GEOGRAPHY (GEOG)

See Course Description Symbols and Terms (https://catalog.csuchico.edu/academic-standards-policies/course-description-symbols-terms/) for an explanation of course description terminology and symbols, the course numbering system, and course credit units.

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**GEOG 101 Earth Systems and Physical Geography** 3 Units GE
Prerequisite: Recommended: High school biology, chemistry, or physics.
Typically Offered: Spring, summer, fall
This course is a survey of the basic processes that determine flows of energy through the atmosphere and examines the subsequent interactions among water, landforms, soil, and vegetation that create and modify the surface of the earth. Students develop a recognition of landscape patterns, as well as an understanding of the physical, chemical, and biological principles and functions that create those patterns, in order to understand the natural environment in which we live and the role of humans affecting that environment. 2 hours activity, 2 hours lecture. (003857)
General Education: Laboratory Activity (B3); Physical Science (B1)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division; Sustainable Course

**GEOG 102 Peoples, Places, and Environments** 3 Units GC, GE
Typically Offered: Fall and spring
Survey of human populations and activities, with an emphasis upon how social, economic, political, and religious institutions influence interrelationships with the physical environment. 3 hours lecture. (003859)
General Education: Social Sciences (D)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division; Global Cultures

**GEOG 105 California Cultural Landscapes** 3 Units GE, USD
Typically Offered: Fall and spring
Broad overview of spatial and temporal changes in the California landscape resulting from the interaction of various cultural groups with their environment. 3 hours lecture. (003860)
General Education: Social Sciences (D)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division; Sustainable Course; US Diversity

**GEOG 106 American West Decolonized** 3 Units GE, USD
Typically Offered: Fall and spring
Re-interpret the diverse environmental and cultural geography of the American West through the comparative lens of human-environmental relationships. Identify the unique influence of Indigenous and settler cultures in shaping the western landscapes. Be inspired by traditional practices being re-applied through diverse partnerships and Indigenous leadership to address social and environmental issues. Recognize sustainable solutions to become an engaged citizen of place through reciprocity and reconciliatory practices. 3 hours lecture. (003861)
General Education: Social Sciences (D)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division; US Diversity

**GEOG 111 Introduction to Geographic Methods** 3 Units
Typically Offered: Fall only
Introduction to essential geographic problem solving techniques which include: data collection, analysis, and presentation of spatial information. Techniques include map measurement and interpretation, aerial photo analysis, field observations with GPS, introductory geographic information systems, computer cartography, summary of numerical data, elementary probability, distributions, and introduction to statistical inference. This is an introductory tools course for students majoring in geography, the natural and earth sciences, and in such applied fields as planning and recreation. Several software analysis packages are introduced. 3 hours lecture. (015867)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division

**GEOG 119A Introductory ArcGIS** 1 Unit
Typically Offered: Fall and spring
Introduction of concepts and techniques of geographic information system analysis and the presentation of map data. The course introduces the ArcMap application. Not for geography majors. 1 hour lecture. (020348)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 2 units
Course Attributes: Lower Division

**GEOG 139 Visualizing Local Landscapes** 3 Units GE
Typically Offered: Fall and spring
Cultural landscapes are works of the human imagination, and thus can be examined via complementary visual media representing our deepest feelings, beliefs, and intuition about a place. They are a palimpsest that contains the etchings that past and present cultures have inscribed on Earth's surface. Cultural landscapes teem with information about the relationship between different cultures and the physical world, the relationships between privileged and marginalized communities, and, also, reflect how cultures change through time. This course develops a student's appreciation of cultural landscapes by exploring and creating visual media representations using the landscapes of the Greater Chico area. This course acknowledges the wholeness of nature and human experiences in the world, a consciousness approach to viewing, interpreting, and representing landscapes. Students read about, observe, illustrate, and think about local landscapes. 3 hours lecture. (022233)
General Education: Arts (C1)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division

**GEOG 198 Special Topics** 1-3 Units
Typically Offered: Fall and spring
This course is for special topics offered for 1.0-3.0 units. Typically the topic is offered on a one-time-only basis and may vary from term to term and be different for different sections. See the Class Schedule for the specific topic being offered. 3 hours lecture. (003869)
Grade Basis: Graded
Repeatability: You may take this course more than once
Course Attributes: Lower Division
GEOG 199 Special Problems 1-3 Units
Prerequisite: Faculty permission.
Typically Offered: Fall and spring
This course is an independent study of special problems offered for 1.0-3.0 units. You must register directly with a supervising faculty member. 3 hours supervision. (020160)
Grade Basis: Credit/No Credit
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Lower Division

