AP ENVIRONMENTAL SCIENCE

We will apply the following central themes of this course throughout the year:

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

Projected Course Outline (subject to change)

	Unit #	Unit Topic	Textbook Chapter Reference
Quarter 1	1	Introduction to Environmental Science General overview of environmental topics, problems and solutions, historical perspective and sustainability	1,2,10 (beginning), 22, 23, 24, 26, 27, 28
	2 (1 st test will be on units 1&2)	Earth Systems Creation of the earth systems and how it has changed over time. Climate, structure of Earth, energy flow and matter cycling, biogeochemical cycles	6, 10
	3	The Atmosphere Layers and compositions of the atmosphere, air pollution, global warming, ozone depletion	17,18
	4	Energy & The Biosphere Overview of units of energy and chemical/physical laws, types of alternative energy sources, biodiversity, community ecology, components of ecosystems, biomes, biogeography, species interactions	3-10, 22, 23
	5	Human Populations Population dynamics, carrying capacity, human growth and demography, toxicology, disease and health	9, 11, 12
Quarter 2	6	The Hydrosphere Aquatic ecology, water cycle, water resources and pollution, oceans and freshwater bodies, water and wastewater treatment	7, 14, 19, 24
	7	The Geosphere & Land Use Waste, recycling, soil composition and erosion, agriculture and forestry, mining resources and processes, fossil fuels, plate tectonics	10, 13 15, 20, 21
	8	Sustainability Urbanization, urban planning, green design, sustaining the Earth, resources and living things	1, 22, 23, 24, 25, 27, 28

Grading weights:

Tests, Projects, Papers	50%
Major Assessments (Labs, Quizzes)	40%
Minor Assessments (Unit summaries, Daily Activities)	10%

Student and Class Expectations

- Students are highly encouraged to take the Advanced Placement Environmental Exam
- Unit summaries, laws and acts, and case studies are due on the day of the unit test. Each unit test is roughly a week and a half to two weeks apart. Students are expected to work on these assignments throughout the period of study for each unit. Procrastination is the most common reason for failing grades in APES.
- Cooperative learning is an essential component of this class. Grades are determined based on individual work, not on the quality of the group product.
- Print out PowerPoints and other materials at the beginning of each unit so that they may be annotated as we cover material in class.
- Test reviews and individual test help is given before and after each unit test during lunch on Mondays and Wednesdays. Attendance is required at tutorials if there is missing work or if you have a failing grade.
- Science literacy is a major component of this class. Cite any written or presentation work you have researched in MLA format.
- AP Environmental is an elective science class. You will be expected to participate in multiple indoor and outdoor field settings. Do not take this class if you are worried about getting some nature on you!

Materials list

- Calf length rubber boots for stream and trail work. I have some sizes that are available to borrow on a first come-first serve basis. Hip waders or other waterproof boots are fine as well.
- Dishwashing gloves-Or other sturdy water proof gloves that are longer than average.

AP Environmental Exam Info

This test is given in the morning on the first day of AP testing in early May. Registration for the AP Exam will start in early March.

This is a three hour test given in two parts: Section 1: 100 Multiple Choice Questions-90 minutes Section 2: 4 Essay questions-90 minutes