley
J.D. 1983, University of California, Hastings College of the Law

## Lucia Gattone $(1988,2004)$

Counselor, Counseling and Psychological Services
M.A. 1984, Sonoma State University

Evangeline A. Geiger $(1968,1981)$
Professor, Education
B.S.E. 1936, Lowell Teacher's College
M.A. 1954, San Francisco State College

Ed.D. 1967, University of California, Berkeley
Bernice Goldmark $(1966,1995)$
Professor, Education
B.S.Ed. 1945, College of the City of New York
M.Ed. 1957, Ph.D. 1963, University of Arizona

Bernard Goldstein $(1998,2003)$
Provost and Vice President for Academic Affairs
B.A. 1962, M.A. 1964, San Francisco State College

Ph.D. 1968, University of California, Davis
Richard H. Gordon $(1984,2004)$
Professor, Computer Science
B.A. 1968, Harvard University

Ph.D. 1976, University of California, Berkeley
Leland W. Gralapp $(1964,1989)$
Professor, Art and Art History
B.S. 1943, University of Oregon
M.F.A. 1948, Ph.D. 1953, University of Iowa

Robert Greenway $(1969,1996)$
Professor, Psychology
B.S. 1955, University of Washington
M.A. 1966, Brandeis University

Robert Gronendyke $(1968,1992)$
Professor, Art and Art History
B.A. 1955, M.A. 1960, California State College, Long Beach

William H. Guynn (1968, 2006)
Professor, Modern Languages and Literature
B.A. 1963, University of California, Berkeley
M.A. 1964, Middlebury College in Paris

Ph.D. 1980, University of California, Berkeley
Betty W. Halpern $(1968,1995)$
Professor, Education
B.A. 1949, M.A. 1960, Ed.D. 1968, University of California, Berkeley

David F. Hanes $(1969,2003)$
Professor, Biology
B.A. 1959, Wittenberg University
M.S. 1961, University of Michigan

Ph.D. 1971, Oregon State University
Dennis E. Harris $(1965,2003)$
Professor, History
B.A. 1960, M.A. 1962, Ph.D. 1969, University of California, Santa Barbara

Marcia K. Hart $(1972,2000)$
Professor, Kinesiology
B.A. 1961, California State University, Los Angeles
M.A. 1972, Ball State University

Gerald W. Haslam $(1967,1998)$
Professor, English
B.A. 1963, M.A. 1965, San Francisco State College

Ph.D. 1980, Union Graduate School
Daniel L. Haytin $(1971,2004)$
Professor, Sociology
B.A. 1966, M.A. 1967, Ph.D. 1969, University of California, Berkeley

Richard H. Hendrickson $(1970,1995)$
Professor, English
B.A. 1959, University of California, Santa Barbara
B.S. 1960, University of Wisconsin

Ph.D. 1968, University of Connecticut
Colin O. Hermans $(1969,1998)$
Professor, Biology
B.A. 1958, Pomona College
M.S. 1964, Ph.D. 1966, University of Washington

## Elizabeth Herron $(1970,2007)$

Professor, Arts and Humanities Mentor Program
B.A. 1964, M.A. 1966, San Francisco State University

## Wyman Hicks $(1968,1988)$

Professor, Management
B.A. 1947, M.A. 1948, University of California, Berkeley

Manuel Hidalgo $\mathbf{( 1 9 7 1 , 2 0 0 7 )}$
Professor, Chicano and Latino Studies
B.A. 1968, California State College, Hayward
M.A. 1985, San Jose State University
G. Arthur Hills $(1969,1998)$

Professor, Music
B.A. 1953, Cascade College
M.A. 1955, University of Portland, Oregon

Janice E. Hitchcock $(1972,2000)$
Professor, Nursing
B.S. 1960, Simmons College
M.S. 1966, D.N.Sc. 1989, University of California, San Francisco

Vincent D. Hoagland, Jr. (1969, 2003)
Professor, Chemistry
B.A. 1962, Wesleyan University

Ph.D. 1967, Florida State University
Levell Holmes $(1969,2003)$
Professor, History
B.A. 1957, M.A. 1960, San Francisco State University

Ph.D. 1977, University of California, Berkeley
V. Skip Holmgren (1986, 2000)

Professor, Counseling
B.A. 1951, Gustavus Aldolphus College
M.S. 1966, St. Cloud State University

Ph.D. 1981, University of New Mexico
John D. Hopkirk $(1969,1998)$
Professor, Biology
B.A. 1957, Sacramento State College
M.A. 1962, Ph.D. 1967, University of California, Berkeley

Laurence J. Horowitz $(1969,1992)$
Professor, Psychology
B.S. 1949, Long Island University
B.A. 1949, University of California, Berkeley
M.A. 1954, San Francisco State College

Ph.D. 1967, Stanford University
Ahmad Hosseini $(1990,2003)$
Dean, School of Business and Economics
Professor, Business Administration
B.A. 1972, Institute of Advanced Accounting, Iran
M.A. 1975, Ball State University

Ph.D. 1981, University of Missouri, Columbia
Judith A. Hunt $(1990,2004)$
Associate Vice President for Faculty Affairs; Professor, Psychology
A.B. 1960, Brown University
M.S. 1964, Ph.D. 1964, Northwestern University

Sally Hurtado de Lopez $(1972,2004)$
Professor, Literacy Studies and Elementary Education
B.A. 1965, California State College, Long Beach
M.S. 1968, University of Southern California

Timothy M. Huston $(1975,2003)$
Librarian
B.A. 1967, University of Arkansas
M.L.S. 1969, University of Maryland
M.A. 1976, Sonoma State University
D.L.I.S. 1989, University of California, Berkeley

Donald E. Isaac $(1963,1996)$
Professor, Biology
B.A. 1949, Chico State College
M.A. 1953, Ph.D. 1967, University of California, Berkeley

Bernd Jager $(1969,1995)$
Professor, Psychology
B.A. 1962, M.A. 1963, San Francisco State College

Ph.D. 1965, Duquesne University
Robert Jefferson $(1990,2004)$
Professor History
B.A. 1963 University of California, Berkeley
M.A. 1965, University of Oregon

Ph.D. 1972, University of Utah

Carl M. Jensen $(1973,1995)$
Professor, Communication Studies
B.A. 1971, M.A. 1972, Ph.D. 1977,

University of California, Santa Barbara

## Donald O. Johnson $(1966,1996)$

Professor, History
B.A. 1952, University of Minnesota
M.A. 1957, Ph.D. 1960, Columbia University

George C. Johnson $(1975,2000)$
Professor, Business Administration
B.S. 1954, M.S. 1963, Ph.D. 1972, University of California, Berkeley

Fred Jorgensen $(1968,2000)$
Student Services Professional, Housing Services
B.A. 1961, California State University, Long Beach
M.A. 1967, University of New Mexico

Margaret Jourdain $(1987,2001)$
Librarian
B.A. 1978, Humboldt State University
M.L.I.S. 1987, University of California, Berkeley

Paul Juhl $(1970,1987)$
Professor, Business Administration
B.A. 1946, LL.B 1948, University of lowa
M.S. 1966, San Francisco State College
W. Dennis Kahn $(1980,2003)$

Professor, Music
B.M. 1972, Ithaca College

Deborah R. Kakalik (1971, 2000)
Professor, Education
B.A. 1959, California State University, Los Angeles
B.A. 1969, Ed.D. 1971, University of California, Los Angeles

Bjorn Karlsen $(1966,1985)$
Professor, Education
B.A. 1949, State Teacher's College of Oslo, Norway
M.A. 1951, University of Nebraska

Ph.D. 1954, University of Minnesota
Robert A. Karlsrud (1970, 2007)
Professor, History
B.A. 1961, University of California, Berkeley
M.A. 1965, Ph.D. 1972, University of California, Los Angeles

Marvin L. Kientz $(1967,1998)$
Professor, Chemistry
B.A. 1958, M.A. 1959, Fresno State College

Ph.D. 1966, University of Western Ontario, Canada

Paul King $(1983,2000)$
Athletic Coach
B.A. 1979, M.A. 1980, Sonoma State University

Chris K. Kjeldsen $(1966,2005)$
Professor, Biology
B.A. 1960, College of Pacific
M.S. 1962, University of the Pacific

Ph.D. 1966, Oregon State University
Kathryn L. Klein $(1971,1990)$
Professor, Physical Education and Health Science
B.S. 1960, University of Michigan
M.S. 1966, University of Washington

Ph.D. 1971, University of Southern California
James L. Kormier $(1966,1995)$
Professor, English
B.A. 1951, University of California, Berkeley
M.A. 1962, San Francisco State College

Walter E. Kuhlman $(1969,1989)$
Professor, Art and Art History
B.A. 1941, University of Minnesota

Certificate, California School of Fine Arts Certificate, Acadamie de la
Grande Chaumiere Certificate, St. Paul School of Art
Ardath M. Lee $(1972,1999)$
Professor, Hutchins School of Liberal Studies
B.A. 1955, Michigan State University
M.A. (Humanities) 1961, M.A. (English) 1963, M.A. (Art History) 1965,

Ph.D. 1972, Wayne State University
William R. Lee $(1969,2001)$
Professor, English
B.A. 1964, M.A. 1966, Wayne State University

Ph.D. 1972, University of Connecticut
Raymond G. Lemieux $(1970,1990)$
Professor, Foreign Languages
B.A. 1958, Northeastern University
M.A. 1960, Ph.D. 1969, The University of Iowa

Anne Lewis $(1985,1998)$
Professor, Education
B.A. 1974, M.A. 1979, University of California, Riverside

Stephen D. Lewis $(1982,2004)$
Professor, Economics
B.A. 1963, University of California, Davis

