

The **A.A. degree in Geography** will be awarded upon completion of the major course requirements listed below and the General Education requirements for the Associate in Arts Degree listed in the Degrees, Programs & Transfer Requirements section of this Catalog.

The A.A. degree in Geography at College of Alameda offers students the opportunity to prepare for a broad range of professions through the study of the spatial distribution of global physical features, environmental processes, and aspects of human culture that impact global environments.

Career Opportunities

Career Opportunities include but are not limited to: Aerial Photo Interpreter; Agricultural Geographer; Cartographer; Census Analyst; Climatologist; Community Development Specialist; Demographer; Development Specialist; Ecologist; Economic Development Analyst; Environmental Analyst/Planner; Geographical Information Systems Specialist; Map Curator; Natural Resources Manager; Park Ranger.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the spatial organization of the world's peoples, nations, cultural environments
- Demonstrate knowledge of global physical and environmental processes and develop an appreciation of landscapes.
- Demonstrate an understanding of how human activities impact the physical environment.

Degree Major Requirements

DEPT/NO.	TITLE	UNITS
Required Courses (7 units)		
GEOG 1	Physical Geography	3
GEOG 1L	Physical Geography Laboratory	1
GEOG 2	Cultural Geography	3
Select a minimum of 4 courses from the following: (12-13 units)		
GEOG 3	World Regional Geography (3)	12-13
GEOG 15	Introduction to Weather and Climate (3)	
GEOG 18	California Geography (3)	
GEOG 14	Introduction to Geographic Information Systems (4)	
GEOL 3	Historical Geology (3)	
GEOL 10	Introduction to Geology (3)	
ANTHR 3	Introduction to Social and Cultural Anthropology (3)	
Total units required for major:		19-20
G.E. and Elective Units Required:		40-41
Total Units Required for Degree:		60



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.

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)
- 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

C-ID GEOG 120

GEOG 3

World Regional Geography

- 3 units, 3 hours lecture (GR)
- Acceptable for Credit: CSU, UC

Introduction to the world's major geographic regions: Interconnections between regions, cultural and economic development, political organization, land uses, and the environment. 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
- Acceptable for Credit: CSU, UC

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

AA/AS area 1; CSU area B1, B3

C-ID GEOG 155

GEOG 15**Introduction to Weather and Climate**

- 3 units, 3 hours lecture (GR or P/NP)

Introduction to the Earth's atmosphere: Atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclones, weather forecasting, climate and climate change. 2206.00

GEOG 18**California Geography**

- 3 units, 3 hours lecture (GR or P/NP)

Forces, processes, and systems that shape the geography of California: Landforms, natural vegetation, forestry and fishing, mineral and water resources, cultural landscapes, agriculture, demographic changes, ethnic diversity, urban growth, regional differences, economic development and its national impact; natural hazards such as earthquakes and volcanism, floods, landslides and wildfires; climate and effects of climate change. 2206.00

GEOG 48CR**Geography Field Studies Abroad**

- .5-5 units, 1.5-9 hours laboratory
- Acceptable for Credit: CSU

Geography field studies abroad: Physical geography and physical processes producing it, such as volcanism, mountain building, ecosystems and biomes of other regions; cultural geography of language, indigenous peoples, land use practices, ecotourism projects and environmental conservation efforts. 2206.00

GEOG 49**Independent Study in Geography**

- .5-5 units, .5-5 hours lecture (GR)
- Acceptable for credit: CSU

In-depth exploration of an area or problem of the student's choice not covered by regular catalog offerings in Geography. Student must obtain approval from an appropriate faculty member. For more details, see the section on independent study in the college catalog. 2206.00