

# Geography

## Overview

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society and cultural activities, and the interdependence of these from the spatial perspective. There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of the human endeavor. This examination includes the distribution of humans and their correspondent activities, how people use and perceive space, and how humans create and sustain their environs. Physical geography examines the physical elements and spatial processes related to the Earth's environmental systems. These include energy, air, water, weather, climate, landforms, soils, animals, plants, etc. In addition, geography is increasingly utilizing spatial technologies, such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remotely-sensed imagery, to study the Earth and its inhabitants. The discipline of geography specifically examines the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the examination and planning of our communities and the development of our human landscapes along with the study of global warming, deforestation, pollution, and a variety of other environmental quandaries. The required and elective coursework for this degree will survey a broad spectrum of physical, human, and geo-spatial inquiry. As a result, the SCC Geography AA-T degree will provide transfer students with a solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree.

## Career Options

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society and cultural activities, and the interdependence of these from the spatial perspective. There are two main branches of geography: human geography and physical geography. Some career areas and specific occupations include: natural resource management; environmental conservation; international development; urban and regional planning; education (K-12 through university); tourism; cartography; climate science; park management; transportation planning and logistics; real estate; international business; marketing; land surveying; research science; remote sensing; demography; GIS analysis; and many more. Some career options may require more than two years of college study.

## Program Maps

### AA-T/AS-T Transfer Degrees

[Geography AA-T Degree Map \(/academics/programs-and-majors/geography-aa-t-degree-map\)](#)

#### Dean

[Devin Horton \(/about-us/contact-us/employee-directory/employee?id=2083239&xid=\)](#)

#### Department Chair

[Craig Davis \(/about-us/contact-us/employee-directory/employee?id=0006742&xid=\)](#)

#### Meta Major

[/academics/programs-and-majors/meta-majors/science-math-and-engineering](#)

[Science, Math, and Engineering \(/academics/meta-majors/science-math-and-engineering\)](#)

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## Associate Degree for Transfer

### A.A.-T. in Geography

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There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of the human endeavor. This examination includes the distribution of humans and their correspondent activities, how people use and perceive space, and how humans create and sustain their environs. Physical geography examines the physical elements and spatial processes related to the Earth's environmental systems. These include energy, air, water, weather, climate, landforms, soils, animals, plants, etc. In addition, geography is increasingly utilizing spatial technologies, such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remotely-sensed imagery, to study the Earth and its inhabitants.

The discipline of geography specifically examines the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the examination and planning of our communities and the development of our human landscapes along with the study of global warming, deforestation, pollution, and a variety of other environmental quandaries.

The required and elective coursework for this degree will survey a broad spectrum of physical, human, and geo-spatial inquiry. As a result, the SCC Geography AA-T degree will provide transfer students with a

solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree.

Note to Transfer Students:

Even though this transfer degree is designed to make transitioning to a California State University in this major as seamless as possible, it is strongly recommended that you meet with a counselor to construct an educational plan. This process will be imperative if you are planning to transfer to an alternative four-year university or college.

The Associate Degree for Transfer (ADT) student completion requirements (as stated in SB1440 law):

- (1) Completion of a minimum of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
- (A) The Intersegmental GE Transfer Curriculum (IGETC) or the California State University GE-Breadth Requirements (CSU GE-Breadth).
- (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Catalog Date: August 1, 2024

## Degree Requirements

COURSE CODE	COURSE TITLE	UNITS
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems	3
GEOG 301	Physical Geography Laboratory	1
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	3 <sup>1</sup>
or GEOG 320	World Regional Geography (3)	
List A:		
A minimum of 6 units from the following:		6
Students may substitute courses from the Required Program not already counted toward the degree.		
GEOG 306	Weather and Climate (3)	
GEOG 331	Exploring Maps and Geographic Technologies (3)	
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
List B:		
A minimum of 6 units from the following:		6
Students may substitute courses from the Required Program or List A not already counted toward the degree.		
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 308	Introduction to Oceanography (3)	
GEOG 334	Introduction to GIS Software Applications (3)	
ANTH 310	Cultural Anthropology (3)	
or ANTH 481	Honors Cultural Anthropology (3)	
GEOL 300	Physical Geology (3)	
Total Units:		19

<sup>1</sup>It is strongly recommended that students take GEOG 310.

