GEOG 101 Introduction to Physical Geography

3 Credits

Community College of Baltimore County Common Course Outline

Description

GEOG 101 – Introduction to Physical Geography: is a course in which students examine the physical elements of geography. These include Earth in its orbit, the nature and distribution of landforms, the elements of weather and climate, soils, flora and fauna, Earth's shape, plate tectonics, landscape building, and erosion.

Pre-requisites: ACLT 053 or (ESOL 052 and ESOL 054) **Co-requisites:** MATH 082

Overall Course Objectives

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

- 1. analyze spatial variations in the atmosphere, hydrosphere, biosphere, and lithosphere using geographic methods;
- 2. analyze historical, social, ethical, and/or political contexts relevant to physical geography;
- 3. explain common themes of geographic research;
- 4. differentiate between physical and cultural elements of geography;
- 5. calculate spatial parameters such as coordinates, distance, and direction using maps;
- 6. create visual aids to support analysis using appropriate technology;
- 7. relate Earth-Sun relationships and Earth's orbital characteristics to Earth's seasons;
- 8. describe the composition and structure of Earth's atmosphere;
- 9. explain the concepts associated with heat exchange in the atmosphere;
- 10. explain how weather systems and associated components such as clouds, wind, precipitation develop and move;
- 11. differentiate between climate and weather;
- 12. explain the movement of water through Earth's hydrosphere;
- 13. identify major characteristics of Earth's internal structural layers;
- 14. describe internal and external processes at work in the formation of Earth's surface and their relationship to plate tectonics;
- 15. describe ways that geography influences diverse cultures locally and globally; and
- 16. find, evaluate, use, and cite information gathered for written and/or oral projects.

Major Topics

- I. Introduction to Earth
 - a. Themes of Geography
 - b. Environmental Spheres
 - c. Earth and Sun Relationships
- II. Mapping the Earth

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- a. Spatial Properties of Maps
- b. Coordinate Systems
- c. Scale and Map Projections
- III. Introduction to the Atmosphere
 - a. Atmospheric Pressure and Wind
 - b. Atmospheric Pressure and Clouds
 - c. Weather
 - d. Climate
- IV. The Hydrosphere
 - a. Hydrologic Cycle
 - b. Surface Water Features and Groundwater
- V. The Biosphere
 - a. Earth's Biomes
 - b. Soils
- VI. The Lithosphere
 - a. Internal Processes Shaping the Earth
 - b. External Processes Shaping the Earth
 - c. Plate Tectonics
- VII. Local and Global Issues in Geography

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- three exams including a cumulative final exam
- five quizzes
- one activity requiring student collaboration
- one written assignment or oral presentation which addresses the General Education Outcomes

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Other Course Information

This course is an approved 3–credit General Education course in the Biological and Physical Sciences but does not fulfill the laboratory requirement.

One or more assignments will infuse CCBC General Education Program outcomes and will account for a minimum of 10% of the total course grade. The assignment(s) will allow students to demonstrate at least 5 of the 7 General Education program outcomes.

Date Revised: 1/17/2023