

Advanced Placement®** Environmental Science

COURSE DESCRIPTION:

AP Environmental Science is a yearlong examination of the interrelationships of the natural world. Students identify and analyze environmental problems and their effects, and evaluate the effectiveness of proposed solutions. Students learn to think like environmental scientists: making predictions based on observations, writing hypothesis, designing and completing field studies and experiments, and reaching conclusions based on the analysis of data derived from these experiments. Students apply the concepts of environmental science to their everyday experiences and current events and issues in science, politics, and society. The course provides opportunities for guided inquiry and student-centered learning to foster critical thinking skills.

PREREQUISITES:

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

COURSE LENGTH:

Two semesters

REQUIRED TEXT:

Living in the Environment: Principles, Connections, and Solutions, 16/E
| Miller | ©2009 | Cengage ISBN: 0495556718

Lab Kit, Quality Science Labs, LLC ISBN: 978-0-9818762-1-4

COURSE OUTLINE:

Unit I: Introduction to Environmental Problems

- Section A: Environmentally Sustainable Societies
- Section B: Environmental Problems Part I
- Section C: Environmental Problems Part II
- Section D: Principles Of Sustainability

Unit II: Ecological Principles

- Section A: Science, Matter, And Energy
- Section B: Earth Structure And Systems
- Section C: Ecology
- Section D: Biodiversity And Evolution

Unit III: Human Impact On Sustainability

- Section A: Impacts Of The Human Population

- Section B: Climate And Terrestrial Biodiversity
- Section C: Aquatic Biodiversity

Unit IV: Sustaining Biodiversity

- Section A: The Species Approach
- Section B: The Ecosystem Approach
- Section C: Sustaining Aquatic Biodiversity

Unit V: Sustaining Land And Water Resources

- Section A: Food, Soil, And Pest Management
- Section B: Water Resources
- Section C: Geology And Nonrenewable Minerals

Semester Exam

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