

Environmental Science explores the biological, physical, and sociological principles related to the environment in which organisms live on Earth, the biosphere. Course topics include natural systems on Earth, biogeochemical cycles, the nature of matter and energy, the flow of matter and energy through living systems, populations, communities, ecosystems, ecological pyramids, renewable and non-renewable natural resources, land use, biodiversity, pollution, conservation, sustainability, and human impacts on the environment.

The course provides students with opportunities to learn and practice scientific skills within the context of relevant scientific questions. Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, deconstruct claims, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts. Case studies of current environmental challenges introduce each content lesson and acquaint students with real-life environmental issues, debates, and solutions. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science. Virtual Lab activities enable students to engage in investigations that require long periods of observation at remote locations and to explore simulations that enable environmental scientists to test predictions. Throughout this course, students are given an opportunity to understand how biology, earth science, and physical science are applied to the study of the environment and how technology and engineering are contributing solutions for studying and creating a sustainable biosphere.

This course is built to state standards.

Length: Two Semesters

## **UNIT 1: INTRODUCTION TO ENVIRONMENTAL SCIENCE**

#### **LESSON 1: WHAT IS SCIENCE?**

# **Study: The Nature of Science**

Distinguish what science is from what science is not. Identify scientists throughout time and from all parts of Earth who have observed the natural world. Summarize the importance of logical reasoning, experimentation, empirical evidence, argumentation, and ethics in scientific endeavors.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: The Nature of Science**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# Study: The Practice of Science

Explain how scientific data and conclusions can be reliable and valid, yet open to change. Describe each of the basic parts that may compose a scientific process that produces valid and reliable data. Summarize the importance of logical reasoning, experimentation, empirical evidence, argumentation, and ethics in scientific endeavors.

Duration: 1 hr 30 mins Scoring: 0 points

## **Ouiz: The Practice of Science**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# Checkup: What Is Science?

Distinguish what science is from what science is not. Identify scientists throughout time and from all parts of Earth who have observed the natural world. Explain how scientific data and conclusions can be reliable and valid, yet open to change. Describe each of the basic parts that may compose a scientific process that produces valid and reliable data. Summarize the importance of logical reasoning, experimentation, empirical evidence, argumentation, and ethics in scientific endeavors.

## **LESSON 2: SCIENCE AND THE ENVIRONMENT**

#### **Study: Fields of Science**

Identify the many fields of science that contribute to the study and understanding of the interrelated, dynamic systems of Earth's environment. Relate examples of environmental studies and equipment to specialized fields of science.

Recommend areas of expertise that might contribute information relevant to specific environmental issues.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Fields of Science**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## Study: Applied Science and Technology

Describe the role of technology in environmental science and human society. Identify commonly used devices and systems that are important to environmental studies. Describe the importance of technology and environmental studies to human health and well-being.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Applied Science and Technology**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### LESSON 3: INTRODUCTION TO ENVIRONMENTAL SCIENCE WRAP-UP

## **Review: What Is Science?**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

## Test (CS): What Is Science?

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

## **UNIT 2: EARTH'S PHYSICAL SYSTEMS**

#### **LESSON 1: THE HYDROSPHERE**

## **Study: The Oceans**

Describe the reasons that liquid water can exist on Earth. Describe the formation of and characteristics of the major types of bodies of water. Identify reasons for fluctuations in sea level.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: The Oceans**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Bodies of Freshwater**

Identify the characteristics of the major types of bodies of water. Describe the formation of and characteristics of the major types of bodies of water.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Bodies of Freshwater**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### Study: Movements of the Hydrosphere

Relate solar energy to ocean currents and the distribution of heat around the globe. Describe the causes and effects of ocean waves and tides. Trace the path of groundwater from soil to the ocean.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Movements of the Hydrosphere**

Take a quiz to assess your understanding of the material.

#### **LESSON 2: THE LITHOSPHERE**

#### Study: Earth's Crust and Landforms

Relate the surface features of Earth's crust to the theory of plate tectonics. Distinguish erosional features and depositional features of Earth's crust.

Duration: 1 hr 30 mins Scoring: 0 points

#### Quiz: Earth's Crust and Landforms

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Soil Composition and Structure**

Identify the types of weathering and the agents of each type of weathering. Describe the types of soil and the processes of soil formation.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Soil Composition and Structure**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# Study: Movements of Land and Soil

Identify the types of erosion and their effects on Earth's crust. Relate the different types of faults to the different types of tectonic plate boundaries.

