## PETERS TOWNSHIP HIGH SCHOOL COURSE SYLLABUS: AP ENVIRONMENTAL SCIENCE (APES)

## **Course Overview and Essential Skills**

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science.

## **Course Textbook and Required Materials**

- Environmental Science for AP. Second Edition (2015) ISBN: 1-4641-0868-4
- Other: online textbook/links/logins/passwords/resources/novels, etc.
- 1 inch Binder, writing utensils, scientific calculator

## **Course Outline of Material Covered:**

Unit or Topic	Concepts/Skills/Resources	Timeframe
Earth Systems and Resources	<u>Concepts:</u> Earth Science Concepts The Atmosphere Global Water Resources and Uses Soil and Soil Dynamics	4 weeks
The Living World	Concepts: Ecosystem Structure Energy Flow Ecosystem Diversity Natural Ecosystem Change Natural Biochemical Cycles	5 weeks
Population	<u>Concepts:</u> Population Biology Concepts Human Population	3 weeks
Land and Water Use	Concepts: Agriculture Forestry Rangelands Mining Fishing Other Land Use Global Economics	6 weeks
Energy Resources and Consumption	<b>Concepts:</b> Energy Concepts Energy Consumption Fossil Fuel Resources and Uses Nuclear Energy Hydroelectric Power Energy Conservation Renewable Energy	6 weeks

Pollution	<u>Concepts:</u> Pollution Types Impacts on the Environmental and Human Health Economic Impacts	7 weeks
Global Changes	<u>Concepts:</u> Stratospheric Ozone Global Warming Loss of Biodiversity	5 weeks

\*Depending on the needs of the class or changes in the school year, the course outline is subject to change.