

GEOG G180: PHYSICAL GEOGRAPHY

Item	Value
Curriculum Committee Approval Date	11/03/2020
Top Code	220600 - Geography
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)
Local General Education (GE)	• GWC Physical Universe*** (GB1)
California General Education Transfer Curriculum (Cal-GETC)	• Cal-GETC 5A Physical Science (5A)
Intersegmental General Education Transfer Curriculum (IGETC)	• IGETC 5A Physical Science (5A)
California State University General Education Breadth (CSU GE-Breadth)	• CSU B1 Physical Science (B1)

Course Description

This course is an introduction to the spatial study of the dynamic physical elements and processes of Earth including weather, climate, oceans, water-cycle, earthquakes, volcanoes, rocks, mountains, caves, forests, deserts, vegetation, soils, ecosystems, and biomes. An emphasis on the interrelationship between these and other features of the atmosphere, hydrosphere, lithosphere, cryosphere, and biosphere. Introduction to the scientific method, and geographic tools such as maps and Geographic Information Systems (GIS). Transfer Credit: CSU; UC. C-ID: GEOG 110. C-ID: GEOG 110.

Course Level Student Learning Outcome(s)

1. Course Outcomes
2. Evaluate changes and outcomes of dynamic geographic processes.
3. Analyze maps conveying key geographic data.
4. Describe the relationship between Earth's physical processes and solar radiation.

Course Objectives

- 1. Assess the size, structure, and movement of Earth and its relationship with the Sun.
- 2. Analyze the major components and processes of the atmosphere, hydrosphere, lithosphere, and biosphere.
- 3. Categorize the distribution of global climates, biomes, ecosystems, and landforms.
- 4. Utilize practical observations and the scientific method to analyze physical geography and environmental patterns.

Lecture Content

Physical Geography Essentials Earths shape Geographic Grid and map interpretation Tools and methods of data collection, interpretation, and analysis Atmosphere Earth-Sun relations Solar radiation Seasons Atmospheric composition, structure, and function Atmospheric and oceanic circulation Hydrosphere, Weather and Climate Atmospheric moisture Water circulation and resources Weather systems Climate classifications Climate change Lithosphere Plate tectonics Rock cycle Land formation Earthquakes, volcanism, and mountains Weathering and deformation Systems interfaces and interactions River systems Ocean and coastal systems Arid landscapes Glacial landscapes Biosphere Soils and vegetation Ecosystems Terrestrial biomes

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)

Instructional Techniques

Lecture Use of audio and visual media Use of charts, maps, models, graphs, diagrams, and illustrations Group discussions and activities Handouts, worksheets, or exercises Instructor feedback on projects and assignments

Reading Assignments

Textbook chapters Handouts and other supplemental reading related to course content

Writing Assignments

Essays or research projects In-class writing assignments Written data analysis and interpretation

Out-of-class Assignments

Observations and data collection related to course content Homework related to course content

Demonstration of Critical Thinking

Apply concepts learned in the course to real-world phenomena related to physical geography, demonstrated through course assignments. Understand how weather and climate-related concepts apply to and interact with each other, demonstrated through course assignments. Hypothesize and predict future physical geographic processes, demonstrated through course assignments.

Required Writing, Problem Solving, Skills Demonstration

In-class writing assignments related to course content. Written analysis and interpretation of observations, maps, charts, graphs, tables, diagrams, and illustrations related to physical geography. Essays or research papers on issues, events, or processes related to physical geography.

Eligible Disciplines

Geography: Masters degree in geography OR bachelors degree in geography AND masters degree in geology, history, meteorology, or oceanography OR the equivalent OR see interdisciplinary studies. Masters degree required.

Textbooks Resources

1. Required Christopherson, R.W., Birkeland. Geosystems: An Introduction to Physical Geography, 10th ed. New York: Pearson, 2018 2. Required

Hess, D.. McKnights Physical Geography: A Landscape Appreciation, 11th edition ed. Upper Saddle River, N.J.: Pearson Prentice Hall, 2017

Other Resources

1. Open education resources or classic sources.