Duration: 1 hr 30 mins Scoring: 0 points

#### Quiz: Movements of Land and Soil

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Checkup: The Lithosphere**

Relate the surface features of Earth's crust to the theory of plate tectonics. Distinguish erosional features and depositional features of Earth's crust. Identify the types of weathering and the agents of each type of weathering. Describe the types of soil and the processes of soil formation. Identify the types of erosion and their effects on Earth's crust. Relate the different types of faults to the different types of tectonic plate boundaries. Discuss the validity and impact of scientific research on environmental issues related to human activities.

Duration: 0 hrs 15 mins Scoring: 0 points

## **LESSON 3: THE ATMOSPHERE**

# Study: Structure and Movements of the Atmosphere

Describe the structure, composition, and temperature of Earth's atmosphere. Identify the processes of wind generation and relate them to different types of local and global wind systems.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Structure and Movements of the Atmosphere**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Weather and Climate**

Describe the major climate zones and their characteristics. Explain how ocean currents, wind patterns, and topography affect climate. Explain how Earth's orbit, tilt, and wobble affect the planet's climate. Describe the effects of El Niño and La Niña on global weather patterns.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Weather and Climate**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **LESSON 4: EARTH'S PHYSICAL SYSTEMS WRAP-UP**

# **Review: Earth's Physical Systems**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

## Test (CS): Earth's Physical Systems

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

#### **UNIT 3: THE BIOSPHERE**

## **LESSON 1: NATURE OF THE BIOSPHERE**

# **Study: Biotic and Abiotic Factors**

Recognize the major types of biotic factors in an ecosystem and their roles in the biosphere. Distinguish biological species, populations, and communities. Identify the abiotic factors in an ecosystem. Explain how biotic factors interact with the abiotic factors of an ecosystem.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Biotic and Abiotic Factors**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Biogeochemical Cycles**

Trace the movement of water in the water cycle from one part of the environment to another. Trace the movement of carbon in the carbon cycle from one part of the environment to another. Trace the movement of nitrogen and phosphorus from one part of the environment to another.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Biogeochemical Cycles**

Take a guiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 2: MATTER AND ENERGY IN THE BIOSPHERE**

## Study: Matter and Energy

Recognize the major types of matter that make up the biosphere. Recognize the forms of energy that enter and flow through the geosphere. Identify the processes that transform energy as it moves through the geosphere. Compare the characteristics of different surfaces on Earth, including albedo and heat capacity. Differentiate among scavengers, decomposers, and detritivores. Trace the flow of matter and energy through a food chain and a food web.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Matter and Energy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# Study: The Flow of Matter and Energy

Differentiate among scavengers, decomposers, and detritivores. Trace the flow of matter and energy through a food chain and a food web.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: The Flow of Matter and Energy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **LESSON 3: ECOSYSTEMS AND BIOMES**

### **Study: Terrestrial Biomes**

Describe characteristics of land ecosystems.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Terrestrial Biomes**

Take a quiz to assess your understanding of the material.

# **Study: Aquatic Ecosystems**

Describe characteristics of aquatic ecosystems.

Duration: 1 hr 30 mins Scoring: 0 points

### **Quiz: Aquatic Ecosystems**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **Study: Land Ecosystems**

Identify the major land and aquatic biomes. Describe the distinguishing biotic and abiotic features of a given biome. Compare the plants and animals of your local biome with those of the other major biomes found in North America.

Duration: 1 hr 30 mins Scoring: 0 points

### **Quiz: Land Ecosystems**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

### **Checkup: Ecosystems and Biomes**

Describe characteristics of land ecosystems. Describe characteristics of aquatic ecosystems. Identify the major land and aquatic biomes. Describe the distinguishing biotic and abiotic features of a given biome. Compare the plants and animals of your local biome with those of the other major biomes found in North America. Evaluate the importance of individual ecosystems to the health of biomes and the biosphere. Discuss the validity and impact of scientific research on environmental issues related to human activities.

Duration: 0 hrs 15 mins Scoring: 0 points

#### **LESSON 4: THE BIOSPHERE WRAP-UP**

## **Review: The Biosphere**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

#### Test (CS): The Biosphere

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

# **UNIT 4: ECOLOGY**

# **LESSON 1: POPULATIONS**

# **Study: Characteristics of Populations**

Identify characteristics used to describe populations. Identify limiting factors that affect populations and their characteristics. Describe a population's carrying capacity and the factors that determine the carrying capacity. Explain how populations change in size.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Characteristics of Populations**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Population Growth**

Describe the factors that produce both positive and negative population growth. Compare exponential and logistic patterns of population growth. Explain the significance of studying populations over time.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Population Growth**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **LESSON 2: COMMUNITIES**

## Study: What Is a Biological Community?

Distinguish biological communities from populations and ecosystems. Identify major types of biological communities.

