



## **Environmental Science**

### ***Course Overview and Syllabus***

#### **Course Description**

Environmental science is a captivating and rapidly expanding field, and this course offers compelling lessons that cover many different aspects of the field: ecology, the biosphere, land, forests and soil, water, energy and resources, and societies and policy. Through unique activities and material, high school students connect scientific theory and concepts to current, real-world dilemmas, providing them with opportunities for mastery in each of the segments throughout the course.

#### **Course Objectives**

- Throughout the course, you will meet the following goals:
- Understand the interrelationships in the natural world
- Examine the natural cycles of energy flow and evaluate how human interaction affects these cycles
- Model real-world phenomena and determine possible consequences of specific actions
- Defend the best choices to protect the environment with changing trends in human demographics
- Interpret evidence and communicate scientifically about environmental conditions and hazards

#### **Student Expectations**

This course requires the same level of commitment as a traditional classroom course would. Throughout the course, you are expected to gain at least a 2% increase each day online on the following activities:

- Interactive lessons that include a mixture of instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson
- Assessments, including quizzes, tests, and cumulative exams



### Grading Policy

You will be graded on the work you do online and the work you submit electronically to your teacher.

The weighting for each category of graded activity is listed below.

<b><i>Grading Category</i></b>	<b><i>Weight</i></b>
<b>Assignments</b>	10%
<b>Labs</b>	10%
<b>Lesson Quizzes</b>	20%
<b>Unit Tests</b>	40%
<b>Cumulative Exams</b>	20%

### Scope and Sequence

When you log into the Virtual Classroom, you can view the entire course map, which provides a scope and sequence of all topics you will study. Clicking a lesson's link in the course map leads to a page listing instructional activities, assignments, and learning objectives specific to that lesson. The units of study are summarized below:

**Unit 1:** The Scientific Inquiry and Measurement

**Unit 2:** Scientific Models and Explanations

**Unit 3:** Applying Environmental Science

**Unit 4:** Biomes

**Unit 5:** Arid and Semi-Arid Biomes

**Unit 6:** Temperate and Wet Biomes

**Unit 7:** Aquatic Biomes

**Unit 8:** Organisms and Populations

**Unit 9:** Populations in Ecosystems

**Unit 10:** Matter & Energy in Ecosystems

**Unit 11:** Energy in Ecosystems

**Unit 12:** The Atmosphere, Geosphere and Hydrosphere

**Unit 13:** Forestry

**Unit 14:** Land Use and Management

**Unit 15:** The Hydrosphere

**Unit 16:** The Environment and Society

**Unit 17:** Impacts on the Environment

**Unit 18:** Environmental Policy