Ph.D. 1969, University of California, Santa Barbara
Wingham J. Liddell, Jr. $(1971,2004)$
Professor, Business Administration
M.A. 1967, M.B.A. 1967, Ph.D. 1969, University of California, Berkeley

Howard Limoli $(1966,1998)$
Professor, Foreign Languages
B.A. 1954, Rutgers University
M.A. 1963, University of California, Berkeley

Han-sheng Lin $(1969,1994)$
Professor, History
B.A. 1954, National Taiwan University
M.A. 1958, University of South Carolina

Ph.D. 1967, University of Pennsylvania
Wallace M. Lowry $(1969,2001)$
Professor, Business Administration
B.A. 1955, Stanford University
M.B.A. 1969, University of California, Berkeley

Jane Luchini $(1979,2004)$
Student Services Professional
Student Services
Robert E. Lynde $(1969,1996)$
Professor, Kinesiology
B.A. 1954, M.A. 1960, Sacramento State College
M.S. 1968, Ed.D. 1969, University of Oregon

Duncan M. MacInnes $\mathbf{( 1 9 7 0 , 2 0 0 2 )}$
Professor, Curriculum Studies and Secondary Education
B.A. 1960, University of British Columbia
M.A. 1966, San Francisco State College

Antoinette O. Maleady $(1968,1982)$
Librarian
B.S. 1940, West Virginia Wesleyan College
M.L.S. 1968, University of California, Berkeley

Vivian A. Malmstrom $(1972,1988)$
Professor, Nursing
B.S. 1958, University of California, San Francisco
M.S. 1960, University of Colorado

Kenneth K. Marcus $(1967,1998)$
Professor, Criminal Justice Administration
B.A. 1952, M.A. 1953, University of Michigan

Ph.D. 1961, University of Illinois
Daniel W. Markwyn $(1970,2002)$
Professor, History
B.A. 1959, University of Colorado
M.A. 1967, San Jose State College

Ph.D. 1970, Cornell University
Patricia A. Marren $(1975,2000)$
Student Services Professional, Financial Aid Office
B.A. 1985, Sonoma State University

Donald D. Marshall $(1966,2001)$
Professor, Chemistry
B.A. 1957, University of California, Davis
M.S. 1958, University of Nevada

Ph.D. 1965, Washington State University

## Douglas R. Martin $(1984,2005)$

Professor, Chemistry and Science Education
B.S. 1969, California State University, Sacramento

Ph.D. 1973, University of California, Berkeley
Leonide L. Martin $(1974,1992)$
Professor, Nursing
B.S. 1963, McNeese State College
M.S. 1967, F.N.P. 1973, University of California, Los Angeles
M.P.H. 1979, D.P.H. 1983, University of California, Berkeley

## Suzanne Martin $(1970,2001)$

Librarian
B.A. 1966, San Francisco State College
M.L.S. 1967, University of California, Berkeley
M.A. 1979, San Francisco State University

Ed.D. 1991, University of San Francisco
Peter Maslan $(1985,1998)$
Professor, Theatre Arts
B.A. 1964, University of Washington
M.A. 1968, San Francisco State University

Marylu C. Mattson $(1970,1992)$
Professor, Hutchins School of Liberal Studies
B.S. 1955, Mount Saint Mary's College
M.A. 1964, University of California, Los Angeles

Ph.D. 1970, University of Southern California

## Marylou McAthie $(1984,1990)$

Professor, Nursing
B.S. 1953, M.S. 1956, De Paul University

Ed.D. 1980, University of San Francisco
William E. McCreary $(1966,1992)$
Professor, Hutchins School of Liberal Studies
B.A. 1951, Westminster College
M.A. 1955, Columbia University

Ph.D. 1962, University of Wisconsin
Stanley V. McDaniel $(1966,1992)$
Professor, Philosophy
B.A. 1953, University of California, Santa Barbara
M.A. 1968, University of California, Los Angeles

Peter J. D. Mellini $(1970,2002)$
Professor, History
B.A. 1962, M.A. 1965, Ph.D. 1971, Stanford University

Edith Menrath $(1964,1988)$
Professor, Psychology
Higher School Certificate, Cambridge University
License-es-Lettres, University of Paris, France
LouAllen F. Miller (1971, 2000)
Professor, Hutchins School of Liberal Studies
B.A. 1963, Occidental College
M.A. 1968, Ph.D. 1975, University of California, Santa Barbara

Susan G. Miller (1977, 2005)
Student Services Professional
School of Business and Economics
Carroll Mjelde $(1968,1996)$
Professor, Education
B.A. 1955, M.A. 1962, Ph.D. 1964, University of Washington, Seattle

Kristen Montgomery $(1991,2006)$
Student Services Professional, School of Business and Economics M.A. 1993

Edward F. Mooney (1968) (2002)
Professor, Philosophy
B.A. 1962, Oberlin College
M.A. 1966, Ph.D. 1968, University of California, Santa Barbara

Fred A. Moore $(1974,1992)$
Professor, Counseling
B.A. 1955, University of California, Los Angeles
M.S. 1962, California State College, Los Angeles

Ed.D. 1971, University of Southern California
Edgar W. Morse $(1970,1990)$
Professor, Hutchins School of Liberal Studies
B.S. 1951, Illinois Institute of Technology
M.A. 1965, Ph.D. 1972, University of California, Berkeley

Jamal H. Munshi $(1991,2003)$
Professor, Business Administration
B.S. 1970, San Jose State University
M.S. 1974, Colorado School of Mines

Ph.D. 1991, University of Arkansas
Rose Murray $(1972,1995)$
Professor, Nursing
B.S. 1966, University of British Columbia
M.S. 1968, University of California, San Francisco Medical Center

Constance Nelsen $(1976,2002)$
Student Services Professional
School of Business and Economics
Thomas C. Nelson $(1969,2003)$
Professor, Mathematics and Statistics
B.S. 1961, M.S. 1963, Santa Clara University

Ph.D. 1969, Oregon State University
H. Andrea Neves (1972, 2006)

Professor, Literacy Studies and Elementary Education
B.A. 1967, Universidad de las Americas, Mexico City
M.A. 1972, California State University, Sacramento

Ph.D. 1984, Stanford University
Michael S. Noble $(\mathbf{1 9 8 5}, 1995)$
Professor, Business Administration
B.A. 1972, University of Arizona
M.B.A. 1973, Ph.D. 1978, Arizona State University

Thomas F. Nolan (1983, 2004)
Professor, Nursing
B.A. 1961, M.Div. 1965, Saint John's University
B.S. 1972, Cornell University
M.A. 1974, Ph.D. 1980, New York University

Philip Northen $(1970,2007)$
Professor, Biology
B.A. 1963, Grinnell College
M.A. 1968, Ph.D. 1970, University of Wisconsin

Bob L. Nugent, Jr. (1981, 2005)
Professor, Art and Art History
B.A. 1969, M.F.A. 1971, University of California, Santa Barbara

Warren Olson $(1962,1992)$
Professor, Hutchins School of Liberal Studies
B.A. 1948, University of Denver
M.A. 1950, University of Washington

Ph.D. 1954, University of Minnesota
Thomas Ormond $(1997,2007)$
Professor, Kinesiology
B.Ed. 1979, Massey University, New Zealand
M.S. 1985, Indiana University

Ph.D. 1988, Ohio State University
John T. Palmer $(1967,1989)$
Professor, Counseling
B.S. 1943, University of Southern Mississippi
M.A. 1947, Teachers College, Columbia University

Ph.D. 1957, University of Southern California
Sue T. Parker $(1971,2002)$
Professor, Anthropology
A.B. 1966, M.A. 1969, Ph.D. 1973, University of California, Berkeley

Don Patterson (1970, 2000)
Professor, English
B.A. 1959, North Texas State College
M.A. 1964, North Texas State University

Richard W. Paul $(1969,1998)$
Professor, Philosophy
B.A. 1960, Northern Illinois University
M.A. (English) 1961, M.A. (Philosophy) 1965, Ph.D. 1968, University
of California, Santa Barbara
Charles J. Phillips $(1968,1992)$
Professor, Mathematics and Statistics
B.A. 1948, M.A. (Mathematics) 1963, San Jose State College
M.A. (Education) 1949, Stanford University

Ph.D. 1969, Oregon State University
Robert G. Plantz $(1983,2004)$
Professor, Computer Science
B.S. 1962, University of California, Berkeley

MSEE 1964, San Jose State College
Ph.D. 1971, University of California, Berkeley
Duncan E. Poland $(1965,2001)$
Professor, Physics and Astronomy
B.S. 1957, University of Michigan

Ph.D. 1963, University of Wisconsin
Douglas Powell $(1990,2001)$
Professor, Geography
A.B. 1941, University of Pacific
M.A. 1963, University of California, Berkeley

Joseph H. Powell $(1968,1986)$
Professor, Biology
B.S. 1959, Whitworth College

Ph.D. 1964, University of Washington
Glenn W. Price $(1967,1988)$
Professor, History
B.A. 1940, La Verne College
A.M. 1950, Ph.D. 1966, University of Southern California

George L. Proctor $(1968,1990)$
Professor, Philosophy
B.A. 1950, M.A. 1955, Ph.D. 1957, University of Virginia, Charlottesville

Charles F. Quibell $(1970,1999)$
Professor, Biology
B.A. 1958, Pomona College

Ph.D. 1972, University of California, Berkeley
Arthur Ramirez $(1990,2002)$
Professor, Chicano and Latino Studies
B.A. 1966, M.A. 1969, Ph.D. 1973, University of Texas at Austin

William L. Reynolds $(1972,1990)$
Professor, Management
B.A. 1969, Sonoma State College
M.B.A. 1974, California State University, Sacramento

Charles H. Rhinehart $(1961,1993)$
Professor, Education
B.A. 1948, San Jose State College
M.A. 1955, Stanford University