GEOG 211 Introduction to Geographical Information Systems 3 Units
Typically Offered: Fall and spring
This course provides an introduction to topics and technology in Geographic Information Systems (GIS). The course will combine a conceptual discussion of topics with practical exercises. Both the theory and practice of GIS analysis will be presented. 3 hours lecture. (021439)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Lower Division

GEOG 301W Global Economic Geography (W) 3 Units GC, GE, W
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Fall and spring
A systematic survey of human economic activities. Analysis of resource exploitation and use, including agriculture, extractive activities, industry, commerce, and service functions. Recommended for business and liberal arts majors. 3 hours lecture. (021530)
General Education: Upper-Division Social Sciences (UDD); Agriculture, Food, and Environment Pathway; Equity, Ethics, and Policy Pathway
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Global Cultures; Writing Course

GEOG 303 Geography and World Affairs 3 Units GC, GE
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Spring, summer, fall
Geography in the news. Analysis of current world conflicts and problem areas, with an emphasis upon examination of social, economic, political, and environmental realities. 3 hours lecture. (003872)
General Education: Upper-Division Social Sciences (UDD); Global Studies Pathway; Science, Technology, and Society Pathway
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Global Cultures

GEOG 304 Sustainability and Resilience 3 Units GE
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Fall and spring
Geographic analysis of humanity’s interaction with the environment. Examines natural and human systems, resources, population, energy, and pollution. Develops an appreciation of the beauty, balance, and complexity of natural systems and human success in attaining harmony with them. Enhances awareness and perception of each individual’s role in and with the environment. 3 hours lecture. (003873)
General Education: Upper-Division Social Sciences (UDD); Sustainability and Climate Change Pathway
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 305 Mobile, Wired, and Tracked: Our Digital Planet 3 Units GE
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Fall and spring
Digital mapping, location based services, geo-tracking, crowdsourcing, citizen science and online social networks are critically examined in terms of geographic representation, geographic inquiry, individual privacy, equity, and social justice. An experiential course that develops skills in critical geospatial thinking through inquiry into and analysis of evolving geospatial technologies (e.g. geographic information systems, global positioning systems (GPS), unmanned aerial vehicles (UAVs), and satellite imagery); and explores their impact on the individual and society as they pertain to scientific, technological, social and earth science phenomena. An examination of the role of critical geospatial thinking in daily life and scientific pursuits. 3 hours lecture. (022317)
General Education: Upper-Division Social Sciences (UDD); Innovation, Design, and the Arts Pathway; Science, Technology, and Society Pathway
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 306 Geographies of Disaster 3 Units
Typically Offered: Fall only odd years
This course adopts a geographical focus to study the impacts of natural and technological hazards at the local, regional, and global scales. The concepts of vulnerability, resilience, and risk are reviewed to examine the spatial and temporal distribution of hazards. Quantitative and qualitative data generated from geographical information systems are used to question, investigate, and draw conclusions about ideas and issues on a selected environmental hazard. In addition to class discussions and readings, students undertake a class project related to a specific disaster event where they explore the environmental, social, and policy implications of disaster preparedness and risk reduction in their project area. Students submit their findings in the form of oral presentations and written reports to practice their writing and critical thinking skills. 3 hours lecture. (003875)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course
GEOG 313 Introductory Cartography 3 Units
Prerequisite: GEOG 211 or equivalent (may be taken concurrently).
Typically Offered: Fall only
Introduction to the compilation, design, and production of thematic maps. Emphasis is on maps as communication devices. 3 hours lecture. (003880)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 315 Applied Statistical Methods in Geography 3 Units
Prerequisite: GEOG 211, MATH 105 or equivalents.
Typically Offered: Fall only
Introduction to quantitative analysis of spatial data using single and two sample inference, analysis of variance, correlation, multiple regression, analysis of co-variance, experimental design, repeated measures, nonparametric procedures, categorical data analysis, clustering/classification, and principal components analysis. Examples are drawn from geographical themes in economics, demography, politics, planning, natural and earth sciences. Statistical packages are introduced. 3 hours lecture. (003881)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 320 Introduction to Land Use Planning J 3 Units
Typically Offered: Fall only
Study of the theory and practice of land use planning. Analysis of planning processes, elements of the comprehensive plan, zoning, environmental impact of development, regional policies, and growth. Includes investigation of a practical planning problem. 3 hours lecture. (003884)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 342 Geomorphology 3 Units
Prerequisite: ERTH 102, GEOG 101, PSSC 101, or PSSC 250; AGET 340, GEOG 211, GEOG 111.
Typically Offered: Fall only
Systematic analysis of the origin and development of landforms. Emphasis is on the study of geomorphic processes using maps, air photos, and field data. 3 hours discussion. (003926)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 343 Climatology 3 Units
Prerequisite: ERTH 170 or GEOG 101 or equivalent.
Typically Offered: Fall only
Systematic analysis of the processes and controls of the earth’s climatic systems. Use of climatic classification systems; examination of climatic regions, microclimatology, and climatic applications. 3 hours lecture. (003928)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 352 The United States 3 Units GE, USD
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Fall and spring
A regional study of our nation in terms of the physical earth and its human use. The course includes emphasis on issues and problems related to resources, environmental concerns, and settlement patterns. Cultural and regional differences in human-environmental relationships are compared and contrasted. 3 hours lecture. (003902)
General Education: Upper-Division Social Sciences (UDD); Equity, Ethics, and Policy Pathway
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; US Diversity