# Quiz: What Is a Biological Community?

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Species Interactions**

Describe the types of interactions that occur among the species in biological communities. Analyze food chains and food webs that describe the interactions of species in a biological community. Explain the nature and importance of ecological niches.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Species Interactions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Community Structure**

Model the makeup of communities using ecological pyramids. Understand the factors that affect community stability and biodiversity.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Community Structure**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 3: CHANGES IN ECOSYSTEMS**

#### Study: Natural Disturbances and Succession

Describe how destructive natural events in the geosphere can affect ecosystems. Predict the effects of the removal of species from biological communities. Predict the effects of the introduction of nonnative species on communities.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Natural Disturbances and Succession**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## Study: Evolution and Biodiversity

Identify the sources and importance of genetic diversity in natural populations, ecosystems, and the biosphere. Summarize the process of natural selection and its role in biological evolution. Predict changes that may occur in an ecosystem when its amount of biodiversity changes.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Evolution and Biodiversity**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Checkup: Changes in Ecosystems**

Describe how destructive natural events in the geosphere can affect ecosystems. Predict the effects of the removal of species from biological communities. Predict the effects of the introduction of nonnative species on communities. Recognize the sources and importance of genetic diversity in natural populations, ecosystems, and the biosphere. Summarize the process of natural selection and its role in biological evolution. Predict changes that may occur in an ecosystem when its amount of biodiversity changes. Discuss the validity and impact of scientific research on environmental issues related to human activities.

Duration: 0 hrs 15 mins Scoring: 0 points

# **LESSON 4: ECOLOGY WRAP-UP**

# **Review: Ecology**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

# Test (CS): Ecology

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

### **UNIT 5: SEMESTER 1 WRAP-UP**

## **LESSON 1: SEMESTER 1 WRAP-UP**

#### **Review: Semester 1 Review**

Review what you have learned in this semester.

Duration: 1 hr Scoring: 0 points

# **Exam: Semester 1 Computer-Scored Exam**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in this semester.

Duration: 0 hrs 40 mins Scoring: 100 points

## **UNIT 6: HUMANS AND THE ENVIRONMENT**

#### **LESSON 1: HUMAN SOCIETIES**

#### **Study: Human Populations**

Describe historical trends in human population growth and distribution. Identify characteristics of human populations.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Human Populations**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **Study: Human Communities**

Describe the purposes of human communities. Identify different kinds of human communities. Explain how individuals work together in groups. Explain how individuals and groups work together in communities.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Human Communities**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Checkup: Human Societies**

Describe historical trends in human population growth and distribution. Identify characteristics of human populations. Describe the purposes of human communities. Identify different kinds of human communities. Explain how individuals work together in groups. Explain how individuals and groups work together in communities.

Duration: 0 hrs 15 mins Scoring: 0 points

#### **LESSON 2: EARTH'S NATURAL RESOURCES**

### Study: Land and Water Resources

Identify natural resources obtained from Earth's land and water and used to support the lifestyles of humans. Recognize the interdependence of natural resources. Evaluate the economic significance of natural resources.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Land and Water Resources**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Mineral and Energy Resources**

Identify types and sources of mineral resources used to produce goods and energy that support human lifestyles.

Recognize the interdependence of natural resources.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Mineral and Energy Resources**

Take a quiz to assess your understanding of the material.

# **Study: Biological Resources**

Identify types and sources of biological resources used to produce food and goods that support human lifestyles. Evaluate the economic significance of natural resources. Recognize the interdependence of natural resources.

Duration: 1 hr 30 mins Scoring: 0 points

#### **Quiz: Biological Resources**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **LESSON 3: LAND USE AND ITS EFFECTS**

## Study: Agriculture, Forestry, and Fishing

Evaluate the economic significance of natural resources. Summarize the effects and cost-benefit trade-offs of practices used in commercial agriculture, forestry, and fishing. Evaluate the hazards and risks involved in obtaining natural resources.

