



AP Environmental Science Course Description:

Course Overview: The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

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.

Topic Outline

- I. Earth Systems and Resources
- II. The Living World
- III. Population
- IV. Land and Water Use
- V. Energy Resources and Consumption
- VI. Pollution
- VII. Global Change

Inquiry-Based Investigations: Because it is designed to be a course in environmental science rather than environmental studies, the AP Environmental Science course includes a strong laboratory and field investigation component. The AP Environmental Science course requires teachers to provide students with opportunities to perform experiments and analyses involving the study of air, water, and soil qualities as an essential core for the lab/field investigation activities. These investigations challenge students' abilities to · Critically observe environmental systems; · Develop and conduct well-designed experiments; · Utilize appropriate techniques and instrumentation; · Analyze and interpret data, including appropriate statistical and graphical presentations; · Think analytically and apply concepts to the solution of environmental problems; · Make conclusions and evaluate their quality and validity; · Propose further questions for study; and · Communicate accurately and meaningfully about observations and conclusions.

Textbook: *Environmental Science for AP*, Friedland, Relyea, and Courard-Hauri, 1st Edition, Freeman, W. H. & Company.

High Bluff Academy is accredited by the Western Association of Schools and Colleges (WASC). The above course is approved by the University of California system (A-G) and the National Collegiate Athletic Association (NCAA).