The Associate in Arts in Geography for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum overall grade point average (GPA) of 2.0, including (a) a minimum grade of "C" (or "P") for each course in the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

## Student Learning Outcomes

Upon completion of this program, the student will be able to:

- understand the general content and scope of collegiate level geography studies.
- compare and contrast the general biophysical and sociocultural differences and similarities among world regions.
- interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.

- utilize geographic information technologies such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remote sensing in understanding environmental and human phenomena.
- evaluate and analyze geographic problems and their solutions.
- communicate geographic information effectively in oral, written, and graphic form.

## Career Information

The career opportunities available to someone earning a degree in geography are as varied as the discipline itself. Some career areas and specific occupations include: natural resource management; environmental conservation; international development; urban and regional planning; education (K-12 through University); tourism; cartography; climate science; park management; transportation planning and logistics; real estate; international business; marketing; land surveying; research science; remote sensing; demography; GIS analysis; and many more (please contact the department for additional information). Some career options may require more than two years of college study.

# Geography (GEOG) Courses

## GEOG 300 Physical Geography: Exploring Earth's Environmental Systems

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of “C-” or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area B1; IGETC Area 5A
<b>C-ID:</b>	C-ID GEOG 110
<b>Catalog Date:</b>	August 1, 2024

This course is a spatial study of planet Earth's dynamic physical systems and processes. Topics include weather, climate, landforms, natural hazards, water resources, vegetation, and soils. Emphasis is placed on interrelationships among Earth systems and processes and their resulting patterns and distributions. Relevant application of these concepts to today's world is also stressed to help students better understand Earth's physical environment as well as human-environmental interaction. Optional field trips may be included.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list and describe the basic components of Earth's major environmental spheres.
- identify the variety and the distribution of the atmospheric, hydrologic, and geologic phenomena of this planet.
- analyze the connections between local atmospheric phenomena and global weather systems.
- compare and contrast the connections between atmospheric phenomena and the biosphere.
- examine impact of lithospheric natural hazards such as earthquakes and tsunamis on human societies.
- evaluate human dependence upon the physical elements for sustenance and livelihood.

## GEOG 301 Physical Geography Laboratory

<b>Units:</b>	1
<b>Hours:</b>	54 hours LAB
<b>Prerequisite:</b>	None.
<b>Corequisite:</b>	GEOG 300
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of “C-” or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area B3; IGETC Area 5A
<b>C-ID:</b>	C-ID GEOG 111
<b>Catalog Date:</b>	August 1, 2024

This course is a laboratory study of basic principles and concepts relating to our Earth's environmental systems. Labs feature observation, collection, analysis, and display of data related to the study of energy, weather and climate, vegetation, soils, landforms, and environmental hazards. In addition, this course utilizes geographic methods such as map and image interpretation and geographic technologies such as weather instruments, global positioning systems (GPS), and computer applications. Field trips may be required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- read, analyze, and interpret topographic maps and other geographic imagery.
- collect and analyze basic geographic data using common instruments.
- analyze and interpret tabular and graphic data related to basic geographic phenomena.
- interpret and synthesize local, regional, and global weather and climate data.

- apply basic physical geographic principles to contemporary environmental situations.

# GEOG 302 Environmental Studies & Sustainability

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of "C-" or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area D5; IGETC Area 4E
<b>Catalog Date:</b>	August 1, 2024

This introductory course offers an interdisciplinary perspective on the major environmental problems confronting society and explores solutions directed toward producing a more sustainable future. Course topics include an introduction to environmental issues, Earth system science, natural resources, global climate change, human demography, agricultural systems, and development issues. These topics will be examined with human-environment interaction as the overriding paradigm to examine potential for sustainable systems as our planet and populations progress. A field trip may be required to relate class discussions to the real world.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- systematize the basic framework of environmental studies and how it relates to the current environmental and sustainability issues.
- compare and contrast global, regional, and local distribution of various environmental issues.
- recognize and identify contemporary environmental and sustainability issues, put them into context, and examine potential solutions.
- recognize and identify the ethical and social justice aspects of environmental problems.

