

GEOGRAPHY

DEPARTMENT OFFICE

Stevenson Hall 3066
(707) 664-2194
Fax (707) 664-3332
www.sonoma.edu/geography

DEPARTMENT CHAIR

Dorothy E. Freidel

Faculty

*William K. Crowley
Dorothy E. Freidel
Rheyne Laney

* Faculty Early Retirement Program

Programs Offered

Bachelor of Arts in Geography
Minor in Geography
Teaching Credential Preparation

A major in Geography provides a study of both the natural and cultural environments. This blend of the natural and social sciences offers a broad-based field of knowledge for a liberal arts education.

A small department with close student-faculty relationships, Geography provides a course of study that is well rounded yet flexible enough to fit specific educational goals of students. Within the range of required courses, students will broaden their research and writing skills, work on various practical projects and problems, and gain field experience. For those who plan to pursue graduate studies in geography, the major provides the necessary knowledge and skills through a balance of cultural and physical course work, methodological viewpoints, and geographic techniques. A strong intern program affords students on-the-job experience. Students who so choose may pursue one of our special concentrations—nature-society, biophysical environment, or geographic information technologies.

The Geography Department has a well-equipped computer laboratory for geographic information systems (GIS), image processing, and digital cartography. The GIS Lab includes a file server, a Sun Sparc Station, Arc/Info and other GIS and graphics software, digitizing tablets, and color plotters. The department is home to the Geographic Information Center, which conducts research and service projects in the region. The department operates a base station for the local global positioning system (GPS) and maintains several GPS mobile receiver units. The department also houses extensive collections of maps, aerial photographs, and remotely sensed imagery, and one of the most complete historical weather libraries in California. A facsimile weather map recorder provides students with current weather data to complement historical resources. The physical geography lab possesses instrumentation for soils analysis.

Geography majors who will have upper-division standing 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 have gone into teaching positions in primary, secondary, and higher education; to graduate programs in schools across the country; into environmental analysis and regional planning firms; into local and regional planning agencies; into state and federal agencies; and into many private businesses where geographical knowledge has provided them with a well-balanced background.

Geography Major with Concentration

Core Courses for All Concentrations (20-21)

Lower Division 8

GEOG 203: Cultural Geography (3)
GEOG 204: Physical Geography (4)
GEOG 205: Map Reading and Interpretation (1)

Regional Synthesis 4

GEOG 392: Latin America: Culture and Environment (4)
GEOG 394: Africa, South of Sahara (4)
GEOG 460: Area Studies Seminar (4)

Field Course and Internship 4-5

GEOG 314: Field Experience (1-2)
GEOG 315: GPS (1)
GEOG 318: Field Experience, Baja California, Mexico (3)
GEOG 499: Internship (2-4)

Geographic Research and Synthesis 4

GEOG 490: Senior Seminar (4)

Nature-Society Concentration

Breadth Courses (7-8 units)

Geographic Information Technologies 3-4

GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3)
GEOG 387: Introduction to GIS (4)

Upper Division Physical 4

GEOG 360: Geomorphology (4)
GEOG 370: Weather and Climate (4)

Concentration Courses (14 units)

Core 8

GEOG 340: Conservation of Natural Resources (4)
GEOG 416: Biogeography / Landscape Ecology (4)

Elective (6)

GEOG 311: Geography of Wine (3)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 350: Urban Geography (4)
GEOG 372: Global Climate Change (4)
GEOG 390: Geography of California (3)
GEOG 396: Special Topics in Geography (Population and Medical)

Supporting Courses (8)

Environmental Issues Track

ENSP 318: Environmental and Natural Resources Planning (3)
ENSP 322: Conservation Biology (3-4)
ENSP 334: Energy, Technology, and Society (4)
ENSP 414: Environmental Law (3)
GEOL 306: Environmental Geology (3)
ANTH 345: Topics in Anthropology and Environment (3)
COMS 320: Environmental Communications (3)

Planning Track

ENSP 310: Introduction to Planning (4)
ENSP 318: Environmental and Natural Resources Planning
ENSP 417: Urban Design (3)
ENSP 411 A/B: Planning Workshop (8)
ENSP 427: Conservation Design (3-4)

