

Course Syllabus

Description:

AP Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students identify and analyze environmental problems that are natural and human-made. They evaluate the relative risks associated with these problems and examine alternative solutions for resolving or preventing problems. Laboratories support student content mastery in both hands-on and virtual experiences.

Follow the link below for the College Board description of this course:

<http://apcentral.collegeboard.com/apc/public/repository/ap-environmental-science-course-description.pdf>

Estimated Completion Time: 2 Segments/ 32-36 weeks

Major Topics and Concepts:

Starting Segment I:

Getting Started

- 01 Things to Know
- 02 Navigation
- 03 Lessons & Assessments
- 04 Course Specifics
- 05 Online Learning
- 06 Pace
- 07 Academic Integrity

Environmental Problem and Sustainability

- 01.00 Module One Checklist
- 01.01 Environmental Problems
- 01.02 History of Environmental Problems
- 01.03 Case Study: Tragedy of the Commons
- 01.04 Public Lands
- 01.05 Science
- 01.06 Environmental Economics
- 01.07 Environmental Politics
- 01.08 AP Exam and Math Prep
- 01.09 Discussion-Based Assessment
- 01.10 Module One Exam

The Living World

- 02.00 Module Two Checklist
- 02.01 Ecosystems
- 02.02 Energy and Ecosystems
- 02.03 Cycles
- 02.04 Community Ecology
- 02.05 Biodiversity
- 02.06 AP Exam and Math Prep
- 02.07 Discussion-Based Assessment
- 02.08 Module Two Exam

The Physical World

- 03.00 Module Three Checklist
- 03.01 Climates
- 03.02 Terrestrial Biomes
- 03.03 Ocean Circulation and Currents
- 03.04 Aquatic Environments and Biodiversity
- 03.05 Structure of the Earth
- 03.06 Mineral Resources
- 03.07 Forestry
- 03.08 AP Exam and Math Prep
- 03.09 Discussion-Based Assessment
- 03.10 Module Three Exam

Population

- 04.00 Module Four Checklist
- 04.01 Population Dynamics
- 04.02 Demographics
- 04.03 Urbanization
- 04.04 AP Exam and Math Prep
- 04.05 Discussion-Based Assessment
- 04.06 Module Four Exam

Energy

- 05.00 Module Five Checklist
- 05.01 Energy Concepts and Consumption
- 05.02 Fossil Fuels I
- 05.03 Fossil Fuels II
- 05.04 Nuclear Energy
- 05.05 Renewable Energy Resources I
- 05.06 Renewable Energy Resources II
- 05.07 Energy Conservation
- 05.08 AP Exam and Math Prep
- 05.09 Collaboration Project Segment One
- 05.09 Discussion-Based Assessment
- 05.10 Module Five Exam
- 05.11 Segment One Exam

Segment II

Atmosphere and Climate Change

- 06.00 Module Six Checklist
- 06.01 Air Pollution and Smog
- 06.02 Ozone
- 06.03 Acid Deposition
- 06.04 Indoor Air Pollution
- 06.05 Climate Change
- 06.06 AP Exam and Math Prep
- 06.07 Discussion-Based Assessment
- 06.08 Module Six Exam

Land and Food

- 07.00 Module Seven Checklist
- 07.01 Soil
- 07.02 Soil Conservation
- 07.03 Agriculture and Food
- 07.04 Pests and Pest Management
- 07.05 Land Conservation
- 07.06 AP Exam and Math Prep
- 07.07 Discussion-Based Assessment
- 07.08 Module Seven Exam

Water

- 08.00 Module Eight Checklist
- 08.01 Water Supply
- 08.02 Water Quality
- 08.03 Water Treatment
- 08.04 AP Exam and Math Prep
- 08.05 Discussion-Based Assessment
- 08.06 Module Eight Exam

Toxicology and Risk

- 09.00 Module Nine Checklist
- 09.01 Risk
- 09.02 Human Health
- 09.03 Toxicology
- 09.04 AP Exam and Math Prep
- 09.05 Discussion-Based Assessment
- 09.06 Module Nine Exam

Recycling and Sustainability

- 10.00 Module Ten Checklist
- 10.01 Solid Waste
- 10.02 Hazardous Waste
- 10.03 Recycling
- 10.04 Global Change and Sustainability
- 10.05 AP Exam and Math Prep

- 10.06 Discussion-Based Assessment
- 10.07 Module Ten Exam
- 10.08 Segment Two Exam

Course Assessment and Participation Requirements:

To achieve success, students are expected to submit work in each course weekly. Students can learn at their own pace; however, “any pace” still means that students must make progress in the course every week. To measure learning, students complete self-checks, practice lessons, multiple choice questions, projects, discussion-based assessments, and discussions. Students are expected to maintain regular contact with teachers; the minimum requirement is monthly. When teachers, students, and parents work together, students are successful.