GEOG 357 Lands and Peoples of Latin America 3 Units GC, GE
Prerequisite: GE Oral Communication (A1); GE Written Communication (A2); GE Critical Thinking (A3); GE Mathematics/Quantitative Reasoning (B4) requirements, or consent of the instructor.
Typically Offered: Fall and spring
Study of the physical environment, human settlement, development, and modern problems of the nations of Latin America. 3 hours lecture. (021143)
General Education: Upper-Division Social Sciences (UDD); Global Studies Pathway; Race, Ethnicity, and Sovereignty Pathway
Cross listing(s): LAST 357
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Global Cultures

GEOG 389 Geography Internship 1-3 Units
Typically Offered: Fall and spring
This internship is offered for 1.0-3.0 units. Students must register directly with a supervising faculty member. The internship provides service learning experience as a volunteer or supervisor in a campus or community environmental organization or agency. Each unit of credit requires a minimum of three hours of activity in the assigned role. 9 hours supervision. (003922)
Grade Basis: Credit/No Credit
Repeatability: You may take this course for a maximum of 15 units
Course Attributes: Upper Division

GEOG 398 Special Topics 1-3 Units
Typically Offered: Fall and spring
This course is for special topics offered for 1.0-3.0 units. Typically the topic is offered on a one-time-only basis and may vary from term to term and be different for different sections. See the Class Schedule for the specific topic being offered. 2 hours lecture. (003923)
Grade Basis: Graded
Repeatability: You may take this course more than once
Course Attributes: Upper Division

GEOG 398H Special Topics - Honors 3 Units
Prerequisite: Junior standing and current enrollment in the Honors Program.
Typically Offered: Inquire at department
In a format designed for students in the Honors Program, this course will present selected topics not covered in the regular curriculum. Topics will vary from one semester to another. See the Class Schedule for the specific topic being offered. 3 hours lecture. (003924)
Grade Basis: Graded
Repeatability: You may take this course more than once
Course Attributes: Upper Division
GEOG 399 Special Problems 1-3 Units
Prerequisite: Faculty permission.
Typically Offered: Fall and spring
This course is an independent study of special problems offered for 1.0-3.0 units. You must register directly with a supervising faculty member. 3 hours supervision. (003925)
Grade Basis: Credit/No Credit
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Upper Division

GEOG 405 Conservation, Restoration, and Stewardship 3 Units
Prerequisite: GEOG 101 or equivalent. Recommended: GEOG 426, GEOG 445 or equivalent.
Typically Offered: Fall only
Degraded ecosystems, increased species extinctions, and the climate crisis are global challenges. Become an ecological fixer. Learn diverse principles and practices to effectively conserve, restore and steward ecosystems in an ever-changing world filled with complex ecological and social interactions. Evaluate and create solutions through experiential learning in various field locations. 3 hours lecture. (003930)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 407W Earth Systems Analysis of Global Change (W) 3 Units
Prerequisite: GE Written Communication (A2); Senior standing.
Typically Offered: Spring only
Through discussions and different styles of writing, students examine global change and its impacts on physical environment and human society. Students work together to understand past, current, and future challenges, relating to physical and cultural landscapes. Students from different backgrounds and trainings share knowledge and plan responses to these challenges, including social vulnerability. 3 hours lecture. (015873)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course; Writing Course; Graduation Writing Assessment

