

AP Environmental Science



COURSE OVERVIEW

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 and their risks, and to examine alternative solutions for resolving or preventing them. The content of this course is multi-disciplinary, encompassing geology, biology, chemistry, physics, sociology, economics, and political science. This course is intended to challenge the students to examine their thinking and assumptions, provide students with problem-solving skills, and increase your understanding of "local and global environmental issues."

LABORATORY REQUIREMENT

The AP Environmental Science course requires students to conduct weekly in-lab experiments and research as well as field investigations. It is expected that all students will perform all of the required labs/field investigations. Formal lab reports will be assigned for some experiments.

RECOMMENDED PRIOR COURSES

Students should have completed two years of high school laboratory science — one year of life science (Biology) and one year of physical science (Chemistry). Due to the quantitative analysis required in the course, students should also have taken and completed up to Math 2.

SKILLS REQUIREMENTS

Students should already be able to competently perform the following tasks:

- Be able to create, read, and interpret all types of graphs
- Be able to read and summarize large amounts of information from college-level texts and other scholarly sources
- Be able to compose written analytical explanations using college-level vocabulary
- Be independent thinker and be responsible for your work
- Be able to collaborate in various groups
- Be active participant in class discussions

AP Environmental Science Course Content

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. There are several unifying themes that cut across topics. The following are course themes:

- Science is a process.
- Energy conversions underlie all ecological processes.
- The Earth itself is one interconnected system.
- Humans alter natural systems.
- Environmental problems have a cultural and social context.
- Human survival depends on developing practices that will achieve sustainable systems.