Geographic Information Technologies Track

GEOG 387: Introduction to GIS (4)
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 487: Advanced GIS (4)

Biophysical Environment Concentration

Breadth Courses (7-8)

Geographic Information Technologies (3-4 units)

GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3)
GEOG 387: Introduction to GIS (4)

Upper-Division Human (4)

GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)

Concentration Courses (14)

GEOG 360: Geomorphology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Climate Change (4)
GEOG 390: Geography of California (3)
GEOG 416: Biogeography & Landscape Ecology (4)

Supporting Courses (8)

Biogeography Track

ENSP 322: Conservation Biology (3-4)
ENSP 427: Conservation Design (3-4)
BIOL 333: Ecology (4)
BIOL 330: Plant Taxonomy (4)

Earth Sciences Track

ENSP 333: Soil Science (3-4)
GEOL 303: Advanced Principals of Geology (3)
GEOL 304: Geological Mapping and Report Writing (1)
GEOL 306: Environmental Geology (3)
GEOL 323: Hydrology (3)

Geographic Information Technologies Track

GEOG 387: Introduction to GIS (4)
GEOG 380: Remote Sensing and Image Processing (4)
GEOG 487: Advanced GIS (4)

Geographic Information Technologies Concentration

Breadth Courses (8)

Upper-Division Human (4)

GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)

Upper-Division Physical (4)

GEOG 416: Biogeography and Landscape Ecology (4)
GEOG 360: Geomorphology (4)
GEOG 370: Weather and Climate (4)

Concentration Courses (14)

GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3)
GEOG 387: Introduction to GIS (4)
GEOG 487: Advanced GIS (3)

Supporting Courses (8)

Math 163: Elementary Statistics (4)
CS 115: Programming I (4)

Geography Major Without Concentration

Core Courses (16 units)

Lower-Division (8 units)

GEOG 203: Cultural Geography (3)
GEOG 204: Physical Geography (4)
GEOG 205: Map Reading and Interpretation (1)

Regional Synthesis (4 units)

GEOG 392: Latin America: Culture and Environment (4)
GEOG 394: Africa, South of the Sahara (4)
GEOG 460: Area Studies Seminar (4)

Geographic Synthesis (4 units)

GEOG 490: Senior Seminar (4)

Breadth Courses (11-12 units)

Geographic Information Technologies (3-4 units)

GEOG 380: Remote Sensing and Image Processing (4)
GEOG 385: Cartographic Visualization (3)
GEOG 387: Introduction to GIS (4)

Upper-Division Human (4 units)

GEOG 330: Historical Geography of North America (4)
GEOG 335: Global Agricultural Systems and Issues (4)
GEOG 340: Conservation of Natural Resources (4)
GEOG 350: Urban Geography (4)

Upper-Division Physical (4 units)

GEOG 360: Geomorphology (4)
GEOG 370: Weather and Climate (4)
GEOG 372: Global Change: Past, Present, and Future (4)
GEOG 416: Biogeography and Landscape Ecology (4)

Elective Courses in Geography (14-15 units)

Supporting Courses Outside Geography (8 units)

Sample Four-year Program for Bachelor of Arts in Geography

Geography has not traditionally had freshmen students begin the major. This suggested plan, however, urges them to take one of the lower-division introductory geography courses in the spring of their freshman year. In addition, this plan does not identify the concentration or elective courses within the major, or the electives in the required supporting courses, both of which should be chosen after consultation with the Geography advisor(s). The sequence of courses taken is a suggestion only, so please see your Geography advisor each semester for assistance.

FRESHMAN YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
GE MATH (B4) (3)	GE PHIL 101 (A3) (3)
GE ENG 101 (A2) (3)	GE UNIV 200 (A1) (3)
GE (3)	GE GEOG 203 (D2) (3)
GE (3), University Elective (3)	GE (3), University Elective (3)

SOPHOMORE YEAR:: 29 Units

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

JUNIOR YEAR:: 30 Units

<i>Fall Semester (15 Units)</i>	<i>Spring Semester (15 Units)</i>
Upper-Division GE (3)	Upper-Division GE (3)
GEOG (Upper-Div Regional) (4)	GEOG (Upper-Div. Cultural) (4)
GEOG (Upper-Div. Techniques) (4)	GEOG (Upper-Div. Physical) (4)
Upper-Div. Supporting (4)	University Elective (4)

