

Common Course Outline
ENVS 101
Introduction to Environmental Science
3 Semester Hours

The Community College of Baltimore County

Description

Introduction to Environmental Science

Explores earth's natural systems, as well as how human activity affects the environment; students will apply the scientific method to investigate natural flows of chemicals, water and energy in terrestrial, aquatic, and atmospheric systems, and how humans impact these natural flows and systems.

Prerequisite: LVE 2, LVR 2, LVM 2. ENVS 101 along with ENVS 102 satisfy General Education 4 credit science requirement.

Overall Course Objectives

Upon successful completion of ENVS 101, a student will be able to:

1. Comprehend how the earth's natural system operate and interrelate with one another. (I, IV, 2, 3, 4, 6, 7)
2. Describe how human activities impact natural systems. (I, IV, 1, 2, 3, 7)
3. Delineate natural flows of chemicals, minerals, water and energy. (I, V, 1, 3, 4)
4. Explain how human activities alter or degrade natural flows. (III, IV, VI, 2, 3, 4)
5. Evaluate a wide range of cultural and social approaches and how they apply to environmental issues. (III, V, 2, 4, 7)
6. Delineate geographic distributions of environmental impacts. (III, V, VI, VII, 1, 4, 7)
7. Explain concepts of environmental justice. (III, V, VI, VII, 1, 4, 7)
8. Summarize major environmental policies and regulations. (II, VII,4,5,6,7)
9. Assess the effect and importance of individual behavior in environmental issues.(V, VII, 2, 4,7)
10. Classify technologies that prevent, control and reverse environmental harm. (II, III, V,VI, VII, 2, 3, 4, 5, 6)
11. Develop informed views based on critical evaluation of information sources. (II,III,IV,V,VI,VII, 2, 3, 6, 7)
12. Engage in problem solving of environmental issues. (II, III, IV, VI, VII, 2, 3, 4, 7)

Major Topics

Environmentalism

Natural Environmental Systems

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. At least 2 written or oral exams. (VII)
2. At least 2 assigned supplementary readings. (VII)
3. At least 1 written assignment. (VII)

4. At least 2 participatory classroom activities (VII)
5. At least 1 group, collaborative project (VII)

Other Course Information

Introduction to Environmental Science, ENV5 101, satisfies the General Education requirement in the Biological and Physical Sciences. ENV5 101 is also a core requirement for the A.A.S. degree and certificate programs in Environmental Science and Technology, as well as a prerequisite for all ENV5 electives. The course is offered in on-site, on-line formats, and compressed video formats.

Date Revised - 8/18/00