



AP ENVIRONMENTAL SCIENCE

SYLLABUS 2014-15

Clear Springs High School

Course Description

AP Environmental Science draws from multiple areas of science such as biology, chemistry, earth sciences, as well as the social science fields of economics and political science. Topics of study include water and energy conservation, chemical cycles and systems, soil and biome processes, population and land development dynamics, human history and influences, community and ecosystem processes, natural resource exploitation and impacts, environmental economics and policy, and future choices.

A large component of this course involves laboratory, field and internet-based research that are designed to familiarize students with contemporary investigative and problem-solving techniques. Students will analyze environmental problems, evaluate risks, collect data, prepare assessments, and contemplate complex issues and solutions to prevent, resolve or mitigate environmental problems.

Required Materials:

Composition Notebook
Pen/pencil
Computer or tablet with Internet access
Rubber Boots
AP Review Study Guide (strongly recommended)

Textbook: Environmental Science "Earth as a Living Planet", Botkin and Keller, 7th edition

Strategies for success:

Students will follow a curriculum that will prepare them for the AP exam in the spring. The course will be taught with the expectation that every student will take the exam. The course pace is rapid and it is important that students remain current on reading assignments and homework. Purchase of an exam review guide early in the year is strongly recommended. Students are expected to bring their tablets daily as there are many online activities included in the curriculum.

Topics of Study		
Third Rock From the Sun: Earth Systems		
Natural Selection & Biodiversity		
Community & Population Ecology		
Environmental Politics & Economics		
Human Populations		
Soils, Food, & Agriculture		
Land & Water Use		
Environmental Health & Toxicity		
Freshwater & Marine Resources		
Atmospheric Science & Climate Change		
Energy Resources		

Tutorials:

Tuesdays and Thursdays after school and any other day after school by appointment.

General Policies

- 1. *Make Up Policy* Make-up work must be turned in based on the guidelines found in the student handbook. If the student was present the day the assignment was given, but absent the day it was due, the assignment is due the first day the student returns to school. Test dates and project due dates will be posted on e4 with plenty of notice so the same is true to tests and projects. *Missing a review day before the test does not excuse a student from taking the test.* It is the responsibility of the student to obtain classwork from the website.
- 2. *Transfer Students* Students that transfer into the course are expected to take responsibility for all assignments and work missed. **Students are expected to be independent and responsible.**Assignments will be posted on e4 and the students are expected to be prepared for class.
- 3. *Cheating & Plagiarism* Plagiarized work will not receive credit. Guidelines for plagiarized work is outline in the student handbook. Disciplinary action will be taken in serious cases.

Grading Percentages

Daily	Reading Assignments	Major
35%	5%	60%
Quizzes, class activities, lab reports(2X)	Current Event Research	Tests and Projects

Assignments

Class Assignments:

Class assignments will include quizzes, periodical summaries, laboratory reports, team projects and research. Scientists and environmental professionals are expected to present their work products in a timely, neat, accurate and well-organized fashion, and students are expected to do the same. Work must be submitted on the day it is due, or 10% will be deducted for each day late. Any assignments not turned in within two school days will receive a zero.

Math Quizzes:

Students are not permitted to use a calculator on the AP exam so it is imperative that they practice basic arithmetic. There will be a math quiz every Friday that will be worth one daily grade.

Arithmetic skills include:

- 1. Multiply and divide (including exponents)
- 2. Calculate percentages, density of a population, rate of change, doubling time
- 3. Express numbers in scientific notation
- 4. Convert units using dimensional analysis.

THE AP EXAM

The Advanced Placement Environmental Science Exam created by the College Board and Educational Testing Service will be administered on **May 4, 2015.** This exam is three hours in length and consists of a multiple-choice section comprised of 100 questions and worth 60% of the grade, and a free response section comprised of four free-response questions worth 40% of the grade. Calculators are not permitted to be used on the AP test. All tests given in this class will reflect the format of the AP exam and the will be composed of questions from released exams from previous years. Review sessions will be held after school beginning in April 2015.

Useful website: http://www.collegeboard.com/student/testing/ap/sub envsci.html?envsci