ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

WHAT IS THIS CLASS ABOUT?

 In Advanced Placement Environmental Science you will learn many invaluable and applicable skills. Skills we will focus on developing include: using visual representations (models) to represent and understand environmental interactions, using controlled experiments to test scientific hypotheses, and analyzing scientific research papers and data in order to draw appropriate conclusions. We will also assess various environmental problems. We will look at potential solutions for those problems, and we will analyze the costs and benefits of each solution for various stakeholders involved. The four major themes that we will explore are: energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability. You will learn a large range of content on topics such as: biodiversity, ecosystems, populations, earth systems and resources, land and water use, energy resources and consumption, atmospheric pollution, terrestrial and aquatic pollution, and global change.

WHAT WORK CAN I EXPECT IN THIS CLASS?

• Class will include group work, lecture accompanied by review questions, discussion, and projects. You will also participate in research skills where many controlled experiments will be done both in the classroom, and online. Regular textbook reading will be expected outside of class time. The workload will be rigorous and equivalent to college level environmental science in terms of depth and breadth.

WHAT SUMMER WORK CAN I EXPERT?

• Summer work will include detailed reading and analysis of a current environmental book. Students will also be expected to read and analyze several scientific articles on current science topics. Finally, students will be doing a reflection and observation activity in a natural environmental setting.

ADVANCED PLACEMENT EXAM FORMAT?

• Students will be expected to take a 160 minute Advanced Placement Exam described and graded by the College Board at the end of the year. This exam will have 80 multiple choice questions on it (90 minutes), along with 3 open response questions (70 minutes). One open response question will require you to design an experiment, one will require you to analyze an environmental problem and come up with a solution, and one will require you to analyze an environmental problem and come up with a solution by doing mathematical calculations.