Duration: 1 hr 30 mins Scoring: 0 points

# Quiz: Agriculture, Forestry, and Fishing

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# Study: Mining and Drilling

Evaluate the economic significance of natural resources. Evaluate the hazards and risks to human health and well-being involved in obtaining and managing natural resources. Summarize the advantages and disadvantages of using different energy resources.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Mining and Drilling**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### Study: Recreation, Conservation, and Urban Development

Summarize the effects on natural ecosystems of human activities such as recreation, urbanization, conservation, preservation, restoration, and resource gathering and management.

Duration: 1 hr 30 mins Scoring: 0 points

# Quiz: Recreation, Conservation, and Urban Development

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **LESSON 4: HUMANS AND THE ENVIRONMENT WRAP-UP**

#### **Review: Humans and the Environment**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

## Test (CS): Humans and the Environment

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

# **UNIT 7: ENVIRONMENTAL CHALLENGES**

#### **LESSON 1: RESOURCE AVAILABILITY**

#### **Study: Renewable Resources**

Identify renewable resources on which humans depend. Differentiate between renewable and nonrenewable resources. Evaluate the cost-benefit trade-offs of using renewable resources instead of nonrenewable resources.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Renewable Resources**

Take a quiz to assess your understanding of the material.

# **Study: Nonrenewable Resources**

Identify nonrenewable resources on which humans depend. Differentiate between renewable and nonrenewable resources. Describe how the use of natural resources will affect future generations of humans.

Duration: 1 hr 30 mins Scoring: 0 points

#### **Quiz: Nonrenewable Resources**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Alternative Energy Resources**

Describe how the use of natural resources will affect future generations of humans. Describe alternative forms of energy production.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Alternative Energy Resources**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 2: POLLUTION AND WASTE MANAGEMENT**

# Study: Water, Air, and Land Pollution

Identify point sources and nonpoint sources of air, land, and water pollution. Describe the effects of pollution on oceans, freshwater supplies, air, and land. Recognize the consequences of air, land, and water pollution on human health and societies. Evaluate the hazards pollutants pose to wildlife and other types of natural resources.

Duration: 1 hr 30 mins Scoring: 0 points

## Quiz: Water, Air, and Land Pollution

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### Study: Waste Management

Describe methods of waste management, including burial in a landfill, dumping, incineration, composting, recycling, and reuse. Evaluate the impact of waste management and reduction strategies on resource availability.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Waste Management**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 3: ENVIRONMENTAL CHANGE**

# **Study: Climate Change**

Describe effects of air pollution on the natural systems that regulate Earth's climate. Analyze the historical trends observed in global climate data. Relate human activities to observed changes in global climate. Evaluate differing views on global warming and climate change.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Climate Change**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **Study: Effects of Climate Change**

Summarize scientists' predictions about the effects of global climate change on the biosphere. Evaluate differing views on global warming and climate change.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Effects of Climate Change**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Checkup: Environmental Change**

Describe effects of air pollution on the natural systems that regulate Earth's climate. Analyze the historical trends observed in global climate data. Relate human activities to observed changes in global climate. Evaluate differing views on global warming and climate change. Summarize scientists' predictions about the effects of global climate change on the biosphere. Discuss the validity and impact of scientific research on environmental issues related to human activities. Duration: 0 hrs 15 mins Scoring: 0 points

# **LESSON 4: ENVIRONMENTAL CHALLENGES WRAP-UP**

# **Review: Environmental Challenges**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

# Test (CS): Environmental Challenges

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

## **UNIT 8: POLITICS AND THE ENVIRONMENT**

## **LESSON 1: THE CONCEPT OF THE COMMONS**

#### Study: The Tragedy of the Commons

Recognize the definition and examples of a "common." Describe how the overuse and degradation of natural resources affects the biosphere and human societies.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: The Tragedy of the Commons**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Managing the Commons**

Describe how conservation and preservation of natural resources affect their availability and quality. Relate conservation and preservation of natural resources to the sustainability of ecosystems and human societies.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Managing the Commons**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 2: NATIONAL ENVIRONMENTAL POLICIES**

### Study: Protecting Water, Air, and Land

Summarize the history, provisions, and effects of the National Park Service Act. Summarize the history, provisions, and effects of the Clean Air Act. Summarize the history, provisions, and effects of the Clean Water Act. Summarize the history, provisions, and effects of the Soil and Water Resources Conservation Act.

Duration: 1 hr 30 mins Scoring: 0 points

# Quiz: Protecting Water, Air, and Land

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Protecting Endangered Species**

Summarize the history, provisions, and effects of the Endangered Species Act.

