

Environmental Science AP: 2016 - 2017

Mr. Durand - Period 3

ross.durand@gmail.com

<http://www.mrdurand.info/>

SOME IMPORTANT INFO

- 1. This is a college** level course. Between now and the AP exam we will cover one college semester of Environmental Science from a college textbook doing college level testing, lab and field work, and writing.
- 2. Our pace will** be at least one chapter per week.
- 3. Each test** will involve both multiple choice and free response (essay) questions (FRQ). The multiple choice will be 60 –75% of each test, the FRQ will be 25 – 40% of each test.
- 4. I expect students** to be able to access the internet, use e-mail, and print documents from the internet.
- 5. I expect students** to take the AP exam on Monday May 1 at 8:00 am.
- 6. You have enrolled** in a year-long course – semester drops are difficult and strongly discouraged. First semester failure does not qualify you for a mid-year drop.
- 7. As with many** college classes, I may be requiring you to read and discuss material supplementary to the textbook.
- 8. Some investigations** may require that you go to particular locations outside of class time, preferably at a time when the instructor is also there, but there will be ways to successfully complete ALL assignments even if you cannot attend when the instructor is there.
- 9. Grades in AP** courses are weighted in your GPA by many colleges when calculating your entrance GPA. This is based on the assumption that most high school college prep “A” students would earn a “B” in a college course, most “B” students would earn a “C” etc.... For this reason, if you usually get As in school it is somewhat likely that you would earn a B in this class doing your usual level of work.
- 10. I enforce** all school policies.

GRADING

Tests and Quizzes are the majority of your grade. - 80%

Labs, investigations, research papers, presentations and other assignments make up the remaining portion of your grade. The point value varies based on the size and difficulty of each assignment.

Review Questions/Notes will be assigned for each chapter/subject studied and will be assessed towards your work habits grade. However, it is important to note that the quizzes will be based on the review questions and that the review questions are designed to support success on the exams.

Letter Grades

The following percentages will guarantee grades within a certain range

90% - A

80% - B

70% - C

60% - D

COURSE OUTLINE

This outline is based on the one published by the College Board. Since we will be following the order of chapters in our textbook we will not be covering this information in the order presented in this outline, but all of the topics will be covered.

I. Earth Systems and Resources

- A. Earth Science Concepts
- B. The Atmosphere
- C. Global water resources and Use
- D. Soil and soil Dynamics

II. The Living World

- A. Ecosystem Structure
- B. Energy Flow
- C. Ecosystem diversity
- D. Natural Ecosystem Change
- E. Natural Biogeochemical cycles

III. Population

- A. Population biology concepts
- B. Human Population
 - 1. Human population dynamics
 - 2. Population size
 - 3. Impacts of population growth

IV. Land and Water use

- A. Agriculture
 - 1. feeding a growing population
 - 2. controlling pests
- B. Forestry
- C. Rangelands
- D. Other Land Use
 - 1. Urban land development
 - 2. Transportation infrastructure
 - 3. Public and Federal Lands
 - 4. Land conservation options
 - 5. Sustainable land use strategies
- E. Mining
- F. Fishing
- G. Global Economics

V. Energy Resources and Consumption

- A. Energy Concepts
- B. Energy Consumption
 - 1. History
 - 2. Present global energy use
 - 3. Future energy needs
- C. Fossil Fuel Resources and Use
- D. Nuclear Energy
- E. Hydroelectric Power
- F. Energy Conservation
- G. Renewable Energy

VI. Pollution

- A. Pollution Types
 - 1. Air Pollution
 - 2. Noise Pollution
 - 3. Water Pollution
 - 4. Solid Waste
- B. Impacts on the Environment and human Health
 - 1. Hazards to human health
 - 2. Hazardous chemicals in the environment
 - 3. Economic Impacts

VII. Global change

- A. Stratospheric Ozone
- B. Global Warming
- C. Loss of biodiversity
 - 1. Habitat loss
 - 2. Maintenance through conservation
 - 3. Relevant laws and treaties