

Crafton Hills College

Course Outline

1. Discipline: Geography
2. Department: Physical Sciences/Mathematics
3. Course Title: Physical Geography
4. Course I.D. : GEOG 110
5. Prerequisite(s): None
- Corequisite(s): None
- Departmental Recommendation(s): Concurrent enrollment in GEOG 111

6. Semester Units: 3

7. Minimum Semester hours:

Lecture: 48 Lab: 0 Clinic: 0 Field: 0

8. Need for Course:

This course is a science survey course. It applies to graduation requirements as a science course. This course transfers and applies to a non-laboratory physical science general education requirement for both CSU and UC systems.

9. Goals for Course:

The course will provide the student with the ability to recognize basic scientific principles and to apply those principles to physical geography. The student will be able to apply scientific principles and geographic tools to understand the interrelationships of our atmosphere, hydrosphere, lithosphere, and biosphere.

10. Catalog Description:

A spatial study of Earth's dynamic physical systems and processes. Topics include Earth-sun relationships, weather, climate, water, geomorphology/landforms, soils, and the biosphere. Emphasis is on interrelationships among systems and processes and their resulting patterns and distributions. Tools of geographic inquiry include maps, remote sensing, Geographic Information Systems, Global Positional Systems, and fieldtrips.

11. Schedule Description

A spatial study of Earth's dynamic physical systems and processes

12. Entrance Skills:

A. Requisite Skills: None

B. Recommended Skills: None

13. Course Objectives:

Upon completion of the course, students will be able to:

- A. Explain the Scientific Method
- B. Recognize the Earth system
- C. Recognize and discuss the three types of map projections
- D. Locate a place, on a projection, utilizing latitude and longitude
- E. Explain the differences between relative and absolute location
- F. Explain the use of GIS and GPS
- G. Construct and explain atmospheric heating and temperature
- H. Explain and diagram atmospheric pressure and winds
- I. Construct general map view and vertical atmospheric circulation patterns
- J. Identify and explain the gain and loss of moisture by condensation and precipitation
- K. Map and discuss air mass source regions and explain atmospheric disturbances
- L. Identify and explain the world climatic regions
- M. Locate and explain the Earth's major terrestrial biomes
- N. Identify and discuss Plate Tectonics, the Earth's crust, and geomorphology
- O. Discuss the surface processes that contribute to regional geomorphology
- P. Identify and explain the features shown on an map view of the global ocean floor

14. Representative Texts and Instructional Materials:

Gabler, Sager, Wise, & Petersen. Essentials of Physical Geography, 7th ed. Orlando, FL. Harcourt Brace. 2003.

Christopherson. Geosystems an Introduction to Physical Geography, 5th ed. Upper Saddle River, NJ. Prentice Hall. 2003.

15. Course Content

The content of this course includes:

- A. Foundations of Physical Geography
 - 1. The Scientific Method
 - 2. The Earth System
 - 3. Representations of Earth
 - 4. Earth as a Planet

- B. The Atmosphere
 - 1. Atmospheric Heating and Temperature
 - 2. Atmospheric Pressure and Winds
 - 3. Circulation Patterns
 - 4. Moisture, Condensation, and Precipitation
 - 5. Air Masses and Atmospheric Disturbances

- C. The Hydrosphere
 - 1. Fluvial Processes
 - 2. Glacial Systems
 - 3. Global Ocean

- D. The Lithosphere
 - 1. Earth's Interior, Crust, and Plate Tectonics.
 - 2. Tectonic Processes and Geomorphology
 - 3. Gradation Processes and Geomorphology

- E. The Biosphere
 - 1. Biogeography
 - 2. Soils
 - 3. Climate

16. Methods of Instruction:

This course will combine lecture, demonstration, reading, multi-media, class discussion, and fieldtrips.

17. Assignments and Methods of Evaluation:

- A. Reading, homework and writing assignments will typically require two hours of time for each class hour of lecture.
- B. Students will be required to complete a weekly homework assignment. The majority of the homework assignments will consist of paragraph length answers to questions. Quizzes may be given at the discretion of the instructor. Examinations will be required and independent work may also be used at the discretion of the instructor.
- C. Students will be tested over major units. Tests will consist of written answers to questions, multiple choice answers, or a combination of both. The final examination will be comprehensive. The bulk of the students grade will be based on a demonstration of mastery of the material in the course outline on tests and class work. The course grade will be based on: (exact percentage to be determined by individual instructor.)

Tests	50 – 90%
Homework	10 – 20%
Class Work and Quizzes	0 – 30%

18. Distributed Education Methods: None.