

Roslyn High School
Advanced Placement Environmental Science Class
Course Outline

Text: Environmental Science for AP
Friedland and Relyea

Courses- Natural Science and Environmental Problems
 Social Science and Environmental Problems

- I. Earth Systems and Resources (10–15%)
 - A. Earth Science Concepts
 - B. The Atmosphere
 - C. Global Water Resources and Use
 - D. Soil and Soil Dynamics
- II. The Living World (10–15%)
 - A. Ecosystem Structure
 - B. Energy Flow
 - C. Ecosystem Diversity
 - D. Natural Ecosystem Change
 - E. Natural Biogeochemical Cycles
- III. Population (10–15%)
 - A. Population Biology Concepts
 - B. Human Population
 - 1. Human population dynamics
 - 2. Population size
 - 3. Impacts of population growth
- IV. Land and Water Use (10–15%)
 - A. Agriculture
 - 1. Feeding a growing population
 - 2. Controlling pests
 - B. Forestry
 - C. Rangelands
 - D. Other Land Use
 - 1. Urban land development
 - 2. Transportation infrastructure
 - 3. Public and federal lands
 - 4. Land conservation options
 - 5. Sustainable land-use strategies
 - E. Mining
 - F. Fishing
 - G. Global Economics

V. Energy Resources and Consumption (10–15%)

- A. Energy Concepts
- B. Energy Consumption
 - 1. History
 - 2. Present global energy use
 - 3. Future energy needs
- C. Fossil Fuel Resources and Use
- D. Nuclear Energy
- E. Hydroelectric Power
- F. Energy Conservation
- G. Renewable Energy

VI. Pollution (25–30%)

- A. Pollution Types
 - 1. Air pollution
 - 2. Noise pollution
 - 3. Water pollution
 - 4. Solid waste
- B. Impacts on the Environment and Human Health
 - 1. Hazards to human health
 - 2. Hazardous chemicals in the environment
- C. Economic Impacts

VII. Global Change (10–15%)

- A. Stratospheric Ozone
- B. Global Warming
- C. Loss of Biodiversity
 - 1. Habitat loss
 - 2. Maintenance through conservation
 - 3. Relevant laws and treaties