Geography

Geography is the study of the spatial distributions and space relations within the human-environment system composing the surface of the earth. Attention is focused on historic and contemporary human activities within the context of the biophysical and cultural environment, and the emergence of humanity as one of the major agents of change on the earth's surface.

The Associate in Arts Degree option in Geography provides for a liberal education and prepares one for positions in business, government, service in foreign areas and, especially, teaching. When combined with electives in art, music, English, foreign languages, geological sciences and mathematics, geography is excellent preparation for elementary teaching. When combined with other social science fields (anthropology, economics, history, political science, sociology, social psychology, social science), geography is excellent preparation for secondary teaching in social studies. Combining an emphasis in physical-biotic geography with other science fields (biology, chemistry, earth sciences, mathematics, physics, psychology, statistics) is excellent preparation for secondary teaching in science and environmental studies.

Course work in geography, which includes Geographic Information Systems (GIS), prepares students for a wide range of jobs that employ computers to gather, manipulate, analyze and report spatial data. There is rapid growth in the use of GIS in natural resource management, urban planning, marketing, real estate, criminology, emergency services, public health, scientific research and many other areas. GIS courses are also useful for transfer students in geography and other environmental and natural science-oriented disciplines. GIS is an important tool for many other disciplines which use maps and spatial referenced data.

Career Alternatives

Regional or Urban Planner
Cartographer
Geographic Information Systems Analyst
Teacher
Park Ranger
Meteorologist
Land Use Planner
Climatologist
Ecologist
Field Analyst
Marketing Analyst
Photographic Interpreter
Research Analyst
Travel Agent
Earth Scientist
Recreational Resource Planner
Demographer
Foreign Area or Intelligence Analyst
Environmental Scientist
Realtor
Regional Systems Analyst
Surveyor
Map Librarian
Resource Economist
Research Geographer

Research in:
Landforms
Marketing
Political Structures
Soils
Transportation
Urban Systems
Vegetation
Water

Faculty and Offices

David Elliot, Chair (IDC-347, ext. 2481)
Karl Halbach (R-1, ext. 2470)
Jan Schultz (R-1, ext. 2313)
Carl Sundbeck (R-1, ext. 2317)

Emeritus Faculty

George E. Frakes

Degrees Awarded

Associate in Arts Degree, Geography
A.A. Degree: Geography

Department Requirements (25 units)

ANTH 103 — Introduction to Cultural Anthropology or
ERTH 111 — Dynamic Earth ............................................ 3
ERTH 141/GEOG 101 — Physical Geography ................ 3
ERTH 142/GEOG 105 — Economic Geography ............ 3
ERTH 171/GEOG 171 — Introduction to GIS & Maps ...... 2
ERTH 172/GEOG 172 — GIS: Software Applications ...... 2
GEOG 102 — Cultural Geography ................................... 3

Controlled Electives (9 Units): ANTH 121, 122, 123,
124, 125, 126; BOT 100, 121 or BIOL 103; ERTH 111,
111L, 112, 113, 114, 115, 116, 121, 131, 132, 133,
141L, 151, 152; ENVS 115, 116; GEOG 101L.

Note: A course may not be used to satisfy more than
one requirement (double-counting is not allowed).
Recommendation: It is strongly recommended that
transfer students in Geography take ERTH 141 and
152. In addition, Associate Degree students should
take a broad background of electives in the Social
Sciences and the Earth Sciences.

College Requirements
For complete information, see “Graduation
Requirements” in the Catalog Index.

Planning a Program of Study
In order to plan the best possible program of study
to meet individual needs, students are encouraged
to contact the Geography Department chairperson,
faculty adviser, or counselor assigned to the Social
Sciences Division. These persons are eager to assist
students—and they welcome the opportunity to be
helpful.

Preparation for Transfer
Course requirements for transfer vary depending upon
the college or university a student wishes to attend.
Therefore, it is most important for a student to consult
with his/her counselor and departmental adviser before
planning an academic program for transfer. Information
sheets for majors, outlining transfer requirements, are
available in the Counseling/Transfer Centers.

Honors and Awards
The Geography faculty selects one student each year
to be honored as “Outstanding Student.” Students are
 nominated by members of the faculty and selections
are made on the basis of academic scholarship
and a student's contribution to our community’s
understanding of political events.

