

AP Environmental Science

SCIH073057

Credits: 0.5 units / 5 hours | NCAA Approved

Course Description

This course is designed to acquaint students with the physical, ecological, social, and political principles of environmental science. The scientific method is used to analyze and understand the interrelationships between humans and the natural environment. The course shows how ecological realities and the material desires of humans often clash, leading to environmental degradation and pollution. The course covers Earth's Systems, Human Population Dynamics, Natural Resources, Environmental Quality, Global Changes, and Environment and Society. This course covers all of the material outlined by the College Board as necessary to prepare students to pass the AP Environmental Science exam. While this course helps prepare students for the College Board Examination, this examination is NOT required for completion of Advanced Placement Environmental Science. This course has been approved by College Board.

PREREQUISITE: Students should have completed one year of Biology prior to enrolling in the course.

Graded Assessments

6 Unit Evaluations; 2 Projects; 3 Proctored Progress Tests; 6 Teacher Connect Activities

Course Objectives

When you have completed the materials in this course, you should be able to:

1. Know and understand the levels of the ecological hierarchy.
2. Appreciate the integration of natural processes that govern the natural world.
3. Appreciate the importance of maintaining a sustaining biosphere for the continued presence of a human population on the earth.
4. Understand the pragmatic and realistic difficulties of integrating human societal needs without further compromising ecological processes.
5. Become familiar with the ecological background to global environmental problems.
6. Realize the consequences of our individual and joint actions upon the biosphere.

Course Outline

Unit 1: Earth's Systems

Teacher Connect 1
Lesson 1: Flow of Energy
Lesson 2: The Cycling of Matter
Lesson 3: The Solid Earth
Lesson 4: The Atmosphere
Lesson 5: The Biosphere
Unit 1 Evaluation

Unit 2: Human Population Dynamics

Lesson 6: History and Global Distribution
Lesson 7: Carrying Capacity
Lesson 8: Cultural and Economic Influences
Unit 2 Evaluation
Teacher Connect 2
Progress Test 1

Unit 3: Natural Resources

Lesson 9: Water
Lesson 10: Minerals
Lesson 11: Soils
Lesson 12: Biodiversity Issues
Lesson 13: Nonrenewable Energy Sources
Lesson 14: Renewable Energy Sources
Lesson 15: Land Use
Unit 3 Evaluation
Teacher Connect 3

Unit 4: Environmental Quality

Lesson 16: Air, Water, and Soil
Lesson 17: Solid Waste
Lesson 18: Environmental Contaminants and Health
Unit 4 Evaluation
Teacher Connect 4
Review for Progress Test 2

Unit 5: Global Changes

Lesson 19: Changing the Global Environment
Lesson 20: Effects of Climate Change
Unit 5 Evaluation
Teacher Connect 5
Project 1

Unit 6: Environment and Society

Lesson 21: Economic Forces
Lesson 22: Culture and Quality of Life Considerations
Lesson 23: Environmental Ethics
Lesson 24: Environmental Laws and Regulations
Lesson 25: Issues and Options
Unit 6 Evaluation
Teacher Connect 6
Project 2
Review for Progress Test 3

Required Textbook

(available through Follett virtual bookstore at <http://highschool.nebraska.bkstr.com>)

Textbook: *Environmental Science: A Study of Interrelationships*, 15th edition. (ISBN: 9781259916816)