GEOG 411 Geospatial Analysis and Modeling in GIS 3 Units
Prerequisite: GEOG 211, GEOG 313, GEOG 315 or equivalents.
Typically Offered: Spring only
Advanced geospatial analysis and modeling techniques using Geographic Information Systems (GIS). Topics include geoprocessing, Python programming, and geospatial modeling. Students collaborate to design, develop, and present a GIS pilot study. They apply GIS theory and techniques to solve problems in land and resource management, utilities, and municipal government. Covers all stages of a GIS project: planning, design, analysis, and presentation. 1 hour activity, 2 hours lecture. (003942)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 417 Field Techniques 3 Units
Prerequisite: GEOG 101, GEOG 102, or equivalent.
Typically Offered: Fall only
Evaluate monitoring and research techniques and tools commonly used in field-based geographic, environmental, and social studies. Collect and analyze data to inform decision making and solutions to environmental and social-environmental issues. 6 hours activity. (003939)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 418 Remote Sensing of Environment 3 Units
Prerequisite: GEOG 211; GEOG 315 or MATH 105, or equivalents.
Typically Offered: Spring only
An introduction to the theory, techniques, data acquisition, processing, and presentation of imagery acquired through aerial photographic and satellite means of remote sensing. Application of basic skills of aerial photographic interpretation and satellite digital image processing and analysis to physical and cultural geographic phenomena. 3 hours lecture. (003941)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 425 Planning for Sustainable Communities and Regions 3 Units
Typically Offered: Fall only even years
Examination of economic, social, demographic, and political bases for sustainable community and regional development and planning. Introduces the theory, evolution and practice of planning for sustainable communities and regions through examination of environmental, economic, and equity issues. 3 hours discussion. (003947)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 426 Sustainable Water Systems 3 Units
Prerequisite: GEOG 101 or SCED 101 or equivalents. Recommended: GEOG 304, GEOG 343.
Typically Offered: Spring only
Water is finite, and life on Earth depends on it. Evaluating and creating solutions to complex environmental and social interactions with water is critical to ensuring water for all life. Draw from diverse examples of policy and stewardship that shape sustainable practices to provide socially and ecologically-just outcomes. Field opportunities provide insight to regional examples of water projects, habitats, and social issues. 3 hours seminar. (003948)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 427 Environmental Impact Analysis 3 Units
Prerequisite: Recommended: GEOG 320.
Typically Offered: Spring only
Study of the legal antecedents to California environmental impact legislation; analysis of environmental review procedures, environmental research, preparation and evaluation of EIRs, and conditional negative declarations. 3 hours discussion. (003949)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course
GEOG 428 Land Use Planning Studio
Prerequisite: Recommended: GEOG 320.
Typically Offered: Spring only even years
Relationship of physical, biotic, cultural, and aesthetic factors to land planning. Techniques of solving site problems dealing with topography, grading, slope stability, seismicity, hydrology, vegetation, wildlife, soils, micro-climate energy use, view-shed, and functional design. Land development projects are analyzed, and plans for new development projects are prepared. 3 hours discussion. (003950)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 429 Environmental and Conservation Planning
Prerequisite: Recommended: GEOG 320.
Typically Offered: Spring only odd years
This course introduces the theory and application of environmental and conservation planning. It critically examines the activities of environmental planning and the analytical approaches that can be used to direct resources toward conservation that yields the greatest return on biodiversity protection and ecosystem services sustainability. Students gain knowledge of the theories, techniques through practical experiences in planning activities, and institutional legalities of environmental and conservation planning. Using sustainability as a framework, this course presents the underlying concepts of sustainable land-use planning to best manage for abiotic and biotic resources. Focus is on the regional, local, and landscape scales. 3 hours lecture. (020744)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 436 Sustainable Transportation Planning
Prerequisite: GEOG 320, or faculty permission.
Typically Offered: Fall only odd years
An analysis of the function and distribution of the various modes of transportation and their role in urban and regional sustainable development. Techniques of sustainable planning transportation systems based on land use. 3 hours discussion. (003955)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 438 Urban Geography
Prerequisite: GEOG 102, GEOG 105, GEOG 106 or SOSC 301.
Typically Offered: Spring only
Examines the location, evolution, shape, spatial patterns, and classification of cities in the United States and elsewhere. Studies the evolution of urban systems and the spatial organization of neighborhoods, central business districts, and suburbs. Explores environmental, economic, and social issues associated with urbanization, and the policies used to address them. Examines the roles of class, race, ethnic diversity, gender, and consumption in shaping the experience of urban life. 3 hours lecture. (021163)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