SENIOR YEAR:: 31 Units

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

TOTAL UNITS:: 120

Teaching Credential Preparation

The Geography Department participates in a teacher preparation program that certifies the subject matter competence in social sciences required for entry into a teaching credential program and exempts the student from taking the Praxis II Subject Assessment Examination in the social sciences. Geography majors interested in seeking a general elementary credential may demonstrate subject matter competence by passing the Praxis II Multiple Subject Assessment for Teachers. For further information, contact Miriam Hutchins, School of Social Sciences, (707) 664-2409.

Geography Courses (GEOG)

Classes are offered in the semesters indicated. Please see the Schedule of Classes for most current information and faculty teaching assignments.

203 CULTURAL GEOGRAPHY (3)

A study of the interrelationships between humans and the physical environment. Attention is focused on humanity'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 human-environment relationships are discussed. Satisfies GE, category D2 (World History and Civilization). CAN GEOG 4.

204 PHYSICAL GEOGRAPHY (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 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.

205 INTRODUCTION TO MAP READING AND MAP INTERPRETATION (1)

This course introduces mapping fundamentals such as map projections and reference systems, scale concepts, coordinate systems, some air photo interpretation, and topographic maps.

302 WORLD REGIONAL GEOGRAPHY (4)

Selected regions of the world form the basis of study. Economic development, political problems, human-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).

310 METEOROLOGY (4)

A systematic study of the earth's atmosphere stressing those elements (temperature, humidity, solar radiation, pressure, and wind) that influence the weather and climate on a local and worldwide scale.

311 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 winemaking. Guest speakers who are experts in enology and viticulture will be featured.

314AB FIELD EXPERIENCE, NORTHERN CALIFORNIA (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 314 may be counted toward the major.

Minor in Geography

GEOG 203 Cultural Geography	3
GEOG 204 Physical Geography	4
GEOG 205 Map Reading and Map Interpretation	1
Upper-division courses chosen in consultation with advisor	12
Total units in the minor	20

314C FIELD GEOGRAPHY OF SONOMA COUNTY WINE (1)

An examination of viticultural practices and winemaking operations in Sonoma County. This course may be taken independent of GEOG 311. Includes preliminary lectures and a weekend field trip. A fee will be charged for this course.

314D FIELD EXPERIENCE BEYOND NORTH CALIFORNIA (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 314 may be counted toward the major.

314E FIELD EXPERIENCE ABROAD (2-3)

Field experience in areas outside of the United States, including but not limited to Central and South America (Ecuador). 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. Permission of the instructor is required before registration.

315 GLOBAL POSITIONING SYSTEMS (1)

The Global Positioning System (GPS) allows you to pinpoint your exact location anywhere on Earth. This course covers the basics of how GPS works and exposes the student to some of the ways GPS technologies are being used to solve real-world problems. Major focus is placed on providing students with hands-on experience collecting field data and integrating GPS data into a geographic information system (GIS) database. State-of-the-art software and GPS receivers are used for planning, implementing, and evaluating a GPS project.

318 FIELD EXPERIENCE, BAJA CALIFORNIA, MEXICO (3)

This course provides the student an opportunity to do fieldwork in an alternate cultural setting. The field experience consists of two stages: (1) observation of physical and cultural features in the northern and central sections of the peninsula; and (2) team studies of towns and villages involving interviewing, data collection, and mapping. The course includes a weekly lecture conducted on campus. A fee will be charged for this course. Check with instructor for amount. Prerequisite: consent of instructor.

320 POLITICAL GEOGRAPHY (4)

An inquiry into the structure and characteristics of political units in order to compare the concepts of state and nation-state. The nature of boundaries, frontiers, and shatter zones is studied in detail, and the development of geopolitical theories is traced.

330 HISTORICAL GEOGRAPHY OF NORTH AMERICA (4)

A study of the settlement history of North America and of the changing concepts of man-environment relationships in the chronology of the Europeanization of the American landscape. Investigations into where and why people settled as they did, and the origins of the economic and spatial relationships that constitute the present American scene will be the focus of the course.

