



## AP ENVIRONMENTAL SCIENCE

SCI305 – 0.5 Credit

### Course Description

This course is designed to acquaint you 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 environmental degradation and pollution. The course consists of six chapters covering the following topics: Earth's Systems, Human Population Dynamics, Natural Resources, Environmental Quality, Global Changes, and Environment and Society. Chapters are divided into several subsections, each of which contains text, animations, laboratory simulations, and video presentations by experts.

### Prerequisites

- Two years of laboratory sciences, usually biology/life science and either chemistry or physics
- Algebra
- Earth Science is desirable

### Course Length

One semester

### Required Text

Environmental Science, 10th Edition, by Miller. (2004), ISBN # 0534424082

### Course Outline

#### Earth's Systems

- The Flow of Energy
- The Cycling of Matter
- The Solid Earth
- The Atmosphere
- The Biosphere
- Review Questions

#### Natural Resources

- Water
- Minerals
- Soils
- Biological
- Energy
- Land
- Review Questions

#### Global Changes

- First Order Effects
- Higher Order Interactions
- Review Questions

#### Population Dynamics

- History and Global Distribution
- Carrying Capacity
- Cultural and Economic Influences
- Review Questions

#### Environmental Quality

- Air, Water, and Soil
- Solid Waste
- Impact on Human Health
- Review Questions

#### Environment and Society