GEOG 439W American Cultural Landscapes (W)
Typically Offered: Fall only
American Cultural Landscapes are wonderfully complex mélanges of diverse materials, technologies and ideas. Students explore the historical evolution of cultural landscapes through maps, reading, photography, field observations, and class discussion. Students develop their observational skills and learn how enjoyable and meaningful looking at landscapes can be. 3 hours discussion. (003890)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Writing Course

GEOG 440 Environmental Thought in Action
Prerequisite: GEOG 101, GEOG 211, GEOG 343, GEOG 390W or equivalents. Recommended: BIOL 161, BIOL 350W, GEOG 315.
Typically Offered: Inquire at department
This seminar is required of students minoring in Environmental Studies and is to be taken as the culminating course in the minor. The course integrates the cross-disciplinary elements of the minor, emphasizing the interplay among the scientific, social, legal, historical, and humanistic elements of the study of the environment. 3 hours seminar. (009080)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 444 Biogeography and Landscape Ecology
Prerequisite: GEOG 101, GEOG 211, GEOG 343, GEOG 390W or equivalents. Recommended: BIOL 161, BIOL 350W, GEOG 315.
Typically Offered: Spring only
Biogeography and landscape ecology are keys for evaluating 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, and thus ecosystem services. The course emphasizes nature and impact of continuity and patchiness of species distributions and movement, and material flow on the structure and dynamics of wildland, agrarian, and urbanized landscapes. This is thus a highly integrative field of inquiry, pulling on concepts, theories and data from general ecology, evolutionary biology, geology, and physical and human geography. Quantitative methods and field trips consider the biogeography of plants and animals in the local landscapes. 2 hours activity, 2 hours lecture. (003929)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course