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.

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).

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.

350 URBAN GEOGRAPHY (4)

A consideration of urban origins, the diffusion of the city, and modern-day inter- and intra-city 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.

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.

370 WEATHER AND CLIMATE (4)

An exploration of the mechanisms that create weather and climate and how and why climate varies from place to place and through time. The role of solar radiation is studied as the major driving force of atmospheric circulation and influence on spatial variations in temperature and precipitation around the world. Secondary factors such as land-sea distribution, topography, altitude, and surface cover are explored. Characteristics of climate, such as seasonality of temperature and precipitation, as well as humidity, cloudiness, evaporation rates, and causes of variability, are also studied. Climate's influence on human culture through time, climate change, and human influence on climate are underlying themes throughout the course. Prerequisite: GEOG 204 or consent of instructor.

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.

375 NATURAL HAZARDS (2)

A survey of natural hazards in relation to human activities around the world, emphasizing hazards from weather and geological sources. Weather and climate-related hazards such as hurricanes, tornadoes, wind, fire, intense precipitation, and drought, and geologic hazards such as landslides, flooding, earthquakes, and volcanism are explored. Although the focus of the course is on naturally occurring hazards, the human as a catalyst influencing the frequency and intensity of hazard occurrences, and the increasing risk of damage to human property are an integral part of the course. Prerequisite: GEOG 204 or consent of instructor.

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: GE MATH and GEOG 205.

385 CARTOGRAPHIC VISUALIZATION (3)

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 or consent of instructor.

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: GEOG 205 or equivalent.

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 trendsetting economic, political, and cultural atmosphere. Issues discussed include changing populations and regional differences, evolving urban areas, water resources, agriculture, and forestry.

391 THE REGIONAL GEOGRAPHY OF NORTH AMERICA (4)

Offerings will vary and will focus upon special topics of interest, such as problems of population growth and distribution, resources and economic development, and regionalism in the continent.

392 LATIN AMERICA: 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.

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 with 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.

396 SPECIAL TOPICS IN GEOGRAPHY (1-5)

A single subject or set of related subjects not ordinarily covered by the Geography Department. Please see the current Schedule of Classes for topics to be emphasized. Cr/NC only.

416 BIOGEOGRAPHY AND LANDSCAPE ECOLOGY (4)

The distributions of plants and animals at global, regional, and local scales. Emphasis on tools of data collection and analysis, on processes that contribute

to distributions, and on conservation of biotic resources. Field trips consider local and regional patterns of plants and animals. Prerequisite: BIOL 115, 121, 122, or equivalent.

420 REGIONAL GEOGRAPHY OF WESTERN EUROPE (4)

Offerings will vary and will focus upon special topics of interest, including the physical, cultural, historical, and economic relationships of Europe and its regions.

460 SEMINAR IN AREA STUDIES (4)

This course will provide offerings in special problem areas such as China and Southeast Asia, arid lands, Pacific Rim/World, and underdeveloped lands.

487 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (3)

This course provides greater depth in the foundations of geographic information systems (GIS). Readings, group discussions, and lectures delve into database development issues, advanced spatial analysis, and GIS research applications. Students also complete a semester-long research project using GIS technologies. Students learn to identify problems that can benefit from a spatial-analytical approach and determine the appropriate data for pursuing such a project. Students build their own GIS database, mastering skills such as digitizing and attributing spatial data; importing data from the Internet; collecting field data for GIS integration; and converting GIS layers into a single coordinate system and map projection. Finally, students learn to choose and implement the most appropriate spatial analysis method for their research, and then interpret the results. Prerequisite: GEOG 387 or consent of instructor.

490 SENIOR SEMINAR (4) SPRING ONLY

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.

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.

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.

499AB 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 work per unit work per week as arranged with the intern coordinator. GEOG 499A is offered in Fall; GEOG 499B is offered in Spring.

Graduate Study

The Geography Department does not offer an M.A.; however, students in graduate programs such as interdisciplinary studies, cultural resources management, and history may arrange to do graduate-level research with members of the Geography faculty. Students should consult with the chair of the Geography Department and their graduate advisor before arranging for graduate-level studies in geography.

595 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.