

Common Course Outline

ENV 102

Introduction to Environmental Science Laboratory

1 Semester Hour

The Community College of Baltimore County

Description

Introduction to Environmental Science Laboratory

Provides students with hands-on laboratory experiences, field trips, and special assignments to demonstrate the principles, processes, techniques, and technologies of natural environmental systems and solutions.

Corequisite: ENVS 101; Prerequisite: Exemption from or successful completion of (ENGL 052 or LVE 2), (RDNG 052 or LVR 2), and (MATH 082 or LVM 2)

Overall Course Objectives

Upon successful completion of ENVS 102, a student will be able to:

1. Demonstrate how natural systems operate and interrelate with one another. (I, IV, 2, 3, 4, 6, 7)
2. Critically evaluate how human activities affect natural systems. (I, IV, 1, 2, 3, 7)
3. Apply the scientific method in experiment design and analysis. (I, II, III, IV, 1, 2, 3, 6)
4. Describe how technology solves environmental problems. (III, VI, 3, 4, 5, 6)
5. Engage in real-world, interdisciplinary problem solving. (1, III, VI, 2, 4, 7)
6. Utilize the Internet and related computer applications to research and evaluate environmental issues. (III, VI, 5, 6)
7. Critically assess environmental news, information, and data sources. (II,III,VI,4)
8. Explain how environmental problems relate to socioeconomic diverse populations. (III, V, VI, VII, 1, 4, 7)
9. Compose technical, scientific research papers on environmental issues. (II, V, VI, 2, 4)
10. Relate natural systems and environmental concerns to the student's daily experience. (III, VI, 2, 7)

Major Topics

The course will explore the following topics with field trips, lab exercises, or special assignments.

Atmosphere – composition, structure, global warming, ozone, acid rain

Biosphere - ecology, biodiversity, endangered species

Hydrosphere – freshwater, saltwater, water treatment and pollution

Lithosphere – soils, minerals, land, erosion, solid & hazardous waste

Human Population

Natural Resource Consumption

Environmental Change and Impacts

Environmental Policy

Environmental Technology

Sustainable Development

Course Requirements

1. Completion of at least 3 written laboratory reports, assignments, exams, or quizzes. (VII)
2. Participation in at least 3 laboratory and/or field trips. (VII)
3. At least 1 group, collaborative project (VII)

Other Course Information

ENVS 102 must be taken with, or after, ENVS 101 or with the permission of the instructor.

ENVS 102 satisfies the General Education requirement in the Biological and Physical Sciences. ENVS 101 is also a core requirement for the A.A.S. degree and certificate programs in Environmental Science and Technology. Personal transportation, carpooling, or campus vehicles are used to visit off campus sites.

Date Revised - 8/18/00