

Common Course Outline
ERSC/GEOG 142
Oceanography Laboratory
1 Credit

The Community College of Baltimore County

Description

ERSC/GEOG 142 – 1 Credit – Oceanography Laboratory provides experience in working with oceanographic data and techniques. Students investigate chemical and physical properties of seawater, biological communities, the interaction of the ocean with the atmosphere and coastal and shoreline features.

1 credit: 2 laboratory hours

Co-requisite: ERSC/GEOG 141

Overall Course Objectives

Upon completion of this course students will be able to:

1. use oceanographic terms to refer to characteristics of ocean objects;
2. describe, numerically and graphically, various presentations of oceanic data;
3. present oceanographic information using written and/or oral communications;
4. use oceanic equipment and data (simulated or real) properly;
5. use oceanic data and scientific methods to solve problems involving oceanic topics;
6. utilize oceanic profiles to draw conclusions about oceanic processes;
7. explain how results from observational technologies are used to develop theoretical models of the ocean;
8. use informational resources to research oceanic topics; and
9. discuss the roles that oceanic observational technologies have had within various cultures.

Major Topics

- I. Analysis of seafloor topography
- II. Earthquakes and plate tectonics
- III. Plankton and simple invertebrates
- IV. Sea grass
- V. Currents and tides
- VI. Coastlines
- VII. Salt marsh
- VIII. Intertidal zone
- IX. Fish

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

- A minimum of 1 exam or extended project
- A minimum of 1 activity requiring student collaboration

Writing: A minimum of 3 written assignments will be determined by the instructor. Students are required to utilize appropriate academic resources.

Other Course Information

This course fulfills a 1-credit General Education laboratory requirement in the Biological and Physical Sciences course. When successfully completed, along with the companion course ERSC/GEOG 141, Oceanography, the combined courses constitute an approved 4-credit Biological and Physical Sciences General Education course.

Date Revised: 12/14/12