

Common Course Outline
ENVS 102
Introduction to Environmental Science Lab
1 Credit

Community College of Baltimore County

Description

ENVS 102 – 1 credit – Introduction to Environmental Science Lab provides students with hands-on laboratory experiences, field trips, and special assignments to demonstrate the principles, processes, techniques, and technologies of the study of natural environmental systems and solutions to environmental challenges. Students are required to attend a maximum of five off-campus or field activities during the scheduled laboratory period.

1 Credit: 3 laboratory hours

Prerequisites: (ENGL 052 and RDNG 052) or ACLT 052; and MATH 082

Co-requisite: Concurrent enrollment in or successful completion, with a C or better, of ENVS 101: Introduction to Environmental Science.

Overall Course Objectives

Upon completion of this course students will be able to:

1. demonstrate how natural systems operate and interrelate with one another;
2. critically evaluate how human activities affect natural systems;
3. apply the scientific method in experiment design and analysis as related to environmental science;
4. use appropriate technology to investigate environmental issues;
5. describe how technology addresses environmental problems;
6. engage in interdisciplinary problem solving;
7. critically assess environmental news, information, and data sources;
8. explain how environmental problems relate to socioeconomically-diverse populations;
9. use and document appropriate academic resources to research and evaluate environmental issues;
10. compose scientific reports on environmental issues;
11. manipulate and present data numerically and graphically;
12. apply mathematical methods to the interpretation of environmental data; and
13. relate natural systems and environmental concerns to the student's daily experience.

Major Topics

- I. Measurements
- II. Scientific method
- III. Atmospheric processes
- IV. Biosphere - ecology, biodiversity, invasive species

- V. Hydrosphere
- VI. Lithosphere
- VII. Natural Resource Consumption
- VIII. Environmental Change and Impacts
- IX. Environmental Technology

Course Requirements

Grading/exams

Grading procedures will be determined by the individual faculty member but will include a minimum of the following:

- 8 written laboratory reports, assignments, exams, or quizzes
- 1 group or collaborative project

Credit will not be given for written lab assignments unless the student attends the lab. There are no make-up labs for this course. Alternative assignments or dates to attend missed labs may be offered at the discretion of the instructor.

Written Assignments: This companion lab supplements ENVS 101: Introduction to Environmental Science. ENVS 101 infuses the CCBC General Education Program Outcomes into the course. The assessment of those outcomes occurs in the requisite lecture course. Students are required to utilize appropriate academic resources.

Other Course Information

Personal transportation, carpooling, or campus vehicles are used to visit off campus sites.

This course is an approved 1-credit General Education course in the Biological and Physical Sciences category. Successful completion of this course **and** the companion lecture course, ENVS 101 Introduction to Environmental Science, fulfills the laboratory requirement and equals 4 credits. Please refer to the current CCBC Catalog for General Education course criteria and outcomes.

ENVS 102 is also a core requirement for the A.S. transfer pattern in Environmental Science.

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