Dorothea "Tak" Richards $(1974,1999)$
Student Services Professional
Counseling and Psychological Services
B.A. 1954, Antioch College

Ph.D. 1978, Union of Experimenting Colleges and Universities
A. Richard Rizzo $\mathbf{( 1 9 7 4 , 2 0 0 3 )}$

Professor, Literacy Studies and Elementary Education
B.A. 1964, M.A. 1969, San Francisco State University

Ph.D. 1974, University of California, San Francisco
Maris Robinson $(1977,2000)$
Student Services Professional,
School of Education
George Rodetis $(1981,1995)$
Professor, Art and Art History
B.A. 1958, M.A. 1965, San Diego State University

Ph.D. 1981, University of Illinois, Urbana-Champaign
Dianne E. Romain $(1990,2004)$
Professor, Philosophy
B.A. 1968, University of Missouri, Kansas City
M.A. 1970, Ph.D. 1980, University of California, Berkeley

Gerald Rosen $(1971,1998)$
Professor, English
B.E.E. 1960, Rensselaer Polytechnic Institute
M.B.A. 1962, The Wharton School
M.A. 1966, Ph.D. 1969, University of Pennsylvania
R. Thomas Rosin $(1970,2005)$

Professor, Anthropology
B.A. 1960, Reed College

Ph.D. 1968, University of California, Berkeley

## Martha R. Ruddell $(1981,2005)$

Professor, Curriculum Studies and Secondary Education
B.S. 1967, Central Missouri State University
E. Gardner Rust $(1968,2001)$

Professor, Music
B.A. 1957, University of California, Los Angeles
M.A. 1959, Ph.D. 1970, University of California, Berkeley

Douglas S. Rustad $(1969,2000)$
Professor, Chemistry
B.S. 1962, M.S. 1964, University of Washington

Ph.D. 1967, University of California, Berkeley

Roshni Rustomji-Kerns $\mathbf{( 1 9 7 3 , 1 9 9 2 )}$
Professor, Hutchins School of Liberal Studies
B.A. 1961, American University of Beirut
M.A. 1963, Duke University

Ph.D. 1972, University of California, Berkeley
Alan F. Sandy, Jr. $(1971,1998)$
Professor, English
B.A. 1954, Amherst College

Diplome de langue 1958, Sorbonne, Paris
M.A. 1961, Ph.D. 1965, University of California, Berkeley

Gene D. Schaumberg $(1965,2003)$
Professor, Chemistry
B.S. 1961, Pacific Lutheran University

Ph.D. 1965, Washington State University
Sandra E. Schickele $(1972,2005)$
Professor, Business Administration
B.A. 1962, M.A. 1970, Ph.D. 1977, University of Chicago

Sara Sharratt $(1976,1995)$
Professor, Counseling
B.A. 1965, M.A. 1968, George Washington University

Ph.D. 1971, Southern Illinois University
Brian T. Shears $(1970,2002)$
Professor, Educational Leadership and Special Education
B.A. 1958, University of Wales
M.A. 1960, Ph.D. 1970, University of Minnesota

Robert J. Sherman $(1970,1995)$
Professor, Biology
B.A. 1962, Coe College
M.S. 1966, Ph.D. 1968, Oregon State University

Shirley K. Silver $(1970,1998)$
Professor, Anthropology
B.A. 1949, Ph.D. 1966, University of California, Berkeley

Thalia Silverman $(1969,1992)$
Professor, Education
B.S. 1949, M.A. 1956, Northwestern University

Ph.D. 1975, University of California, Berkeley
Frank R. Siroky $(1964,1998)$
Professor, Psychology
B.S. 1952, John Carroll University
M.A. 1954, Fordham University

Ph.D. 1964, Duquesne University
Robert W. Slagle (1970, 2004)
Professor, Psychology
B.S. 1963, University of New Mexico

Ph.D. 1968, University of California, Berkeley

David L. Sloss $(1970,1998)$
Professor, Music
B.A. 1962, Harvard University
M.A. 1968, Stanford University

Robert A. Smith $(1969,2003)$
Professor, Political Science
B.A. 1962, Yale University
M.A. 1964, Ph.D. 1971, University of California, Berkeley

Larry A. Snyder $(1971,1995)$
Professor, Music
B.A. 1950, Whittier College
M.A. 1952, University of Rochester

Robert P. Sorani $(1966,1995)$
Professor, Kinesiology
B.S. 1958, M.S. 1959, Ph.D. 1967, University of Southern California

Eugene H. Soules $(1965,1996)$
Professor, English
B.A. 1957, M.A. 1958, San Francisco State College

Ph.D. 1965, University of the Pacific
Clarice Stasz $(1970,2006)$
Professor, History
B.A. 1962, Douglass College
M.A. 1964, University of Wisconsin

Ph.D. 1967, Rutgers University
John M. Steiner $(1968,1992)$
Professor, Sociology
B.A. 1952, University of Melbourne
M.A. 1956, University of Missouri

Ph.D. 1967, University of Freiburg
James C. Stewart $(1975,2003)$
Professor, Environmental Studies and Planning
B.A. 1961, Wesleyan University
M.A. 1968, Ph.D. 1977, University of Hawaii

Kenneth M. Stocking $(1963,1979)$
Department of Biology, Environmental Studies and Planning
B.A. 1933, M.A. 1942, College of the Pacific

Ph.D. 1950, University of Southern California
Anne Swanson $(1992,2000)$
Dean, School of Science and Technology
B.S. 1970, Northern Illinois University

Ph.D. 1975, University of Wisconsin
E. Barbara Taylor $(1988,1997)$

Librarian
A.B. 1962, University of California, Berkeley
M.A. 1964, University of California, Los Angeles
B.L.S. 1970, University of British Columbia

Keith L. Taylor (1985, 1995)
Professor, Business Administration
B.S. 1952, Antioch College
M.I.M. 1972, American Graduate School of International Management

Ph.D. 1981, Arizona State University
Robert W. Tellander (1971, 2005)
Professor, Sociology
B.A. 1960, Princeton University
M.A. 1966, University of California, Berkeley

Philip O. Temko $(1964,1993)$
Professor, Philosophy
B.A. 1949, M.A. 1950, Columbia University

Ph.D. 1968, Stanford University
David Thatcher $(1969,1991)$
Professor, Education
B.A. 1947, Swarthmore College
M.A. 1949, University of Pennsylvania

Ed.D. 1965, University of California, Berkeley
Hobart Thomas $(1961,1992)$
Professor, Psychology
B.A. 1947, Southern Methodist University
M.A. 1948, Ph.D. 1951, Stanford University

Sue A. Thomas $(1972,2000)$
Professor, Nursing
B.S. 1960, University of California, San Francisco
M.S. 1969, Boston University

Ed.D. 1985, University of San Francisco
Ellen Kay Trimberger $(1975,2003)$
Professor, Women's and Gender Studies
B.A. 1962, Cornell University
M.A. 1963, Ph.D. 1969, University of Chicago

Ella M. Trussell $(1965,1992)$
Professor, Health Sciences and Physical Education
B.A. 1950, M.A. 1952, Ed.D. 1966, University of California, Berkeley

Richard A. Van Gieson $(1963,2000)$
Professor, Economics
B.A. 1958, Sacramento State College

Ph.D. 1997, Columbia Pacific University
David W. Van Nuys $(1971,2004)$
Professor, Psychology
B.A. 1962, University of Pennsylvania
M.A. 1964, Montana State University

Ph.D. 1970, University of Michigan
Albert L. Wahrhaftig $(1969,2005)$
Professor, Anthropology
B.A. 1957, Stanford University
M.A. 1960, Ph.D. 1975, University of Chicago

Charles "Dick" Walker $(1978,1995)$
Athletic Coach
B.S. 1960, Hamline University
M.Ed. 1970, West Chester State College

David Walls $(1982,2005)$
Professor, Sociology
A.B. 1964, University of California, Berkeley
M.A. 1972, Ph.D. 1978, University of Kentucky, Lexington

## Sandra D. Walton $(1970,2002)$

Librarian
B.A. 1961, M.LS 1963, University of California, Berkeley
M.A. 1975, Sonoma State University

## Eva Washington $(1966,1988)$

Professor, Education
B.A. 1945, San Jose State College
M.A. 1956, Stanford University

Ed.D. 1962, University of California, Berkeley
Stephen D. Watrous $(1968,2002)$
Professor, History
B.A. 1961, M.A. 1965, University of Wisconsin

Ph.D. 1970, University of Washington
Shane Weare $(1971,2000)$
Professor, Art and Art History
A.R.C.A. 1963, Royal College of Art, London

Linda S. Webster (1990, 2001)
Professor, Education
A.B. 1965, M.A. 1973, Ph.D. 1977, University of California, Berkeley
D. Anthony White $(1968,2005)$

Professor, History
B.A. 1958, Stanford University
M.B.A. 1961, University of California, Berkeley

Ph.D. 1968, University of California, Los Angeles
Debra White $(1981,2001)$
Student Services Professional, Counseling and Psychological Services
B.A. 1973, University of California, Los Angeles
M.S. 1978, California State University, Long Beach

Ph.D. 1981, University of California, Santa Barbara
Donald Wilkinson $(1971,1992)$
Professor, Psychology
B.A. 1968, University of Michigan, Ann Arbor
M.A. 1972, Sonoma State University

Janice L. "J. J." Wilson $(1969,2003)$
Professor, English
B.A. 1957, Stanford University
M.A. 1962, Ph.D. 1969, University of California, Berkeley

## Ann B. Woodhead $(1975,2002)$

Professor, Theatre Arts
M.A. 1982, Sonoma State University

Judith G. Wright $(1973,1998)$
Professor, Business Administration
B.A. 1965, DePauw University
M.A. 1967, Ph.D. 1973, Indiana University, Bloomington

William "Terry" Wright III $(1969,2006)$
Professor, Geology
B.A. 1965, Middlebury College
M.A. 1967, Indiana University

Ph.D. 1970, University of Illinois

## Martha M. Yates $(1968,2000)$

Professor, Kinesiology
B.S. 1960, University of North Carolina, Greensboro
M.A. 1963, San Jose State College

Ph.D. 1969, University of Wisconsin
Homero E. Yearwood (1974, 2000)
Professor, Criminal Justice Administration
B.A. 1956, New Mexico Highlands University
M.Div. 1959, M.Rel.Ed 1960, Golden Gate Theological Seminary

Doctor of Criminology 1972, University of California, Berkeley
Donna Yonash (1980, 2005)
Lecturer, English
Ph.D. 1971, University of California, San Diego
Jean A. Young $(1965,1984)$
Professor, Education
B.S. 1951, State Teacher's College, New York
M.A. 1957, Ed.D. 1968, University of California, Berkeley
*Emeritus status pending

## STUDENT SERVICE PROFESSIONALS

Dates listed in parentheses indicate year of appointment to Sonoma State University.

