Geography GEOG

Degree: AA-T – Geography for Transfer

Program Information
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 environments. 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 California State University General Education-Breadth Requirements or the Intersegmental General Education Transfer Curriculum (IGETC).
   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.

Career Opportunities
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.

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.
**GEOG 300**  Physical Geography: Exploring Earth’s Environmental Systems  
3 Units

Prerequisite: None.
Advisory: MATH 34 with a grade of “C” or better, ENGRD 310 and ENGW 101, or ESLR 320 and ESLW 310, with grades of “C” or better.

General Education: AA/AS Area IV; CSU Area B3; IGEC Area 5A  
Course Transferable to UC/CSU  
Hours: 54 hours LEC

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. (C-ID GEOG 110)
GEOG 306 Weather and Climate 3 Units
Prerequisite: None.
Advisory: MATH 34 with a grade of “C” or better, ENGRD 310 and ENGWR 101, or ESLR 320 and ESLW 310, with grades of “C” or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC
This course is an introduction to atmospheric processes including energy and moisture exchanges, atmospheric pressure, winds, and global circulation. Severe weather conditions such as hurricanes and tornadoes are also studied. World, 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. Because this course involves the use of some quantitative concepts, students are encouraged to have fundamental algebraic skills prior to enrolling in this course. (C-ID GEOG 130)

GEOG 308 Introduction to Oceanography 3 Units
Prerequisite: None.
Advisory: MATH 34 with a grade of “C” or better, ENGRD 310 and ENGWR 101, or ESLR 320 and ESLW 310, with grades of “C” or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC
This course is an integrated study of water on Earth emphasizing physical oceanography. 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.

GEOG 310 Human Geography: Exploring Earth’s Cultural Landscapes 3 Units
Prerequisite: None.
Advisory: ENGRD 310 and ENGWR 101, or ESLR 320 and ESLW 310, with grades of “C” or better.
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
Course Transferable to UC/CSU
Hours: 54 hours LEC
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. (C-ID GEOG 120)

GEOG 320 World Regional Geography 3 Units
Prerequisite: None.
Advisory: ENGRD 310 and ENGWR 101, or ESLR 320 and ESLW 310, with grades of “C” or better.
General Education: AA/AS Area V(b); CSU Area D5; IGETC Area 4E
Course Transferable to UC/CSU
Hours: 54 hours LEC
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. (C-ID GEOG 125)

GEOG 330 Introduction to Geographic Information Systems 3 Units
Prerequisite: None.
Advisory: CISC 300 or equivalent with a grade of “C” or better.
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 54 hours LEC
This course provides an introduction to the concepts, functionality, and applications of Geographic Information Systems (GIS). Emphasis is placed on the techniques utilized to capture, store, query, analyze, and display spatial data. Specific topics include types of GIS data, GIS applications, basic mapping constructs, coordinate systems, data capture techniques, data management, basic GIS analysis, and creating cartographic documents using GIS. These topics will be studied using a combination of theoretical overview and software examination. (C-ID GEOG 155)

GEOG 331 Exploring Maps and Geographic Technologies 3 Units
Prerequisite: None.
Advisory: CISC 300 or equivalent with a grade of “C” or better
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 50 hours LEC; 12 hours LAB
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, basic statistics, 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. (C-ID GEOG 150)

GEOG 334 Introduction to GIS Software Applications 3 Units
Prerequisite: None.
Advisory: CISC 300 or equivalent with a grade of “C” or better
Course Transferable to CSU
Hours: 45 hours LEC; 27 hours LAB
Geographic Information Systems (GIS) are computer-based mapping programs that analyze spatial data. This course provides the foundation for using desktop GIS software. A conceptual overview along with hands-on experience will be used to explore basic GIS software functionality. Emphasis will be placed on display characteristics, attribute querying, database exploration and management, spatial analysis, data creation, and cartographic presentation.

GEOG 353 Introduction to the Global Positioning System (GPS) 1 Unit
Prerequisite: None.
Advisory: CISC 300 or equivalent with a grade of “C” or better
Course Transferable to CSU
Hours: 16 hours LEC; 6 hours LAB
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.
GEOG 391  Field Studies in Geography: 1-4 Units
Mountain Landscapes
Prerequisite: None.
Course Transferable to CSU
Hours: 244 hours LEC; 144 hours LAB
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. (C-ID GEOG 160)

GEOG 392  Field Studies in Geography: 1-4 Units
Coastal Landscapes
Prerequisite: None.
Course Transferable to CSU
Hours: 24 hours LEC; 144 hours LAB
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. (C-ID GEOG 160)

GEOG 393  Field Studies in Geography: 1-4 Units
Arid Landscapes
Prerequisite: None.
Course Transferable to CSU
Hours: 24 hours LEC; 144 hours LAB
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. (C-ID GEOG 160)

GEOG 394  Field Studies in Geography: 1-4 Units
Volcanic Landscapes
Prerequisite: None.
Course Transferable to CSU
Hours: 24 hours LEC; 144 hours LAB
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. (C-ID GEOG 160)

GEOG 495  Independent Studies in Geography 1-3 Units
Prerequisite: None.
Enrollment Limitation: Student must obtain approval from an instructor to conduct an independent study.
Course Transferable to UC/CSU
Hours: 162 hours LAB
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.

GEOG 499  Experimental Offering in Geography .5-4 Units
Prerequisite: None
Course Transferable to UC/CSU
Hours: 72 hours LEC
This is an experimental course designed to provide students with courses not normally offered by the Geography Department. Course topics will be structured around emerging issues related to Geographic inquiry. 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.