GEOG 445 Pyrogeography
Prerequisite: GEOG 101 or equivalent.
Typically Offered: Spring only
Pyrogeography is a comprehensive study of the physical and cultural parameters of fire. Topics covered include the spatial and temporal relationships of fire as an integral landscape process with an emphasis on the maintenance of North American ecosystems; the interpretation of the cultural uses of fire by indigenous communities as well as the historic and contemporary implications of fire management and policies; and the ecological implications of fire on biotic and abiotic systems. 3 hours discussion. (020415)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Sustainable Course
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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Typically Offered</th>
<th>Description</th>
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<td>GEOG 489</td>
<td>Geography Internship</td>
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<td>Fall and spring</td>
<td>This course is an internship offered for 1.0-3.0 units. You must register</td>
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<td>applied geography or planning in public or quasi-public agencies. 9 hours</td>
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<td>GEOG 498</td>
<td>Special Topics</td>
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<td>GEOG 499</td>
<td>Special Problems</td>
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<td>Faculty permission.</td>
<td>Fall and spring</td>
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<td>specific topic being offered. 3 hours supervision. (004004)</td>
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<td>GEOG 499H</td>
<td>Honors Research in Geography</td>
<td>3</td>
<td>Faculty permission.</td>
<td>Fall and spring</td>
<td>This course is a graduate-level independent study offered for 1.0-3.0 units.</td>
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<td>GEOG 506</td>
<td>Community Service Practice in Sustainability</td>
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<td>Fall only</td>
<td>An intensive 3-unit course in geographical research. See department</td>
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<td>office for details. Open only to students with at least a 3.0 GPA in the</td>
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<td>major. The course consists of a research project done under the supervision</td>
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<td>of a faculty member, a formal written paper, and a public presentation. 9</td>
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<td>hours supervision. (004006)</td>
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<td>Grade Basis: Graded</td>
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<td>Repeatability: You may take this course for a maximum of 6 units</td>
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<td>Course Attributes: Upper Division</td>
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<tr>
<td>GEOG 598</td>
<td>Special Topics</td>
<td>1-3</td>
<td></td>
<td></td>
<td>This course is for special topics offered for 1.0-3.0 units. Typically the</td>
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<td>topic is offered on a one-time-only basis and may vary from term to term</td>
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<td>and be different for different sections. See the Class Schedule for the</td>
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<td>specific topic being offered. 0 hours supervision. (020162)</td>
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<td>Grade Basis: Graded</td>
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<td>Repeatability: You may take this course for a maximum of 3 units</td>
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<tr>
<td>GEOG 599</td>
<td>Special Problems</td>
<td>1-3</td>
<td>Faculty permission.</td>
<td>Fall and spring</td>
<td>This course is an independent study of special problems offered for 1.0-3.0</td>
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<td>units. You must register directly with a supervising faculty member. 9 hours</td>
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<td>supervision. (020187)</td>
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<td>Grade Basis: Credit/No Credit</td>
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<td>Repeatability: You may take this course for a maximum of 15 units</td>
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<tr>
<td>GEOG 689</td>
<td>Geography Internship</td>
<td>1-3</td>
<td></td>
<td>Fall and spring</td>
<td>This course is an internship offered for 1.0-3.0 units. You must register</td>
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<td>directly with a supervising faculty member. Supervised work experience.</td>
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<td>9 hours supervision. (004057)</td>
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<td>Grade Basis: Graduate Graded</td>
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<td>Repeatability: You may take this course for a maximum of 15 units</td>
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<tr>
<td>GEOG 689T</td>
<td>Supervised College Teaching</td>
<td>2</td>
<td></td>
<td>Fall and spring</td>
<td>Weekly tutorials and supervision for those students who plan to prepare</td>
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<td>themselves for a career in college teaching of geography. Students must</td>
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<td>identify the course and the tenure/tenure-track faculty member teaching</td>
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<td>that course during the semester offered. The faculty member must agree to</td>
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<td>mentor a student in pedagogical training with a particular course. Faculty</td>
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<td>members can be responsible for a maximum of two students in any one</td>
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<td>semester. A maximum of 2.0 units in this course is acceptable for credit</td>
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<td>GEOG 697</td>
<td>Independent Study</td>
<td>1-3</td>
<td>Graduate Coordinator permission.</td>
<td>Fall and spring</td>
<td>This course will be offered for 1.0-3.0 units. Typically the topic will be</td>
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<td>offered on a one-time-only basis and may vary from term to term and be</td>
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<td>different for different sections. See the Class Schedule for the specific</td>
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<td>topic being offered. 3 hours supervision. (020443)</td>
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<td>Grade Basis: Graduate Division</td>
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<td>Repeatability: You may take this course for a maximum of 4 units</td>
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<td>GEOG 6897</td>
<td>Geoscience Internship</td>
<td>2</td>
<td></td>
<td>Fall and spring</td>
<td>This course is an internship offered for 1.0-3.0 units. You must register</td>
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<td>directly with a supervising faculty member. 9 hours supervision. (004060)</td>
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<td>Grade Basis: Credit/No Credit</td>
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<td>Repeatability: You may take this course for a maximum of 6 units</td>
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<td>Course Attributes: Graduate Division</td>
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</table>

**Course Attributes:**
- **Repeatability:**
  - You may take this course for a maximum of 15 units.
  - You may take this course for a maximum of 6 units.
  - You may take this course for a maximum of 4 units.
  - You may take this course for a maximum of 3 units.
  - You may take this course more than once.
- **Grade Basis:**
  - Graded
  - Credit/No Credit
- **Typically Offered:**
  - Fall and spring
  - Fall only
  - Fall and spring
  - Fall and spring
  - Fall only
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall only
  - Fall only
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
  - Fall and spring
GEOG 699P  Master's Project  1-6 Units
Prerequisite: Graduate Coordinator permission and candidacy status.
Typically Offered: Fall and spring
This course is offered for 1.0-6.0 units. You must register directly with a supervising faculty member. 9 hours supervision. (004064)
Grade Basis: Report in Progress: CR/NC
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Graduate Division

GEOG 699T  Master's Thesis  1-6 Units
Prerequisite: Graduate Coordinator permission and candidacy status.
Typically Offered: Fall and spring
This course is offered for 1.0-6.0 units. You must register directly with a supervising faculty member. 9 hours supervision. (004061)
Grade Basis: Report in Progress: CR/NC
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Graduate Division