Kimberly Abodallo (1995)
Academic Records Specialist
Andre Bailey (1993)
ACE Advisor and Program Specialist
B.S. 1994, Sonoma State University

Sarah Bauer (2006)
Campus Life Advisor
B.S. 2001, Muskingum College
M.A. 2003, Indiana Univeristy of Pennsylvania

Kerry Bourns (2004)
Outreach Advisor
B.A. 1984, California State University, Hayward
M.S. 2005, California Coast University

## Kerbrina Boyd (2002)

Academic Records Specialist
B.A. 1995, Sonoma State University
M.A. 1999, Sonoma State University
M.A. 2005, Sonoma State University

## Edie Brown (2001)

ACE Advisor and Program Specialist
B.A. 1997, Sonoma State University
M.S. 2001, San Francisco State University

Julie Bulow von Dennewitz (2006)
Residential Life Coordinator
B.B.A. 1999, Pacific Lutheran University
M.E.D. 2003, Oregon State University

Brent Bynum (2007)
Academic \& Career Advisor/Program Coordinator
B.S. 1995, University of California, Davis
M.S. 2003, California State University, Sacramento

Margaret Cook-Imoto (1984)
Academic Records Specialist

## Laurie Dawson (2002)

Learning Skills Services Component Specialist and Coordinator
B.A. 1972, California State University, Chico
M.A. 1998, Sonoma State University

Edvige Day (2001)
Academic Records Specialist
B.A. 1966, Stanford University
M.S. 1985, Dominican University of San Rafael

Carmen Diaz Misa (2001)
Financial Aid Representative
B.A. 2000, Sonoma State University

Aurora Duarte-Hall (2003)
Project Coordinator
A.A. 1997, Santa Rosa Junior College
B.A. 2000, Sonoma State University

Matthew Flores (2004)
Academic Records Specialist
B.S. 1999, Stanford University

Heather French (2006)
Residential Life Coordinator
B.A. 1997, Bradford College
M.A. 2005, Humboldt State University

Rosemary Galten (2005)
Joint Doctorate Program Assistant
B.A. 1986, San Francisco State University
M.A. 1996, University of San Francisco

Donna Garbesi (2003)
Elementary Education and Multiple Subject Credential Program
Advisor/Recruiter
B.A. 1982, San Francisco State University
M.A. 2001, Sonoma State University

Christy Giambastiani (2007)
Disability Management Advisor
B.S. 1995, University of California, Los Angeles

Julie Greathouse (2003)
Coordinator for Student Academic Services
B.S. 1998, Muskingum College
M.A. 2001, Indiana University of Pennsylvania

Anne Greenblatt (2002)
ACE Advisor and Program Specialist
B.A. 1966, Antioch College
M.A. 1970, Stanford University
M.A. 1994, John F. Kennedy University

Jacqueline Holley (2006)
Campus Life Advisor
B.A. 2001, Sonoma State University
M.S. 2006, San Francisco State University

Katheryn Horton (2004)
Early Assessment Program Coordinator
B.A. 1985, University of California, San Diego

Julia Ibanez (2000)
Loan Coordinator
B.A. 1997, Sonoma State University

Teresa James (2001)
Operations Coordinator
B.S. 1991, California State University, San Bernardino

Natalie Kalogiannis (2002)
Admissions and Records Quality Production Operations Lead
A.A. 1996, Santa Rosa Junior College
B.A. 1999, Sonoma State University

Erica Klafter (2004)
Academic Records Specialist
B.A. 2003, Sonoma State University

Cindy Larson (1995)
Financial Aid Representative

## Lillian Lee (1987)

Special Populations Specialist
A.A. 1991, Santa Rosa Junior College

Ivonne Manriquez (2004)
Financial Aid Representative
B.S. 2002, Sonoma State University

Amanda McGowan (2002)
Advising and Transfer Credit Functional Lead
B.A. 1998, University of California, Santa Cruz

Andrea Melrose (2006)
Residential Life Coordinator
B.A. 2002, Marquette University
M.S. 2004, University of Kansas Main Campus

Stacey Murray (2007)
Residential Life Coordinator
B.A. 2001, New England College
M.S. 2006, University at Albany

Guadalupe Navarro-Ochoa (2004)
Academic Records Specialist
B.A. 2004, Sonoma State University

## Laurie Ogg (2000)

Scholarship Coordinator
B.A. 1994, Sonoma State University
M.A. 1999, Sonoma State University

David Orr (1976)
Head Trainer
B.A. 1972, Biola University

Barton Owens (2003)
Assistant Athletic Trainer
B.A. 1994, Sonoma State University
M.A. 1998, Sonoma State University

Raul Pasamonte (2005)
Outreach Advisor
B.A. 2002, Holy Names College

## Monique Pearl (2005)

Learning Skills Services Specialist: Mathematics
A.S. 1984, Santa Rosa Junior College
B.A. 2002, Sonoma State University

Bruce Peterson (1987)
ACE Advisor and Program Specialist
B.A. 1971, University of California, Los Angeles
M.S. 1982, San Diego State University

Carolynne Schmidt (2000)
Financial Aid Representative
B.S. 2002, Sonoma State University

Kenneth Scott (2006)
Coordinator for Alcohol and Drug Education
B.A. 2001, Sonoma State University
M.A. 2004, John F. Kennedy University

## Sandra Shand (1989)

ACE Advisor and Outreach Coordinator
B.A. 1972, Humboldt State University
M.S. 1989, San Francisco State University

Sheila Sims (1981)
Academic Advisor
B.A. 1981, Sonoma State University

Joshua Skillman (2005)
Residential Life Coordinator
B.S. 1999, Indiana University Bloomington
M.S. 2001, Indiana University Bloomington

Daniel Smith (2006)
Learning Skills Services Specialist: Academic Writing
B.A. 2000, San Francisco State University
M.A. 2005, San Francisco State University

## Marguerite St Germain (1980)

Recuiter/Admissions Counselor
Michael Stark (2006)
Residential Life Coordinator
B.A. 1999, University of Southern Mississippi
M.E.D. 2000, University of Southern Mississippi

## Janet Swing (1984)

ACE Advisor \& EOP Admissions Coordinator
B.A. 1978, University of California, Santa Cruz
M.S. 1983, San Francisco State University

## Phyllis Tajii (2001)

Academic Records Specialist
B.A. 1974, San Jose State University

## Marisa Thigpen (2007)

International Student Services Coordinator
B.S. 2001, California Polytechnic State University, San Luis Obispo

Rosanna Toews (2002)
Academic Records Specialist
A.A. 1998, Santa Rosa Junior College
B.A. 2001, San Diego State University

## Sherrill Traverso (1985)

Admissions and Records Coordinator
B.A. 1981, Humboldt State University

## Luis Vega (2007)

Academic \& EOP Services Advisor/Program Coordinator
B.A. 1990, California Polytechnic State University, San Luis Obispo
M.A. 1994, California Polytechnic State University, San Luis Obispo
M.A. 2004, California State University, Bakersfield

## Elizabeth Warner (1996)

Administrative Coordinator
B.A. 1989, Sonoma State University

Carson Williams (2004)
Financial Aid Representative
B.A. 2000, Arizona State University
B.S. 2000, Arizona State University

## Ivona Williams (1989)

Outreach Advisor
B.A. 1991, Sonoma State University
M.A. 1997, Sonoma State University

Sara Young (2001)
Assistant Systems Coordinator
A.A. 1999, Santa Rosa Junior College
B.S. 2001, Sonoma State University