Special Programs and Courses

Geography Club
Students who are interested in exploring geography
with their peers are invited to join the Geography Club.
See Mr. Sundbeck for further information.

Advising
Our faculty is eager to provide counseling to students
seeking to explore career opportunities which relate
to Geography as a major or who simply need further
information about any of our course offerings.

Student Participation
We invite student input at any time about needed
changes in curriculum or additions to our program. Our
course offerings are constantly under review and we
welcome student perspective.

Course Descriptions

GEOG 101/ERTH 141 — Physical Geography
(3) F, S — CSU, UC
Skills Advisories: MATH 1 and ENG 103
Course Advisories: Concurrent enrollment in
ERTH 141L/GEOG 101L
Introduction to the earth sciences. Interrelationships
among the basic elements of the physical environment
are examined. Topics include geology, geomorphology,
meteorology, climatology, hydrology and agronomy.
Required of Geography majors.

GEOG 101L/ERTH 141L — Physical Geography Laboratory
(1) F, S — CSU, UC
Corequisites: GEOG 101/ERTH 141
Skills Advisories: MATH 1 and ENG 103
Laboratory approach to a combination of earth
science disciplines, including cartography, geology,
geomorphology, meteorology and oceanography.
Remote sensing techniques are utilized in 75% of
laboratory activities.
GEOG 102 — Cultural Geography
(3) F, S — CSU, UC
Skills Advisories: Eligibility for ENG 110 or ENG 110H
Cultural geography is an exploration of culture around the world as seen in the patterns of settlement, belief systems, economic development, political units and responses to the physical world. Investigates the characteristics of the countries of the world divided into regional groupings. The dynamics between countries and regions are also explored as they affect the cultural landscape.

GEOG 105/ERTH 142 — Economic Geography
(3) F, S — CSU, UC
Skills Advisories: MATH 4 and ENG 103
Designed for students majoring in Geography. Addresses regional patterns of principal economic activities of the world, with an emphasis on economic development and the problems of urbanization, transportation and the environment.

GEOG 106 — Geography of California
(3) F, S — CSU, UC
Skills Advisories: Eligibility for ENG 110 or ENG 110H
Non-technical survey of the wide variety of natural and human environments found in California. It includes a regional study of physical landscapes, economic activities, characteristics of population, cities and rural areas, and current environmental problems. California’s interaction with other parts of the U.S. and world is also covered.

GEOG 171/ERTH 171 — Introduction to Geographic Information Systems (GIS) and Maps
(2) F — CSU, UC
Corequisites: GEOG 172/ERTH 172
Skills Advisories: MATH 4 and ENG 103
Introduction to the techniques, tools and theories used to examine geographic information, with focus on Geographic Information Systems (GIS). Includes the structure, uses, hardware and software requirements, and basic operations of a GIS. Cartography and cartographic design are incorporated, as well as overviews of aerial photography, remote sensing and global positioning systems. Includes uses of GIS software in business, urban planning, resource management and scientific research.

GEOG 172/ERTH 172 — Geographic Information Systems: Software Applications
(2) S — CSU
Corequisites: ERTH 171/GEOG 171 (taken concurrently)
Skills Advisories: ENG 103
Extensive practice with a GIS package (ArcGIS or similar GIS software), accompanied by exploration of the range of applications in which GIS is used (e.g., resource management, public works, business, planning, scientific research). Covers the key skills for operating GIS software packages, including geographical data acquisition, creation, management, analysis and output.

GEOG 175/ERTH 175 — Raster GIS Applications
(2) F, S — CSU
Prerequisites: GEOG 172/ERTH 172
Hands-on introduction to basic raster concepts, using ArcGIS Spatial Analyst extension within the Arc Map environment. The underlying methodology required to solve real world problems is explored through a series of extensive course projects. Key skills in data acquisition, surface creation techniques, map algebra, database design and result reporting are covered.

GEOG 299 — Independent Study in Geography
(1-3) F, S — CSU
Limitation on Enrollment: Six units of Geography with a 3.0 or above GPA; minimum 12 units of course work completed at SBCC with GPA of at least 2.5.
For complete information, see “Independent Study” in the Catalog Index. (*UC transfer limit: 299 computed as Independent Study; please see counselor)