

### Advanced Placement® \*\* Environmental Science\*

#### 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.

**STANDARDS:** The College Board topic outline for AP Environmental Science

**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, 10<sup>th</sup> 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

##### Population Dynamics

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

##### Natural Resources

- Water
- Minerals
- Soils

- Biological
- Energy
- Land
- Review Questions

##### Environmental Quality

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

##### Global Changes

- First Order Effects
- Higher Order Interactions
- Review Questions

##### Environment and Society

\* = One semester (.5 credit) course

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