## INDEX

## A

Academic Advising ..... 414
For Undeclared Students. ..... 398
Academic Calendar. ..... 6
Academic Centers, Institutes, and Projects ..... 388
Academic Departments. See Departments
Academic Disqualification ..... 417
Academic Load ..... 411
Academic Probation ..... 417
Academic Programs ..... 46
Academic Records. ..... 416
Academic Renewal ..... 418
Academic Standing ..... 417
Accreditation ..... 5
Acting. See Theatre Arts
Add/Drop ..... 411
Additional Work Opportunities ..... 24
Administration ..... 433
Administrative-Academic Disqualification ..... 418
Administrative-Academic Probation ..... 413
Admission and Evaluation of Academic Records. ..... 17
Admissions ..... 397
Academic Qualification ..... 15
Adult Students ..... 16
Application Filing Periods, 2008-2010. .....  8
Advanced Placement ..... 17
Applicants Not Regularly Eligible ..... 16
Application Acknowledgment. .....  9
Application Filing Periods .....  8
Credit by Challenge Examinations ..... 17
Credit by Examination ..... 17
Credit for Noncollegiate Instruction ..... 17
Credit for Prior Learning ..... 17
Determination of Residence for Nonresident Tuition Purposes .....  .18
Educational Opportunity Program ..... 15
Eligibility Index ..... 10
Faculty Evaluated Prior Learning (FEPL) Program ..... 17
Faculty Evaluation ..... 18
FEPL Policies and Procedures ..... 18
Freshman Requirements. ..... 10
General Information About Admission and Evaluation of Academic
Records. ..... 17
Graduate and Postbaccalaureate Admission ..... 13
Graduate and Postbaccalaureate Application Procedures .....  9
Graduation Requirement in Writing Proficiency ..... 13
Hardship Petitions. ..... 10
High School Students. ..... 11
Housing ..... 15
Immunization Requirements - Pre-enrollment ..... 16
Impacted Programs .....  8
Importance of Filing Complete, Accurate, and Authentic Application Documents. ..... 8
Information for International Students ..... 14
International (Foreign) Student Admission Requirements ..... 14
International Services and Activities at SSU ..... 15
International Student Fees and Expenses (Academic Year) ..... 15
Intrasystem and Intersystem Enrollment Programs. ..... 16
Limitation on Units Possible Through FEPL ..... 18
Lower-Division Transfer Requirements ..... 11
Making Up Missing College Preparatory Subject Requirements . ..... 12
Nonbaccalaureate Courses in English and Math
(courses with numbers lower than 100). ..... 13
Orientation and Advising ..... 18
Other Applicants ..... 15
Payment of User Fee. ..... 18
Posting of FEPL Credit. ..... 18
Procedures and Policies. .....  8
Provisional Admission ..... 11, 12
Reapplication for Subsequent Semesters ..... 9
Requirements ..... 13
Reservation ..... 17
Returning Students ..... 14
Subject Requirements. ..... 11
Supplementary Admission Criteria .....  8
Systemwide Placement Test Requirements ..... 12
Test Requirements ..... 12
TOEFL Requirement ..... 12
Graduate-Postbaccalaureate TOEFL Requirement. ..... 14
English Placement Test ..... 13
Entry Level Mathematics Placement Examination ..... 13
Transfer Requirements ..... 11
Undergraduate Admission Requirements. ..... 10
Undergraduate Application Procedures .....  8
Upper-Division Transfer Requirements ..... 12
Veterans ..... 16
Adult Students ..... 16
Advanced Placement ..... 17
Advancement to Candidacy ..... 38
Advising ..... 414
Advising Career \& EOP (ACE) Services ..... 398
Alan Pattee Scholarships ..... 25
Alcohol and Drug Education Program ..... 399
Alumni Association ..... 427
AMERICAN MULTICULTURAL STUDIES ..... 47
Admission into the Major ..... 48
Bachelor of Arts in American Multicultural Studies ..... 48
Careers in American Multicultural Studies ..... 47
CIP/Service Learning. ..... 48
Course Descriptions. ..... 260
Grading Minimums ..... 48
Integrated Program ..... 49
Lower-Division Units ..... 48
Major Electives and Repeated Courses ..... 48
Minor in American Multicultural Studies ..... 50
Optional Courses in Related Fields and Departments ..... 48
Programs Offered ..... 47
Anthropological Studies Center ..... 52, 388
ANTHROPOLOGY ..... 51
Admission to the Program ..... 55
Advisory Plan in Biological Anthropology ..... 54
Advisory Plan in Human Development ..... 54
Anthropological Studies Center ..... 52
Anthropology Department Resources ..... 52
Anthropology Laboratory. ..... 52
Anthropology Scholarships ..... 52
Bachelor's Degree Programs ..... 52
Careers in Anthropology ..... 51
Course Descriptions ..... 262
Course Requirements ..... 54
Facilities and Faculty ..... 55
Faculty ..... 51
Master of Arts in Cultural Resources Management ..... 55
Minor in Anthropology ..... 55
Programs Offered .....  .51
Requirements for the Degree ..... 55
Appeals ..... 26
Applicants Not Regularly Eligible ..... 16
Application Acknowledgment .....  .9
Application Fee ..... 20
Application Filing Periods .....  8
Application Procedures ..... 24
APPLIED ARTS ..... 56
Activity Courses ..... 56
Concentration Courses. ..... 56
Minor in Applied Arts ..... 56
Program Offered ..... 56
ART AND ART HISTORY ..... 58
Admission Requirements ..... 63
Advising ..... 59
Areas of Emphasis ..... 61
Bachelor's Degree Programs ..... 59
Career Minor in Arts Management ..... 65
Careers in Art and Art History ..... 59
Course Descriptions ..... 266
Major Core Requirements ..... 64
Minor in Art History ..... 60
Minor in Art: Studio Concentration ..... 64
Minor in Film Studies ..... 61
Programs Offered ..... 58
Requirements for the Major ..... 59, 61
Studio Concentration, Painting Emphasis ..... 63
Teaching Credential Preparation ..... 65
Arts, The ..... 408
Arts and Humanities, School of ..... 40
Associated Students ..... 399
ASTRONOMY ..... 66
Careers in Astronomy ..... 66
Course Descriptions. ..... 271
Faculty ..... 66
Minor in Astronomy ..... 66
Program Offered ..... 66
Athletics, Intercollegiate ..... 402
Auditing ..... 414
Availability of Institutional and Financial Assistance Information ..... 26
Average Cost ..... 24
Average Support Cost Per Full-time Equivalent Student and Sources of Funds ..... 24
Awarding of Degrees ..... 32
B
Baccalaureate Candidates ..... 31
Bachelor of Arts (B.A.) ..... 29
Bachelor of Science (B.S.) ..... 29
Bachelor's DegreesPrograms29
Requirements ..... 31
Second ..... 32
BIOLOGY ..... 67
Admission to the Program ..... 71
Bachelor's Degree Programs ..... 69
Biology Degree Concentrations ..... 67
Careers in Biology ..... 67
Course Descriptions. ..... 272
Degree Requirements ..... 68
Master of Science in Biology ..... 71
Minor in Biology ..... 71
Preparation for Applying to Health Professions ..... 68
Programs Offered ..... 67
Restrictions ..... 69
Secondary Education Teaching Credential Preparation in Life Science ..... 68
Upper-Division Biology Core ..... 68
Upper-Division Biology Electives ..... 68
Biophysical Geography Laboratory ..... 153
BUSINESS ADMINISTRATION ..... 73
Advising ..... 74
Bachelor's Degree Program ..... 73
Careers in Business Administration ..... 73
Concentrations for Business Administration Majors ..... 75
Course Descriptions. ..... 276
Department Mission. ..... 73
Major in Business Administration ..... 74
Master of Business Administration ..... 78
MBA Admissions ..... 78
Minor in Business Administration ..... 78
Pre-Business Administration Program ..... 74
Programs Offered ..... 73
Undergraduate Program Special Requirements ..... 77
Wine MBA Program Special Requirements ..... 81

