Geography

Do you dream of exploring far-off places when you look at a map? Do you prefer the window seat on airplanes and buses? Are you captivated by connections between people and the environment? Are you hoping to land a job studying and stewarding Earth’s resources? Do you like using high-tech gadgets to gather and report interesting details? If you answered “yes” to any of these questions then geography may be the major for you.

Geography is the science of space and place. Geographers study spatial distributions and relations within Earth’s human-environment systems. Attention is focused on historic and contemporary human activities within the context of the biophysical and cultural environments, and the emergence of humanity as one of the major agents of change on Earth’s surface.

The Associate in Arts Degree in Geography provides for a liberal education and prepares one for positions in business, government, environmental consulting, resource management, service in foreign areas and teaching.

Many geography courses satisfy G.E. requirements and appeal to the major and non-major alike. Coursework 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 spatially referenced data.

Career Alternatives
Cartographer
Climatologist
Demographer
Earth Scientist
Ecologist
Environmental Scientist
Field Analyst
Foreign Area or Intelligence Analyst
Geographic Information Systems Analyst
Land Use Planner
Map Librarian

Marketing Analyst
Meteorologist
Park Ranger
Photographic Interpreter
Realtor
Recreational Resource Planner
Regional or Urban Planner
Regional Systems Analyst
Research Analyst
Research Geographer
Resource Economist
Surveyor
Teacher
Transportation Analyst
Travel Agent

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

Faculty and Offices
Jeffrey W. Meyer, Chair (EBS-110, ext. 4270)
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Jan Anderson, Information/Assistance (EBS-114, ext. 2315)

Degree Awarded
Associate in Arts Degree, Geography

A.A. Degree: Geography

Department Requirements (26 units)
GEOG 101+/ERTH 141+ — Physical Geography ..............3
GEOG 101L/ERTH 141L — Physical Geography Lab ....1
GEOG 102 — Cultural Geography ...........................................3
GEOG 104 — World Regional Geography ....................3
GEOG 152/ERTH 152 — Weather and Climate .............3
GEOG 171/ERTH 171 — Introduction to GIS and Maps ....2
GEOG 172/ERTH 172 — GIS: Software Applications .......2
312 Geography

Controlled Electives (9 Units): ANTH 103, ANTH 121
122, 123, 124, 125, 126, BIOL 122 or 144 or
BOT 121, BIOL 124, ERTH 111+ or 111H+, 112+ or
115+ or ENVS 115+, ERTH 113 or 114, ERTH 116+ or
ENVS 116+, ERTH 131 or 132 or 133,
ERTH 151+, GEOG 105 or ERTH 142, GEOG 106,
GEOG 175 or ERTH 175, ENVS 110+, GLST 101,
GLST 102, MATH 117 or 117H.
+Satisfies Area A of the SBCC General Education
Requirements if both lecture and lab are completed.

Note: A course may not be used to satisfy more than
one requirement (double-counting is not allowed).
Recommendation: Associate Degree students should
take a broad background of electives in both the Earth
Sciences and Social 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 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 Geography 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 geographic 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 Dr. Robinson or Ms. Armstrong 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) — CSU, UC
Skills Advisories: MATH 1 and ENG 103
Course Advisories: Concurrent enrollment in
ERTH 141L/GEOG 101L
Hours: 54 lecture
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) — CSU, UC
Corequisites: GEOG 101/ERTH 141
Skills Advisories: MATH 1 and ENG 103
Hours: 54 lab
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) — CSU, UC
Skills Advisories: Eligibility for ENG 110 or 110H or 110GB
Hours: 54 lecture
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 104 — World Regional Geography
(3) — CSU, UC
Skills Advisories: Eligibility for ENG 103
Hours: 54 lecture
Global survey of cultural regions, people and environments. Geographic methodologies are employed to evaluate people, resources, landscapes, livelihoods and economies across eight major geographic regions. The gap between developed and undeveloped economies, the global roles and interconnections of countries and regions, and the conflicting pressures between cultural diversity and globalization are analyzed.

GEOG 105/ERTH 142 — Economic Geography
(3) — CSU, UC
Skills Advisories: MATH 4 and ENG 103
Hours: 54 lecture
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) — CSU, UC
Skills Advisories: Eligibility for ENG 110 or 110H or 110GB
Hours: 54 lecture
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 152/ERTH 152 — Weather and Climate
(3) — CSU, UC
Skills Advisories: MATH 1 and ENG 103
Hours: 54 lecture
Fundamentals of meteorology, including the nature of the atmosphere, circulation of the atmosphere, air masses and fronts, weather analysis, weather at sea and forecasting. The climates of the earth with California’s varied climate and local weather phenomena emphasized, as well as future climatic changes. Required of all Environmental Studies and Marine Science majors.

GEOG 171/ERTH 171 — Introduction to Geographic Information Systems and Maps
(2) — CSU, UC
Corequisites: GEOG 172/ERTH 172
Skills Advisories: MATH 4 and ENG 103
Hours: 36 lecture
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) — CSU
Corequisites: ERTH 171/GEOG 171 (taken concurrently)
Skills Advisories: ENG 103
Hours: 54 (27 lecture, 27 lab)
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) — CSU
Prerequisites: GEOG 172/ERTH 172
Hours: 36 lecture
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 results reporting are covered.

GEOG 299 — Independent Study in Geography (1-3) — 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.
Hours: 48-144 lab
For complete information, see “Independent Study” in the Catalog Index. (*UC transfer limit: 299 computed as Independent Study; please see counselor)