

AP® Environmental Science
Mrs. Molly Bostic
Syllabus 2012-2013



Course Description

The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the inter-relationships 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 and will embrace a wide variety of topic from different areas of study: geology, oceanography, biology, chemistry, and geography. Through this course, we will investigate problems through hands-on laboratory experiences or fieldwork at least one class period a week. Students are expected to participate in all activities, labs, and fieldwork. Due to the interdisciplinary nature of AP Environmental Science, students must have completed biology, chemistry and geometry prior to taking the course.

Course Assignments

- Homework (10%): Students will be expected to regularly complete assignments out of class. These include, but are not limited to: textbook readings, case study or current event investigations, lab report write-ups, and creating presentations.
- Current Events and Book Reviews (20%): An Electronic APES Current Event Notebook must be completed prior to the beginning of the semester. Students will receive specific assignment requirements and descriptions in June of the prior school year. A second edition of the Current Event Notebook will be required during second quarter. Additionally, for each unit, students will review a selection of a book and respond to it in the form of an essay.
- Labs and fieldwork (25%): All lab and fieldwork will be completed in written report form of an electronic laboratory notebook. Students will be expected to maintain an organized lab e-notebook throughout the course.
- Tests and quizzes (45%): Students will be regularly assessed through the use of quizzes and tests. Tests will be modeled after AP Exam formats, including free-response questions.
- Summative assessments: A midterm exam will be administered at the end of 1st quarter, accounting for 10% of the quarter average. A final exam will be administered at the end of 2nd quarter, accounting for 20% of the final grade.
- Late work: Any work turned in after the deadline will receive a deduction of 30%.

Text

Living in the Environment: Concepts, Connections, and Solutions, by G. Tyler Miller, Jr. and Scott E. Spoolman. 16th edition, Brooks/Cole, Cengage Learning, 2011.

Course Materials: Students will need to bring to class daily a folder (3-ring, portfolio, or pocket), 2 composition notebooks, notebook paper, textbook, and a flash drive.

Communication

Communication will be frequently used through electronic means:

- **Email:** email will be used to communicate between teacher, students, and parents. Regular emails will be sent to allow parents to keep up to date on assignments, expectations, and available enrichment opportunities.
- **Blog:** Reminders of assignments and public information will be posted at: <http://bosticap.es.blogspot.com>. *This website is open to all.*
- **Blackboard:** Assignments will be posted to Blackboard and students will be expected to use electronic submission in many different ways. *The blackboard course is open only to those enrolled in the course.*

Course Topics

Unit 1: Environmental Problems	Overview of current events and the History of Environmental Law <i>1 week</i>
Unit 2: Earth Systems	Atmosphere, water quality, soil quality <i>2 weeks</i>
Unit 3: The Living World	Ecosystems, energy flow, ecosystem diversity, natural ecosystem change, and chemical cycles <i>3 weeks</i>
Unit 4: Energy Resources	Consumption of resources, use of fossil fuels, nuclear energy, hydroelectric energy, renewable energy, conservation of resources <i>2 weeks</i>
Unit 5: Population	Human population change, ecological population changes, impacts on population change <i>2 weeks</i>
Unit 6: Land & Water Use	Agriculture, forestry, mining, fishing, and global economics <i>3 weeks</i>
Unit 7: Pollution	Air pollution, Noise pollution, Water pollution, solid waste, the environment and human health, economic impacts <i>3 weeks</i>
Unit 8: Global Change	Ozone layer, global climate change, biodiversity loss <i>2 weeks</i>

Honor Code:

All students are expected to adhere to the Husky Honor Code. In AP Environmental Science, students must complete their own lab and fieldwork conclusions. Students are only allowed to share data with group members, as approved by the teacher. Any conclusions and analysis must be completed individually. Any violation will result in consequences as stated in the Heritage High School student handbook.

Instructor Information: Molly Bostic, Room 2612

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Office Hours: Wednesdays during Husky Help and Thursdays 2:30-3:30