## C

Calendar, Academic .....  6
CALIFORNIA CULTURAL STUDIES ..... 82
Areas Of Concentration ..... 83
Minor. ..... 84
Prerequisites to the Major ..... 82
Special Major (B.A.) and Minor in Interdisciplinary Studies in California Cultural Studies ..... 82
California Institute on Human Services ..... 388
California Reading and Literature Project ..... 388
California State University (CSU) Campuses ..... 432
Campuses ..... 430
Campus Policies, Other ..... 424
Campus Smoking Policy ..... 424
Cancellation of Registration or Withdrawal from the Institution. ..... 412
Career Minor in Arts Management ..... 65, 85
Career Minor in Health Systems Organizations. ..... 85
CAREER MINORS ..... 85
Career Minor in Arts Management. ..... 85
Career Minor in Health Systems Organizations ..... 85
Career Minor in Women's Health ..... 85
Programs Offered ..... 85
Career Placement ..... 420
Career Resource Center. See Career Services
Career Services ..... 398
Catalog Year Requirement ..... 414
Categories of Enrollment. ..... 410
Center for Community Engagement ..... 389
Center for Economic Education ..... 389
Center for Interdisciplinary Geospatial Analysis (CIGA) ..... 341
Center for Performing Arts ..... 408
Center for Reseach and Education in Science and Technology (CREST) ..... 389
Center for Student Leadership ..... 400
Center for Teaching and Professional Development ..... 389
Center for the Study of the Holocaust and Genocide ..... 390
Certificate in Gerontology ..... 160
Change in Graduate Standing. ..... 38, 419
Changes in Rules and Policies. ..... 410
CHEMISTRY ..... 87
Bachelor's Degree Programs ..... 87
Careers in Chemistry ..... 87
Course Descriptions ..... 282
Faculty ..... 87
Minor in Chemistry ..... 90
Programs Offered ..... 87
Secondary Education Teaching Credential Preparation ..... 90
CHICANO AND LATINO STUDIES. ..... 91
Advising Four-year Plan for CALS Majors ..... 92
Advising Plan for Four-Year Integrated Program ..... 93
Bachelor's Degree Program ..... 92
Course Descriptions ..... 284
Faculty ..... 91
Future Careers. ..... 91
History of the CALS Major and the Department ..... 91
Minor in Chicano and Latino Studies ..... 93
Programs ..... 91
Social Science emphasis: ..... 93
Spanish emphasis: ..... 93
Spanish Language Proficiency ..... 93
Subject-Matter (Teaching Credential) Preparation Programs. ..... 93
Upper-Division Subject Matter Preparation Program
in Chicano and Latino Studies/Liberal Studies ..... 94
Child Care Center See Children's School
Class Attendance ..... 419
Communication Studies ..... 95
Bachelor's Degree Program ..... 95
Careers in Communication Studies ..... 95
Course Descriptions. ..... 287
Faculty ..... 95
Programs Offered ..... 95
Community Counseling Center ..... 390
Compliance ..... 424
Computer Science ..... 97
Course Descriptions ..... 289
Faculty ..... 97
Minor in Computer Science ..... 98
Programs Offered ..... 97
Concurrent, Cross, and Visitor Enrollment Programs ..... 413
Concurrent Enrollment with SSU Extended Education ..... 413
Continuing Student Status ..... 412
Continuous Enrollment Policy ..... 38
Counseling ..... 99
Admission Requirements ..... 100
Application Procedures ..... 100
Community College Counseling Credential ..... 101
Course Descriptions. ..... 293
Faculty ..... 99
General Information Meetings ..... 100
Master of Arts in Counseling ..... 100
Programs Offered ..... 99
Counseling and Psychological Services ..... 400
Course Challenges. ..... 199
Course Descriptions ..... 260
Course Numbering System ..... 46
Course Prefixes. ..... 46
Course Repeat ..... 418
Course Requirements Policy ..... 426
Creative Writing ..... 102
Programs Offered ..... 102
Credit by Challenge Examinations ..... 17
Credit by Examination ..... 17
Credit Cards. ..... 22
Credit for Noncollegiate Instruction ..... 17
Credit for Prior Learning ..... 17
Criminal Justice Studies ..... 103
Criminology and Criminal Justice Studies ..... 103
Bachelor's Degree Program ..... 103
Course Descriptions ..... 296
Faculty ..... 103
Minor in Criminology and Criminal Justice Studies ..... 104
Programs Offered ..... 103
Cross Enrollment ..... 413
CSU Concurrent Enrollment ..... 413
CSU Visitor Enrollment ..... 413
Customer Services Center ..... 22
D
Dean's List ..... 416
Declaring or Changing a Major ..... 414
Degree Requirements ..... 31, 68
Departmental and Athletic Scholarships ..... 25
Departments ..... 40
Determination of Residence for Nonresident Tuition Purposes ..... 18
Diplomas ..... 416
Disabilities Services For Students ..... 401
Disability ..... 425
Discrimination See Nondiscrimination Policy
Discrimination Complaint Procedures ..... 425
Doctoral Degree Program ..... 30
Doctorate of Education (Ed.D.) ..... 30
Double Majors ..... 32
Double Major with Economics. ..... 149
E
Early Childhood Programs ..... 129
Economics ..... 105
B.A. Advisory Study Plans ..... 106
B.A. Field Concentrations ..... 106
Bachelor of Arts in Economics ..... 105
Careers in Economics ..... 105
Course Descriptions ..... 297
Double Majors ..... 106
Faculty ..... 105
Graduate Work in Economics and Related Fields ..... 106
Learning Objectives ..... 105
Minor in Economics ..... 106
Prerequisites ..... 106
Programs Offered ..... 105
Teaching Credential Preparation ..... 107
Education ..... 108
Admission to Basic Teaching Credential
Preparation Programs. ..... 109
Advancement to Candidacy ..... 112
Applying to the M.A. in Education Program ..... 111
Basic Teaching Credential Programs ..... 109
Career Outlook ..... 109
Course Descriptions ..... 299
Credentials Office ..... 109
Departments and Programs ..... 108
Description of M.A. in Education Programs ..... 110
General Information ..... 108
Individualized Examination ..... 111
M.A. Degree in Education ..... 112
Master of Arts in Education ..... 110
Pathways to Program Completion ..... 111
Prerequisites for the M.A. in Education Program ..... 111
Procedures for Admission to Basic Teaching Credential Preparation Programs ..... 110
Program Portfolio ..... 112
Thesis/Project. ..... 111
Undergraduate Integrated/Blended Degree and Credential Programs ..... 108
Educational Mentoring Teams ..... 401
Educational Opportunity Program ..... 15
Education: Curriculum Studies \& Secondary Education (CSSE) ..... 113
Basic Authorization to Teach in California Public Schools ..... 116
Career Outlook ..... 113
Course Descriptions ..... 301
Credentials Office ..... 113
Curriculum Teaching and Learning Recommended Course Advising Pathway ..... 117
Faculty ..... 113
Integrated Degree and Credential Pathway Program ..... 115
Master of Arts in Education with Concentration in Curriculum, Teaching, and Learning ..... 116
Programs Offered ..... 113
Requirements for the Master of Arts in Education Degree Program: ..... 117
Single Subject Credential Program ..... 114
Special Resources ..... 113
Teaching Performance Assessment ..... 115
Education: Educational Leadership and
Special Education (ELSE) ..... 118
Administrative Service Credentials ..... 124
Admission to Basic Teaching Credential Preparation Programs. ..... 120
Applying to the M.A. Program ..... 122
Authorization to Teach in the California Public Schools ..... 120
Career Outlook. ..... 118
Continuation in Basic Teaching Credential Preparation Programs120Core Curriculum.122
Course Descriptions. ..... 303, 309
Course of Study ..... 123
Department Overview ..... 118
Faculty ..... 118
Internship Program in Special Education ..... 121
Master of Arts with a Concentration in Educational Leadership. 125
Master of Arts with a Concentration inSpecial Education122
Multiple/Single Subject Teacher Education Requirements ..... 119
Programs Offered ..... 118
Requirements for the M.A. Degree in Education ..... 122
Special Education Credentials ..... 120
Special Education Requirements ..... 119
Student Service's Office ..... 118
Education: Literacy Studies and
Elementary Education (LSEE) ..... 126
Basic Teaching Credential Preparation Programs. ..... 127
Course Descriptions ..... 302, 304, 306
Credentials Office ..... 126
Credentials Office ..... 132
Early Childhood Programs ..... 129
Faculty. ..... 126
Master of Arts in Education with Concentration
in Early Childhood Education ..... 129
Master of Arts in Education with Concentration in Reading and Language ..... 132
Multiple Subject Intern Program ..... 129
Multiple Subject Program ..... 126
Multiple Subject Teaching Credential Programs ..... 126
Programs Offered ..... 126
Reading and Language Arts Specialist Credential ..... 134
Reading and Language Programs ..... 131
Reading Certificate Program ..... 134
Reading Programs ..... 132
Electives ..... 32
Eligibility Index. ..... 10
Emeritus Faculty ..... 449
Engineering Science ..... 136, 138
Admission to the Program. ..... 139
Bachelor's Degree Program ..... 136
Careers in Engineering Science. ..... 136
Conditional Admission ..... 139
Course Descriptions ..... 311
Degree Requirements ..... 141
Faculty ..... 136
GPA Requirements ..... 141
Internship Opportunities and Financial Aid ..... 139
Internship Requirement ..... 141
Laboratories ..... 141
Master of Science in Computer and Engineering Science ..... 138
Minor in Mathematics ..... 138
Program Educational Objectives ..... 137, 139
Program of Study ..... 140
Program Outcomes ..... 137, 139
Programs Offered ..... 136
Written English Proficiency Test Requirement ..... 139
English Courses (ENGL) ..... 146
English ..... 142
Admission to the Program. ..... 145
Advancement to Candidacy ..... 145
Advising Clarifications ..... 144
Bachelor's Degree Program ..... 142
Course Descriptions ..... 313
Creative Writing Concentration ..... 143
Degree Options ..... 146
English Courses (ENGL). ..... 146
English Education Concentration ..... 143
Faculty. ..... 142
Literature Concentration ..... 143
Literature Concentration ..... 144
Major Core Requirements for All English Majors ..... 142
Master of Arts in English ..... 145
Minor in English ..... 145
Minor in Linguistics. ..... 145
Program Requirements ..... 145
Programs Offered ..... 142
Teaching Credential Preparation ..... 144
English Placement Test ..... 13
Entry Level Mathematics Placement Examination ..... 13
Environmental Studies and Planning ..... 147
Admission Requirements ..... 147