# GEOG 305 Global Climate Change

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of "C-" or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area B1; IGETC Area 5A
<b>Catalog Date:</b>	August 1, 2024

This course explores the history and mechanisms of climate change on the Earth as well as the methods that scientists use to investigate climate change. Areas of emphasis will include climate change in the recent history of Earth (the past few million years) and the connection between human industrial activity and current climatic shifts. Additionally, this course investigates the effects of climate change in the world today and discusses possible technological and political solutions to this vast and increasingly important problem. Field trips may be required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the scientific tools used to study global climate change in the past and present.
- describe the various lines of evidence that scientists use to investigate climate change in Earth's deep past.
- interpret the components, processes, and dynamics of the global heat budget as they pertain to the ocean/atmosphere system.
- analyze the conditions that led to extensive climate change over the past 2.5 million years.
- evaluate the purported human causes of climate change, the evidence surrounding that, and the likely consequences of human-caused climate change.

# GEOG 306 Weather and Climate

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of "C-" or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area B1; IGETC Area 5A
<b>C-ID:</b>	C-ID GEOG 130
<b>Catalog Date:</b>	August 1, 2024

This course is an introduction to atmospheric processes including energy and moisture exchanges, atmospheric pressure, winds and global circulation, and severe weather conditions. In addition, global, regional, and local climates are investigated. Student work will include weather observations and analysis of atmospheric data using charts, weather maps, and radar and satellite imagery from the Internet and other sources. Field trips may be required to reinforce course content.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret, analyze, and display (map or graph) atmospheric data.
- detail the processes of energy exchange within the Earth/atmosphere system.
- identify and describe forces that cause atmospheric motion as they relate to wind systems and the global circulation.
- detail the processes involving atmospheric humidity, specifically the changes of phase of water.
- explain why precipitation occurs, including sources of moisture, lifting mechanisms, adiabatic processes, and cloud and precipitation formation.
- compare and contrast the dynamics of severe weather systems, including thunderstorms, hurricanes, and tornadoes.
- classify and interpret atmospheric data in order to describe variation in climate over Earth's surface.
- compare and contrast California's Mediterranean climate with other global climates, especially the four other major Mediterranean climate zones around the world.
- discuss and debate the mechanisms of climate change, both natural and anthropogenic, the impacts of climate change, and the potential solutions.

## GEOG 308 Introduction to Oceanography

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGWR 300 or ESLW 340 with a grade of "C" or better; Pre-algebra or equivalent with a grade of "C-" or better. Students needing a review of mathematical concepts covered in this course should enroll in MATHS 10.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV; CSU Area B1; IGETC Area 5A
<b>Catalog Date:</b>	August 1, 2024

This course is an integrated study of the world's oceans from chemical, biological and human perspectives. Topics include ocean and shoreline processes, plate tectonics, sea floor morphology, types and distribution of seafloor sediment, ocean sediment transport, ocean chemistry, ocean currents, marine resources, and environmental concerns. Regional oceanographic features are emphasized and a field trip may be required to reinforce course content.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and evaluate the relationships between marine processes and plate tectonics.
- assess the impact of human activities on ocean chemistry, marine life, and global climate.
- examine common coastal features and processes.
- evaluate the impact of shoreline processes on human activities and structures.
- analyze the relationships between weather patterns and oceanic circulation.
- assess and interpret the gross chemical composition of the ocean.
- evaluate and measure the impact of resource extraction on marine environments.
- describe the distribution of sediment in the oceans and the processes that move sediment.

## GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGRD 310 and ENGWR 101 with grades of "C" or better.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
<b>C-ID:</b>	C-ID GEOG 120
<b>Catalog Date:</b>	August 1, 2024

This course investigates the diverse patterns of human activity on earth in relation to cultural and environmental factors. Major themes include human-environment interaction, globalization, spatial and cultural conflict, and cultural diversity. The following topical areas will be utilized to examine these dynamic concepts: population, migration, language, religion, ethnicity, political and economic systems, development issues, agriculture, urbanization, and resource issues.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- systematize the basic framework of geographic inquiry and identify where cultural geography fits into this spatial science.
- compare and contrast the global, regional, and local distribution of various cultural phenomena, including: population dynamics, language, religion, ethnicity, development, and resources.
- recognize contemporary geographic issues and their contexts.
- analyze the roles of cultural diversity, natural resources distribution, and human systems on global decision-making.
- evaluate possible solutions to global issues.

## GEOG 320 World Regional Geography

<b>Units:</b>	3
<b>Hours:</b>	54 hours LEC
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	ENGRD 310 and ENGWR 101 with grades of "C" or better.
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area V(b); CSU Area D5; IGETC Area 4E
<b>C-ID:</b>	C-ID GEOG 125
<b>Catalog Date:</b>	August 1, 2024

This course is a global survey of the world's major cultural regions. Basic geographic concepts and ideas are used to study and compare people, resources, landscapes, and economies across eight major geographic regions. In addition, interactions between these regions, globalization, cultural diversity, environmental issues, and development dynamics are utilized as themes to examine our ever-changing world.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- generalize the special combination of cultural, physical, historical, and economic qualities that characterize each of the major geographic regions of the human world (such as North America or Sub-Saharan Africa).
- identify major socioeconomic, political, and/or environmental issues currently affecting Earth's major geographic regions.
- recognize and identify the world's major geographic regions, as well as all countries located within them, on a blank outline map.

## GEOG 331 Exploring Maps and Geographic Technologies

<b>Units:</b>	3
<b>Hours:</b>	50 hours LEC; 12 hours LAB
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	CISC 300 or equivalent with a grade of "C" or better
<b>Transferable:</b>	CSU; UC
<b>General Education:</b>	AA/AS Area IV
<b>C-ID:</b>	C-ID GEOG 150
<b>Catalog Date:</b>	August 1, 2024

This course introduces students to the exciting world of maps (both hard-copy and digital) and the geographic techniques and technologies that are utilized in the creation of modern cartographic documents. The examination of cartographic constructs, Global Positioning Systems (GPS), Internet mapping, remote sensing, and Geographic Information Systems (GIS) will shed light on this interesting and rapidly changing area of spatial inquiry.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- determine basic geographic information (e.g. location, distance, and direction) using various map scales, coordinate systems, and projections.
- create, analyze, critique, and interpret data using maps, aerial photographs, and satellite imagery.
- demonstrate basic proficiency in traditional and technology-based cartographic skills.
- collect, import, and display geospatial data within a GIS.
- critically analyze mapping applications and technologies commonly used in today's society.

## GEOG 334 Introduction to GIS Software Applications

<b>Units:</b>	3
<b>Hours:</b>	50 hours LEC; 12 hours LAB
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	CISC 300 or equivalent with a grade of "C" or better
<b>Transferable:</b>	CSU
<b>Catalog Date:</b>	August 1, 2024

This course provides the conceptual and practical foundations for using Geographic Information Systems (GIS) software. It emphasizes basic GIS software functionality including map display, attribute and spatial query, address geocoding, spatial database management, spatial analysis, cartographic presentation, and spatial data management.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and utilize the components of the software graphical user interface
- compile and manage spatial data
- organize spatial data using statistical classification methods
- perform attribute and spatial queries
- create and modify spatial databases
- utilize basic geoprocessing tools

- analyze spatial relationships between map features
- design and produce maps

# GEOG 353 Introduction to the Global Positioning System (GPS)

<b>Units:</b>	1
<b>Hours:</b>	16 hours LEC; 6 hours LAB
<b>Prerequisite:</b>	None.
<b>Advisory:</b>	CISC 300 or equivalent with a grade of "C" or better
<b>Transferable:</b>	CSU
<b>Catalog Date:</b>	August 1, 2024

This course introduces the Global Positioning System (GPS). Topics include how this location systems works, hands-on operation of the technology, real-world applications, computer interfaces, GIS, and other mapping software. A field trip may be required which could include a nominal fee.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate GPS receiver operation for positioning and navigation.
- design and implement field data collection for mapping.
- understand GPS in relation to basic geographic information system (GIS) concepts.
- describe the procedure for downloading and uploading GPS data to and from a computer.
- create maps of GPS data using computer software.

