

GEOGRAPHY (GEOG)

What is Geography? Humans have long pondered their place in the natural world, recognizing both the challenges and opportunities afforded them by the environment and, more recently, the effects of human activities in modifying that environment. This interplay of natural systems and human societies is the subject of the field of geography. **Physical geography** focuses primarily on the operation of earth's systems upon which humans depend; **cultural geography** examines how humans live on the earth: how we modify the landscape, organize space, move about, use resources, and create the economies that sustain us.

Skills learned in the study of geography are useful in many rewarding career paths. **Urban planners** design livable environments in the city; **environmental managers**, employed by government agencies and private industry, work to conserve our natural resources; **hydrologists** manage increasingly scarce water resources; **cartographers** produce maps for both public and private employers; **academic geographers** teach at all levels in our educational system; **geographic information system (GIS) specialists** provide their technical expertise to assist in the planning of structures and projects; **foresters**, many employed by the National Forest Service or the US Department of Agriculture, manage millions of acres of precious woodlands; **park rangers** in state and national parks help to maintain the health and beauty of these places and share their knowledge through public information programs.

“When we try to pick out anything by itself, we find it hitched to everything else in the universe.”

- John Muir 1869

The College of Alameda Geography program recognizes this and takes an integrated, system-based approach to the study of natural processes, sometimes called earth system science. This stress upon the interactions of various components of our system is especially valuable in today's rapidly changing environment.

Field trips. Local and/or long-distance, overnight field trip and field research opportunities may be included in some courses. Students must pay own expenses.

GEOG 1

Physical Geography

3 units, 3 hours lecture (GR)

Acceptable for credit: CSU, UC

Basic elements of the earth's physical systems and processes: Earth-sun relations, weather, climate, water, plate tectonics, landforms, soils, and ecosystems and their interrelationships and global distribution patterns. 2206.00

AA/AS area 1; CSU area B1; IGETC area 5A

GEOG 1L

Physical Geography Laboratory

1 unit, 3 hours laboratory (GR or P/NP)

Prerequisite or corequisite: Geog 1

Acceptable for credit: CSU, UC

Practical application of basic concepts and principles of physical geography: Earth-sun relationships, weather, climate, geologic processes, landforms, and field observation. 2206.00

CSU area B3; IGETC area 5C

GEOG 2

Cultural Geography

3 units, 3 hours lecture (GR)

Acceptable for credit: CSU, UC

Basic elements of cultural geography: Interrelationships of people and the land, including study of populations, cultural origins, migration, language and religion, ethnicity, systems of agriculture, urbanization, political units, economic organization and resource exploitation. 2206.00

AA/AS area 2; CSU area D; IGETC area 4

GEOG 14

Introduction to Geographic Information Systems

4 units, 3 hours lecture, 3 hours laboratory

Study of Geographic Information Systems (GIS) science and its applications to spatial data management: Identification and acquisition of GIS data; assessment of vector and raster systems, scale, resolution, map projection, coordinate systems, georeferencing and Global Positioning Systems (GPS); spatial analysis and modeling with GIS. 1901.00

GEOG 48AA-FZ**Selected Topics in Geography**

.5-5 units, 0-5 hours lecture, 0-15 hours laboratory
(GR or P/NP)

Acceptable for credit: CSU

See section on Selected Topics. 2206.00

GEOG 49**Independent Study in Geography**

.5-5 units, .5-5 hours lecture (GR)

Acceptable for credit: CSU

See section on Independent Study. 2206.00

GEOG 248AA-FZ**Selected Topics in Geography**

.5-5 units, 0-5 hours lecture, 0-15 hours laboratory
(GR or P/NP)

See section on Selected Topics. 2206.00