Advisory Plans for the Freshman and Sophomore Years ..... 147
Bachelor's Degree Programs ..... 148
Course Descriptions. ..... 317
Double Major with Economics ..... 149
Education and the Environment (B.A.) ..... 148
Energy Management and Design (B.A. and B.S.) ..... 148
Environmental Conservation and Restoration (B.A.) ..... 148
Faculty ..... 147
Hazardous Materials Management and Water Quality (B.A. and B.S.) ..... 148
Minor in Environmental Studies and Planning ..... 149
Outdoor Leadership (B.A.) ..... 149
Planning Concentration (B.A.) ..... 149
Programs Offered ..... 147
Required Courses ..... 148
Special Resources in ENSP ..... 149
Study Plans ..... 148
Supporting Programs ..... 147
Ethnic Studies Requirement ..... 33
Excessive Enrollment ..... 418
External Scholarships ..... 25
F
Faculty. ..... 436
Faculty Evaluated Prior Learning (FEPL) Program ..... 17
Faculty Evaluation ..... 18
Fairfield Osborn Preserve. ..... 390
Fall Schedule of Fees 2007-08 ..... 20
Federal Aid ..... 24
Fees and Charges, Other ..... 20
Fees and Debts Owed to the Institution ..... 23
Fees and Expenses ..... 20
Fees, Specific Course ..... 21
Fee Waivers ..... 23
FEPL Policies and Procedures ..... 18
FEPL Credit, Posting of ..... 18
Film History Emphasis ..... 60
Film Studies ..... 150
Faculty ..... 150
Film Studies Courses (ARTH) ..... 151
Minor in Film Studies ..... 150
Programs Offered ..... 150
Film Studies Courses (ARTH) ..... 151
Financial Aid and Scholarship Programs. ..... 24
Additional Work Opportunities ..... 24
Alan Pattee Scholarships ..... 25
Appeals ..... 26
Application Procedures ..... 24
Departmental and Athletic Scholarships25
External Scholarships25
Financial Aid Programs ..... 24
President's Scholar Program ..... 25
University Scholarship Program ..... 25
Financial Aid Appeal Policy ..... 424
Financial Aid Programs ..... 24
Foundation Courses ..... 32
Freshman Requirements ..... 10
G
Galbreath Wildlands Preserve ..... 391
General Education Program ..... 33
General Requirements for the Master's Degree ..... 38
Geography ..... 152
Bachelor's Degree Program ..... 153
Biophysical Environment Concentration ..... 154
Biophysical Geography Laboratory ..... 153
Careers in Geography ..... 152
Center for Interdisciplinary Geospatial Analysis (CIGA) ..... 153
Core Requirements ..... 153
Course Descriptions ..... 322
Environment and Society Concentration ..... 153
Faculty ..... 152
Geography Department Resources ..... 152
Geography Major Without Concentration ..... 155
Geospatial Techniques Concentration ..... 154
Geospatial Technology Instructional Laboratory ..... 152
Globalization and Identity Concentration ..... 153
Map Library ..... 153
Minor in Geography ..... 155
Programs Offered ..... 152
Teaching Credential Preparation ..... 155
Geology ..... 156
Bachelor's Degree Programs ..... 156
Careers in Geology ..... 156
Course Descriptions ..... 325
Faculty ..... 156
Minor Core Requirements ..... 158
Minor Electives ..... 158
Minor in Geology ..... 158
Minor in Paleontology ..... 158
Minor in Paleontology ..... 158
Programs Offered ..... 156
Secondary Education Teaching Credential Preparation ..... 158
Geospatial Technology Instructional Laboratory. ..... 152
Gerontology ..... 159
Careers in Gerontology ..... 159
Certificate Core Courses ..... 160
Certificate Electives ..... 160
Certificate in Gerontology ..... 160
Course Descriptions. ..... 328
Minor Electives ..... 159
Minor in Gerontology ..... 159
Programs Offered ..... 159
Global Studies ..... 161
Asia Concentration ..... 163
Bachelor's Degree Program ..... 161
Careers in Global Studies ..... 161
Course Descriptions. ..... 330
Europe Concentration ..... 162
Global Environmental Policy Concentration ..... 163
Global Studies Minor ..... 164
International Economic Development Concentration ..... 163
Latin America Concentration ..... 163
Overseas Concentrations ..... 164
Programs Offered ..... 161
Good Standing ..... 417
Grade Appeal ..... 424
Grade Reporting ..... 416
Grading ..... 415
Graduate Admission Requirements ..... 37
Graduate and Postbaccalaureate Admission ..... 13
Graduate and Postbaccalaureate Application Procedures .....  9
Graduate and Postbaccalaureate Regulations ..... 419
Graduate Degrees ..... 37
Graduate-Postbaccalaureate TOEFL Requirement ..... 14
Graduation Requirement in Writing Proficiency ..... 13
Green Music Center ..... 408
Grievance Procedures, Student ..... 424
H
Hardship Petitions ..... 10
Health Center, Student ..... 405
Health Professions Advisory Program ..... 165
Admission to Health Professions Schools ..... 165
Courses for Health Professions ..... 165
Hepatitis B ..... 421
High School Students ..... 11
History of the University ..... 5
History ..... 167
Bachelor's Degree Program ..... 167
Careers in History ..... 167
Comprehensive Examination Option ..... 170
Course Descriptions ..... 330
Faculty ..... 167
History Honors Program ..... 168
Major Core Requirements ..... 168
Major Electives ..... 168
Master of Arts in History ..... 169
Master's Thesis Option. ..... 170
Minor in History ..... 168
Programs Offered ..... 167
Requirements for Admission ..... 169
Requirements for the M.A. ..... 170
Teaching Credential Preparation ..... 169
Holds ..... 410
Honors at Graduation ..... 32
Housing ..... 15
Housing Services ..... 28
Human Development ..... 171
Bachelor's Degree Program ..... 171
Careers in Human Development ..... 171
Course Descriptions ..... 335
Major Core Requirements ..... 171
Major Electives ..... 172
Prerequisites to the Major ..... 171
Program Offered ..... 171
Total units required for B.A. in Human Development ..... 171
Hutchins Institute for Public Policy Studies and Community Action ..... 391
Hutchins School of Liberal Studies ..... 173
Admission ..... 174
Bachelor's Degree Program ..... 175
Blended Program ..... 177
Careers in Liberal Studies ..... 173
Core Seminars ..... 175
Course Descriptions ..... 336
Degree Completion Program ..... 178
Faculty. ..... 173
Interdisciplinary General Education Program Lower Division ..... 174
Interdisciplinary Studies ..... 175
LIBS/MBA Advising Pathway ..... 176
M.A. Program in Interdisciplinary Studies. ..... 178
Minor in Integrative Studies ..... 178
Multiple Subject (Pre-Credential) Preparation ..... 176
Overview ..... 173
Requirements for the Major ..... 175
I
Immigration Requirements For Licensure ..... 419
Immunization Requirements - Pre-enrollment ..... 16
Importance of Filing Complete .....  8
Information Technology ..... 396
Institute for Community Planning Assistance ..... 392
Integrated Degree and Credential Program ..... 185
Interdisciplinary General Education Program Lower Division ..... 174
Interdisciplinary Studies ..... 179
See also Hutchins School of Liberal Studies
Application requirements ..... 179
Bachelor's Degree Program ..... 179
Master of Arts or Science ..... 180
Programs Offered ..... 179
Requirements for the M.A. or M.S. ..... 180
Requirements for the Special Major ..... 179
Special Minor in Interdisciplinary Studies ..... 180
International (Foreign) Student Admission Requirements ..... 14
International Programs ..... 198
International Services ..... 402
International Services and Activities at SSU ..... 15
International Student Fees and Expenses (Academic Year) ..... 15
International Student Services ..... 403
International Students. ..... 14
Internship Program in Special Education ..... 121
Intrasystem and Intersystem Enrollment Programs. ..... 16
Involvement and Service (CSLIS) ..... 400
K
Kinesiology ..... 181
Adapted Physical Education Concentration ..... 185
Admissions Procedures. ..... 189
Advancement to Candidacy for the M.A. Degree ..... 189
Areas of Emphasis in Exercise Science ..... 186
Bachelor's Degree Program ..... 182
Careers. ..... 187
Classified Graduate ..... 189
Conditionally Classified Graduate ..... 189
Course Descriptions. ..... 339
Exercise Science Concentration ..... 186
Faculty ..... 181
Integrated Degree and Credential Program ..... 185
Interdisciplinary Concentration ..... 187
Lifetime Fitness Concentration ..... 186
Lifetime Fitness ..... 184
Lower-Division Preparation ..... 183
M.A. Core Requirements ..... 188
M.A. Electives ..... 188
Major Concentrations ..... 185
Major Core Requirements ..... 183
Master of Arts in Kinesiology ..... 188
Minor in Kinesiology ..... 188
Physical Education Concentration ..... 185
Physical Education ..... 184
Physical Therapy Program Prerequisites ..... 182
Programs Offered ..... 181
Upper-Division Specialization ..... 183
Language and Culture Learning Center ..... 199
Latin American Studies ..... 190
Latin American Studies Minor ..... 190
Program Offered ..... 190
Regional Courses ..... 190
Specialized Courses ..... 190
Supporting Electives ..... 190
Leadership and Management Specialty Option. ..... 217
Leadership Program ..... 404
Liberal Studies See Hutchins School of Liberal Studies
Liberal Studies Ukiah ..... 191
Application to the Program ..... 191
Bachelor's Degree Program ..... 191
Liberal Studies Ukiah Admission Criteria ..... 191
Program Offered ..... 191
Ukiah Resident Program ..... 191
Library Fees ..... 21
Linguistics ..... 192
Course Descriptions ..... 343
Faculty ..... 192
Minor in Linguistics. ..... 192
Programs Offered ..... 192
Supplementary English Language Courses (SELD) ..... 193
Linked Courses: Visions of California. ..... 37
M
Map Library ..... 153
Mathematics ..... 194
Bachelor's Degree Programs ..... 194
Cooperative Master of Arts in Mathematics ..... 196
Core Curriculum ..... 194
Course Descriptions ..... 343
Entry-Level Mathematics (ELM) Requirement ..... 197
Faculty ..... 194
Grading Policy in the Mathematics Department ..... 197
Minor in Math for Teachers ..... 196
Minor in Mathematics ..... 196
Preparation for Teaching ..... 196
Programs Offered ..... 194
Statistics ..... 196
Measles and Rubella (MMR) ..... 421
Migrant Education Advisor Program ..... 392
Minor Programs ..... 30, 32
Miscellaneous Fees ..... 22
Mission .....  5
Modern Languages and Literatures ..... 198
Bachelor's Degree Programs ..... 199
Careers in Modern Languages and Literatures ..... 198
Course Challenges ..... 199
Course Descriptions ..... 321, 327, 366, 377
Faculty ..... 198
Grade Requirements ..... 199
