

## CUMBERLAND COUNTY COLLEGE

Course: GL 117 Earth Science

Credits: 3

Prerequisites: EN 060 and MA 091 or MA 094

### Description:

A course for non-science majors, designed to introduce students to the Earth Sciences of Geology and Oceanography and the solid Earth. Topics of study include: the structure and chemistry of minerals and rocks, due process of weathering, theories and processes of earthquakes, plate tectonics, volcanism and geological time, the origin of the oceans, the characteristics and chemistry of ocean waters and currents, and the structure and topographic features of the ocean floors.

### Learning Outcomes:

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

- Apply the scientific method to study the principles of Earth Science and scientific questions in general.
- Identify basic Earth materials (rocks, minerals, water, and air) and understand the roles these materials in Earth processes.
- Discuss Earth resources and their uses.
- Discuss the time periods and the geological history associated with Earth.
- Identify the layers of Earth, discuss the methods by which scientists distinguish the layers and describe the composition of each.
- Describe plate tectonics and discuss basic geological processes and hazards that mark the plate boundaries.
- Explain the structural aspects associated with Earth's crust.
- Explain how the motion of the Earth relative to the Sun is associated with seasonal change and atmospheric heating.
- Identify how ocean currents are generated and redistribute global heat.
- Discuss how the uneven heating of the Earth influences wind and weather.
- Use the scientific method of inquiry, through the acquisition of scientific knowledge.
- Use computer systems or other appropriate forms of technology to achieve educational and personal goals.

### Topical Outline:

- Earth Materials
- Sculpturing Earth's Surface
- Forces Within
- Deciphering Earth's History
- The Global Ocean
- Earth's Dynamic Atmosphere

- Earth's Place in the Universe

Text:

Tarbuck, Earth Science, 14<sup>th</sup> Edition, Prentice Hall ISBN: 9780321928092

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.

As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

**Before Withdrawing From This Course:**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA, which can limit or eliminate future financial aid in addition to causing academic suspension.