

# Southmoreland School District Environmental Science Curriculum Overview

### **Environmental Science Overview:**

In this course, students will examine topics in Environmental Science & Ecology. Course content will include current issues in environmental science, population ecology, pollution in ecosystems and local ecology in our region. This course is designed for any 12th grade student with fewer than three science credits or for any 12th grade student seeking an elective credit.

## **Module Titles:**

Module 1: Introduction to Environmental Science

- Module 2: Ecosystems
- Module 3: Biodiversity
- Module 4: Humans and the Environment
- Module 5: Natural Resources
- Module 6: Environmental Protections

## Module Overviews:

### Module 1: Introduction to Environmental Science

Students will develop and refine skills essential to explore Environmental Science by creating an environmental philosophy used to define, evaluate and propose solutions for environmental issues.

### Module 2: Ecosystems

Students will analyze ecosystems by exploring evolutionary processes resulting in current energy flow, nutrient cycle, terrestrial biome and aquatic biome systems.

### Module 3: Biodiversity

Students explain how biodiversity is essential to global function by determining population trends and species interactions to evaluate human impacts on natural systems.

### Module 4: Humans and the Environment

Students will explain the relationship between humans and nature by modeling human population growth, predicting impacts of that growth on natural systems, and proposing various plans to maximize human experiences while minimizing impacts on natural systems.

#### **Module 5: Natural Resources**

Students will analyze natural resource exploration, extraction, usage and consequences by exploring water resources, land resources, mineral resources, and energy resources.



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#### **Module 6: Environmental Protections**

Students will explain how to protect the environment through behavioral changes, legal resources, and public discourse.