International Programs. ..... 198
Language and Culture Learning Center ..... 199
Minor in French ..... 200
Minor in German ..... 200
Placement in Modern Language Courses ..... 199
Programs Offered ..... 198
Requirements for the Minor ..... 201
Spanish Major ..... 202
Spanish Minor ..... 202
Spanish Placement Test ..... 201
Multiple/Single Subject Teacher Education Requirements. ..... 119
Multiple Subject Intern Program. ..... 129
Multiple Subject Teaching Credential Programs ..... 126
Music. ..... 203
Applied Music Concentration ..... 206
Auditions ..... 204
Bachelor's Degree Programs. ..... 206
Capstone Experience ..... 205
Course Descriptions. ..... 348
Faculty ..... 203
Jazz Studies Concentration ..... 207
Jazz Studies Concentration ..... 211
Liberal Arts Concentration ..... 211
Liberal Arts Music Concentration ..... 210
Lower-Division Program ..... 205
Minors in Music ..... 211
Music Use Fee and Instrument Checkout ..... 206
Performance Ensemble Requirement ..... 205
Private Instruction ..... 206
Proficiency Expectations ..... 205
Programs Offered ..... 204
Scholarships ..... 204
School of Performing Arts ..... 203
Upper-Division Program ..... 205
World Music (Ethnomusicology) Concentration ..... 211
N
Native American Studies ..... 212
Course Descriptions. ..... 353
Faculty ..... 212
Minor in Native American Studies ..... 212
Program Offered ..... 212
Nonbaccalaureate Courses in English and Math ..... 13
Nondiscrimination Policy ..... 425
Nonresident Students (U.S. and Foreign) ..... 20
North Bay International Studies Project ..... 393
Nursing ..... 213
Application Procedures ..... 216
Bachelor's Degree Program ..... 213
Concentrations ..... 218
Course Descriptions. ..... 354
DEMSN- Clinical Nurse Leader Curriculum ..... 218
Direct Entry Master of Science in Nursing Program ..... 218
Faculty ..... 213
Family Nurse Practitioner Specialty Option ..... 216
L.V.N. 30-Unit Option ..... 215
Leadership and Management Specialty Option ..... 217
M.S.N. Pathways Option ..... 216
Master of Science in Nursing ..... 215
MSN - Leadership and Management Curriculum ..... 218
Post-Master's Family Nurse Practitioner Certificate Option ..... 217
Prelicensure B.S.N. Option .....  213
Programs Offered ..... 213
R.N. to B.S.N. Option .....  .214
0
Off-Campus Housing ..... 28
Office of Development ..... 427
Office of Research and Sponsored Programs ..... 427
Office of the Chancellor. ..... 430
On-Campus Housing ..... 28
Orientation and Advising ..... 18
Overdue Fees ..... 21
Overdue fees for media items ..... 21
Overdue Fees for Reserve Materials ..... 21
P
Parking Fees ..... 22
Payment of User Fee ..... 18
Philosophy ..... 220
Advising ..... 220
Bachelor's Degree Program ..... 220
Course Descriptions ..... 357
Faculty ..... 220
Faculty and Curriculum ..... 220
Major Core Requirements ..... 220
Minor in Philosophy ..... 221
Programs Offered ..... 220
Physical Sciences for Elementary School Teachers ..... 222
Physics. ..... 223
Applied Physics Concentration ..... 225
Bachelor's Degree Programs ..... 223
Careers in Physics ..... 223
Course Descriptions ..... 360
Faculty ..... 223
Minor in Physics ..... 228
Programs Offered ..... 223
Teaching Credential Preparation ..... 228
Planned Educational Leave ..... 412
Political Science ..... 229
Academic Advising ..... 230
Admission Requirements ..... 232
Bachelor's Degree Program ..... 230
Careers in Political Science ..... 230
Certificate Program in the Administration of
Course Descriptions ..... 362
Nonprofit Agencies ..... 233
Code Requirements ..... 232
Course Work ..... 232
Culminating Experience ..... 233
Faculty ..... 229
Features ..... 229
Graduation Requirements for the Master's Degree ..... 232
Internships ..... 229
Major Core Requirements ..... 230
Master's in Public Administration ..... 232
Minor in Political Science ..... 232
Programs Offered ..... 229
Teaching Credential Preparation ..... 230
President, A Word from the. .....  2
President's Scholar Program. ..... 25
Privacy Rights of Students in Education Records ..... 419
Project Censored ..... 393
Provisional Admission ..... 11, 12
Provisional Unclassified Graduate Status for Senior Students ..... 414
Psychology ..... 234
Advising and Interest Areas ..... 237
Bachelor's Degree Program ..... 236
Careers in Psychology ..... 235
Course Descriptions. ..... 367
Depth Psychology Program ..... 238
Faculty ..... 234
Fees ..... 240
Internships ..... 238
Learning Goals and Objectives ..... 235
Major Requirements ..... 236
Master of Arts in Psychology ..... 238
Minor in Gerontology ..... 238
Minor in Psychology. ..... 237
Mission of the Psychology Department. ..... 234
Organization Development Program ..... 239
Prerequisites for Admission ..... 240
Programs Offered ..... 234
Special Studies ..... 238
R
Race, Color, and National Origin ..... 425
Reading and Language Arts Specialist Credential ..... 134
Reading and Language Programs ..... 131
Reading Programs ..... 132
Reapplication for Subsequent Semesters .....  9
Refund of Fees Including Nonresident Tuition ..... 22
Registration ..... 410
Registration and Enrollment ..... 410
Registration Fee Payment Deadline ..... 410
Regulations And Policies ..... 410
Reinstatement after Disqualification ..... 418
Reservation ..... 17
Residence Master's Degree Programs ..... 37
Residential Life ..... 404
Returning Students ..... 14
ROTC Programs ..... 413
S
Scholastic Status ..... 416
School of Arts and Humanities. ..... 40
School of Business and Economics ..... 40
School of Education. ..... 41
School of Extended Education ..... 42
School of Science and Technology ..... 43
School of Social Sciences ..... 44
Schools ..... 40
Secondary Education Teaching Credential Preparation ..... 158
Second Bachelor's Degree ..... 32
Sex/Gender. ..... 425
Sexual Orientation ..... 425
Single Subject (Secondary Schools) Teaching Credential ..... 113
Social Science Subject Matter Preparation Program ..... 241
Breadth and Perspectives ..... 241
Program Core Requirements ..... 241
Sociology ..... 243
Bachelor's Degree Program ..... 244
Careers in Sociology ..... 243
Course Descriptions ..... 374
Faculty ..... 243
Major Requirements ..... 244
Methods Seminar ..... 244
Minor in Sociology ..... 245
Programs Offered ..... 243
Substantive Areas of Sociology ..... 244
Sonoma Film Institute ..... 393
Sonoma State American Language Institute ..... 393
Sonoma State Enterprises ..... 427
Sonoma State University Academic Foundation ..... 428
Sonoma State University Wine Business Program ..... 394
Sonoma Student Union Corporation ..... 405
Special Education ..... 122
See also Educational Leadership and Special Education
Special Sessions Master's Degree Program ..... 37
Special Studies Courses ..... 414
SSU FAQ .....  3
State Aid ..... 24
Statistics ..... 246
Actuarial Science Career Preparation ..... 248
Bachelor's Degree Programs ..... 247
Careers in Statistics and Actuarial Sciences ..... 246
Entry-Level Mathematics (ELM) Requirement ..... 248
Faculty ..... 246
Grading Policy ..... 249
Learning Objectives for the B.A. and B.S. ..... 246
Mathematics and Statistics Majors and Minors ..... 249
Minor in Applied Statistics. ..... 248
Non majors ..... 249
Programs Offered ..... 246
Required Area of Concentration. ..... 248
Student Affairs and Enrollment Management ..... 399
Student Body Fee, Procedure for the Establishment
or Abolishment of ..... 22
Student Conduct ..... 407
Student Conduct / Judicial Affairs ..... 423
Student Disciplinary Procedures ..... 423
Student Discipline ..... 424
Student Policies ..... 421
Student Service Professionals ..... 465
Student Services. ..... 399
Study Plans ..... 148
Subject Requirements. ..... 10
Summer Session and Conferences ..... 27
Supplementary Admission Criteria .....  7
Supplementary English Language Courses (SELD) ..... 193, 380
Support Services ..... 429
Systemwide Placement Test Requirements ..... 11
TTeaching116
Teaching Credential Preparation ..... $55,65,107,155,169,228$
Teaching Goals ..... 32
Testing Services ..... 408
Test Requirements. ..... 11
Theatre Arts and dance. ..... 250
Bachelor's Degree Programs ..... 250
Course Descriptions. ..... 381
Faculty ..... 250
Guest Artists ..... 250
Minor in Theatre Arts ..... 255
Programs Offered ..... 250
TOEFL Requirement ..... 11
Transcripts of SSU Courses ..... 416
Transfer Requirements ..... 10
Trustees. ..... 431
U
Undergraduate Admission Requirements .....  9
Undergraduate Application Procedures .....  6
Undergraduate Integrated/Blended Degree and Credential Programs ..... 108
University Affairs. ..... 430
University Art Gallery ..... 411
University Curricula ..... 46
University Degrees. ..... 28
University Library ..... 397
University Library Arts and Lectures Program. ..... 411
University Scholarship Program ..... 54
University Support and Preparation Services ..... 408
University-Wide Option ..... 32
Upward Bound Programs ..... 409
User ID and Password ..... 412
V
Veterans ..... 15
Veterans Services ..... 415
w
Withdrawing from Classes ..... 413
Women's and Gender Studies ..... 256
Bachelor's Degree Program ..... 256
Career Minor in Women's Health ..... 257
Careers in Women's and Gender Studies ..... 256
Core Requirements ..... 256
Course Descriptions ..... 385
Disciplinary Concentration ..... 256
Major in Women's and Gender Studies ..... 256
Minor in Women's and Gender Studies ..... 257
Programs Offered ..... 256
Skills Application ..... 257
Women's Health ..... 85
Writing Center ..... 409
Written English Proficiency Requirement ..... 37



[^0]:    * Fees are subject to legislative and CSU Trustee review and therefore are subject to change.

[^1]:    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.

[^2]:    \#A list of recommended GE courses is posted at the department's website and is available in the department office.
    *9 units overlap with GE units.

[^3]:    * Courses that meet general education requirements.

[^4]:    * GE courses

[^5]:    Note: Students should note the prerequisites for upper-division courses.

[^6]:    *3 units of Area E will be satisfied upon completion of the nursing major to meet the 51-unit GE requirement.

[^7]:    THAR 400 Theatre of Today

[^8]:    Note: Telephone numbers are to the campus admission office.