Duration: 1 hr 30 mins Scoring: 0 points

#### **Quiz: Protecting Endangered Species**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Checkup: National Environmental Policies**

Summarize the history, provisions, and effects of the National Park Service Act. Summarize the history, provisions, and effects of the Clean Air Act. Summarize the history, provisions, and effects of the Clean Water Act. Summarize the history, provisions, and effects of the Soil and Water Resources Conservation Act. Summarize the history, provisions, and effects

Duration: 0 hrs 15 mins Scoring: 0 points

#### **LESSON 3: GLOBAL ENVIRONMENTAL POLICIES**

# **Study: Protecting Environmental Quality**

Summarize the goals and provisions of international treaties and protocols that address the effects of human activities on the environment, including the Antarctic Treaty System, Montreal Protocol, and Kyoto Protocol. Evaluate the effects of international treaties and protocols on environmental quality and global cooperation.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Protecting Environmental Quality**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **Study: Protecting Wildlife and Biodiversity**

Summarize the goals and provisions of international treaties and protocols that address biodiversity, such as the United Nations' Convention of International Trade in Endangered Species (CITES), the RAMSAR Convention on Wetlands, the International Treaty on Plant Genetic Resources for Food and Agriculture, and the Convention on Biological Diversity. Evaluate the effects of international treaties and protocols on environmental quality and global cooperation.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Protecting Wildlife and Biodiversity**

Take a guiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### **LESSON 4: POLITICS AND THE ENVIRONMENT WRAP-UP**

#### Review: Politics and the Environment

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

## Test (CS): Politics and the Environment

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

## **UNIT 9: SUSTAINABILITY FOR THE FUTURE**

# **LESSON 1: THE GLOBAL COMMUNITY**

# **Study: Human Cultures and Societies**

Summarize the nature and purpose of human cultures and societies. Identify examples of different types of human cultures and societies.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Human Cultures and Societies**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## Study: The Global Economy

Recognize the interrelatedness of the global economy. Identify complex real-world problems faced by the global economy. Evaluate possible solutions to complex real-world problems in a global economy. Evaluate the need for cooperative human behaviors in mitigating and preventing complex real-world problems.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: The Global Economy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

# **LESSON 2: SUSTAINABLE PRACTICES**

## **Study: Sustainable Food Production**

Explain the goal of using sustainable practices in food production, resource management, and human societal development. Describe sustainable methods of food production, resource management, and human societal development. Compare traditional practices used in food production, resource management, and human societal development with sustainable practices. Identify advantages and disadvantages of using "green" and sustainable practices in food production, resource management, and human societal development.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Sustainable Food Production**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

#### Study: Sustainable Resource Management

Explain the goal of using sustainable practices in food production, resource management, and human societal development. Describe sustainable methods of food production, resource management, and human societal development. Compare traditional practices used in food production, resource management, and human societal development with sustainable practices. Identify advantages and disadvantages of using "green" and sustainable practices in food production, resource management, and human societal development.

Duration: 1 hr 30 mins Scoring: 0 points

## **Quiz: Sustainable Resource Management**

Take a guiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

## **Study: Sustainable Societal Development**

Explain the goal of using sustainable practices in food production, resource management, and human societal development. Describe sustainable methods of food production, resource management, and human societal development. Compare traditional practices used in food production, resource management, and human societal development with sustainable practices. Identify advantages and disadvantages of using "green" and sustainable practices in food production, resource management, and human societal development.

Duration: 1 hr 30 mins Scoring: 0 points

# **Quiz: Sustainable Societal Development**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 20 points

### **Checkup: Sustainable Practices**

Explain the goal of using sustainable practices in food production, resource management, and human societal development. Describe sustainable methods of food production, resource management, and human societal development. Compare traditional practices used in food production, resource management, and human societal development with sustainable practices. Identify advantages and disadvantages of using "green" and sustainable practices in food production, resource management, and human societal development. Summarize the process of carbon dioxide sequestration and technologies that achieve it. Discuss the validity and impact of scientific research on environmental issues related to human activities.

Duration: 0 hrs 15 mins Scoring: 0 points

# **LESSON 3: SUSTAINABILITY FOR THE FUTURE WRAP-UP**

# **Review: Sustainability for the Future**

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

## Test (CS): Sustainability for the Future

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

## **UNIT 10: SEMESTER 2 WRAP-UP**

# **LESSON 1: SEMESTER 2 WRAP-UP**

**Review: Semester 2 Review** 

Review what you have learned in this unit.

Duration: 1 hr Scoring: 0 points

# **Exam: Semester 2 Computer-Scored Exam**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in this semester.