# GEOG 391 Field Studies in Geography: Mountain Landscapes

<b>Units:</b>	1 - 4
<b>Hours:</b>	6 - 24 hours LEC; 36 - 144 hours LAB
<b>Prerequisite:</b>	None.
<b>Transferable:</b>	CSU
<b>C-ID:</b>	C-ID GEOG 160
<b>Catalog Date:</b>	August 1, 2024

This course involves the study of geographic principles and processes in mountain environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

# GEOG 392 Field Studies in Geography: Coastal Landscapes

<b>Units:</b>	1 - 4
<b>Hours:</b>	6 - 24 hours LEC; 36 - 144 hours LAB
<b>Prerequisite:</b>	None.
<b>Transferable:</b>	CSU
<b>C-ID:</b>	C-ID GEOG 160
<b>Catalog Date:</b>	August 1, 2024

This course involves the study of geographic principles and processes in coastal environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.

- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

# GEOG 393 Field Studies in Geography: Arid Landscapes

<b>Units:</b>	1 - 4
<b>Hours:</b>	6 - 24 hours LEC; 36 - 144 hours LAB
<b>Prerequisite:</b>	None.
<b>Transferable:</b>	CSU
<b>C-ID:</b>	C-ID GEOG 160
<b>Catalog Date:</b>	August 1, 2024

This course involves the study of geographic principles and processes in arid environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

# GEOG 394 Field Studies in Geography: Volcanic Landscapes

<b>Units:</b>	1 - 4
<b>Hours:</b>	6 - 24 hours LEC; 36 - 144 hours LAB
<b>Prerequisite:</b>	None.
<b>Transferable:</b>	CSU
<b>C-ID:</b>	C-ID GEOG 160
<b>Catalog Date:</b>	August 1, 2024

This course involves the study of geographic principles and processes in volcanic environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

# GEOG 495 Independent Studies in Geography

<b>Units:</b>	1 - 3
<b>Hours:</b>	54 - 162 hours LAB
<b>Prerequisite:</b>	None.
<b>Enrollment Limitation:</b>	Student must obtain approval from an instructor to conduct an independent study.
<b>Transferable:</b>	CSU
<b>Catalog Date:</b>	August 1, 2024

This course is for students or small groups who wish to develop an in-depth understanding of a geographic topic that is beyond what is offered in our regular courses. Instructor approval is required to enroll in this course.

UC transfer credit will be awarded only after the course has been evaluated by the enrolling UC campus. The units completed for this course cannot be counted towards the minimum 60 units required for admissions.



# Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop the topic and research goals for this study.
- demonstrate the ability to research topics in a variety of formats
- analyze researched information for efficacy and relevance to defined topic.
- develop and complete final project for course.

# GEOG 499 Experimental Offering in Geography

<b>Units:</b>	0.5 - 4
<b>Prerequisite:</b>	None.
<b>Catalog Date:</b>	August 1, 2024

This is the experimental courses description.

# Faculty

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## Check Out Degree Planner

If you're interested in a transfer degree (AA-T or AS-T), then check out Degree Planner, a tool that helps you complete your degree efficiently by mapping out what courses to take and when to take them.

[Degree Planner](https://scc.losrios.edu/academics/programs-and-majors/degree-planner) ([HTTPS://SCC.LOSRIOS.EDU/ACADEMICS/PROGRAMS-AND-MAJORS/DEGREE-PLANNER](https://scc.losrios.edu/academics/programs-and-majors/degree-planner))

## Science, Math and Engineering

</academics/meta-majors/science-math-and-engineering>

This program is part of the Science, Math and Engineering meta major.

[Science, Math, and Engineering](/academics/meta-majors/science-math-and-engineering) ([/ACADEMICS/META-MAJORS/SCIENCE-MATH-AND-ENGINEERING](/academics/meta-majors/science-math-and-engineering))