

# FLINNPREP™

## AP\* Environmental Science Prep Course



## SYLLABUS

Welcome to the FlinnPREP™ AP\* Environmental Science Online Prep Course! Your enrollment in this course is your first step toward a 5 on the AP\* Environmental Science exam. FlinnPREP™ covers fundamental concepts in environmental science using clear and concise text, vibrant images, practice problems with fully worked solutions, illustrative videos, engaging animations and end-of-unit summaries and assessments. All of the content can be viewed on a desktop, tablet or phone, so you can prepare for AP\* Environmental Science conveniently and on the go.

### Unit 1 – Planet Earth

- Geologic Time
- Earth's Geologic History
- Plate Tectonics
- The Rock Cycle
- Volcanism
- Earthquakes
- Solar Radiation and Intensity
- Earth's Tilt and Seasons

### Unit 2 – Earth's Surface

- Composition of the Atmosphere
- Atmospheric Layers
- Weather and Climate
- Ocean Circulation
- Global Water Distribution
- Composition of Soil
- Soil Types

### Unit 3 – Fundamentals of Ecology

- Conservation of Matter
- Energy Flow
- Biomes
- Ecological Hierarchy
- Community Interactions
- Keystone Species
- Natural Selection

## Unit 4 – Population Dynamics

- Population Concepts
- Human Population I
- Human Population II
- International Policies on Population Growth
- Strategies for Sustainability
- Impacts of Population Growth

## Unit 5 – Biodiversity Loss

- What Is Biodiversity?
- Species Diversity
- Habitat Loss
- Case Study: Monarch Butterflies
- Induced/Invasive Species
- Case Study: Asian Carp
- Endangered and Extinct Species
- Case Study: Vaquita
- Species Conservation
- Success Stories

## Unit 6 – Land Use

- Feeding a Growing Population
- Pesticide Use
- Forestry
- Rangelands
- Mining
- Water Resources
- Fisheries and Aquaculture
- Urban Land Use
- Transportation
- Global Economics

## Unit 7 – Conservation and Sustainability

- Changing Land Use Patterns
- Federal Lands
- Other Public Lands
- Land Conservation
- Sustainable Land Use Strategies

## Unit 8 – Energy Concepts and Consumption

- Types of Energy
- Thermodynamics
- Past Energy Consumption
- Present Global Energy Use
- Future Energy Needs
- Energy Audit

## Unit 9 – Nonrenewable and Renewable Energy

- Fossil Fuel Resources and Use
- Coal
- Natural Gas
- Oil
- Nuclear Energy
- Hydroelectric Power
- Energy Conservation
- Renewable Energy

## Unit 10 – Types of Pollution

- Primary Air Pollutants
- Secondary Air Pollutants
- Heat Islands
- Indoor Air Pollution
- Remediation and Reduction of Air Pollution
- Noise Pollution
- Light Pollution
- Water Pollution Sources and Causes
- Water and Wastewater Treatment
- Solid Waste

## Unit 11 – Impact of Pollution

- Hazards to Human Health
- Treatment and Remediation of Hazardous Chemicals
- Hazardous Chemicals in the Environment
- Eutrophication
- Groundwater Pollution
- Economic Impacts

## Unit 12 – Climate Change

- Greenhouse Effect
- Greenhouse Gases
- Carbon Dioxide
- Evidence of Man-made Climate Change
- Global Effects of Climate Change
- Local Effects of Climate Change
- Reducing Impact on Climate
- Relevant Laws and Treaties

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FlinnPREP™ Online Student Prep Course for AP\* Environmental Science  
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