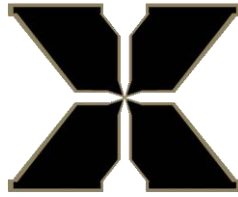


A.M.D.G.



## AP Environmental Science

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*"The best time to plant a tree was twenty years ago. The next best time is today."*

Chinese proverb

WELCOME TO ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE aka APES. In order to be prepared to jump right in at the beginning of the school year, there are two required assignments that must be completed by our first class meeting in August. They are each described below.

Please understand that this course will require a lot of time and effort to be successful. The pace and workload are designed to acquire a thorough understanding of the content and be as prepared as possible for the AP exam in May. Expect homework to be assigned on weekends and during all of our breaks including Thanksgiving break, Christmas break, Winter break, and Spring Break. The work will be manageable and given well before the breaks so ample time will be given to finish the assignments. Please understand this is the best way to ensure that we get to all required course topics covered in preparation for the AP exam in May. This course is often described as, "A mile wide and an inch deep." Meaning we will talk about many, many things to varying depths.

Prerequisite: The minimum grade of 'B' in Biology, Chemistry and Geometry, and department recommendation.

I look forward to having all of you in class and having a very positive year. If you have any questions please feel free to email me at [dbranconier@xavierprep.org](mailto:dbranconier@xavierprep.org)

Enjoy your summer and I'll see you in August.

Mr. Branconier



# INTRODUCTION

## THROUGH WHICH LENSES?

This course is an interdisciplinary study and experience of the natural world and man's place in it. This course specifically looks at the mechanics of the various physical, chemical and biological systems of earth and how these dynamics effect the environment and affect human response. These concepts will be considered through three main perspectives.

- The first lens - With earth as a unique, individual and advanced organism unto itself; how, when unmolested, its systems are efficiently and perfectly balanced to maintain and propagate life, evolve and manage change.
- The second lens - Inserts humans into the natural economy beyond being simply an additional species but as a species quite capable of changing the earth's natural state and carrying capacity to unnatural ones and the positive and negative effects of these manipulations. Through this second lens the course allows for investigation and conversations beyond the empirical science and into the areas of culture, politics, history, sociology, technology, economics and justice. Here the course reinforces the relevance of these studies and the course in general.
- The third lens - is informed by the first two and looks at current situations and projections into the future. You will study and design models to project current statuses into the near and distant future. You will study current solutions and proposals from technical, empirical, cultural, civic and economical viewpoints. You will develop skills in forming, supporting, arguing, refining and defending a position including cost/benefit data and justification.

You will finish this course with a more developed and informed intellect and conscience in regards to human influence in the natural world and social realms and be familiar with multiple courses of action to respond.



# SUMMER FUN

## **ASSIGNMENT #1 - HEALING EARTH:**

*Healing Earth* is a new type of text book. It is published through Loyola University Chicago and approaches environmental studies as an integral discipline involving not just empirical science like most of our high school science studies. It is a living document revised as new discoveries are made.

From the Authors: "By *integral*, we mean that the scientific knowledge presented in *Healing Earth* is joined by ethical analysis, spiritual reflection, and a call to action. The authors of *Healing Earth* consider an 'integral' approach critically important. An 'integral ecology' likewise emphasizes the link between environmental and social problems. As Pope Francis wrote in his encyclical *Laudato Si*,

*We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrate approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature."*

We will be using this textbook throughout the school year along with our class textbook, "The Environment and You" and other published materials.

YOUR ASSIGNMENT #1 - Read and study *Healing Earth* - Section 1: **Introduction** and Section 6: **Global Climate Change**. You will start a vocabulary journal, basically your own environmental studies reference glossary. As you read, please define each of the highlighted terms throughout the readings. By scrolling over the word the definition will pop up. This may seem like busy work but it is not. Environmental Science involves a new vocabulary and your vocabulary journal will become a critical resource as we move through all of the concepts and new terms. Also, as you are reading and studying you will encounter highlighted sections titled, "Questions to Consider". Answer these questions as thoroughly and as best as you can. Please Note: Your goal with this assignment is to get familiar with beginning Environmental Science concepts and begin developing your new vocabulary. It is not to "just get it done." Please take your time, break it up into manageable pieces and begin developing a command of the concepts.

**ASSIGNMENT #2 - Go Outside!!** - NOTE: It is ok to do this in your backyard. If we are still restricted on travel this summer, you are not required to go to a public campground if you would rather not. You can stay in the backyard. Camp outside on any 2 nights this summer. The two nights do not need to be consecutive, but they can be. You may find yourself in the backwoods of the Sierra, the shore of the Amazon, or your own back yard on the pool chaise lounge. The idea is to be outside. (Sleeping in the casita with the doors open is not camping.) I invite you to be adventurous, go with other APES classmates, and get out of your comfort zone. If you need any suggestions on where to camp, what to pack, what to eat, just let me know and I would be glad to advise.

The purpose for this activity is to be outside. Here at Xavier we often speak of things out there that are bigger than yourself. Nature is just that. Our culture often wants to put faith and science against each other. Spend the night outside and experience how faith and nature emanate from the very same Source. Along with your work from assignment #1 include a page for each of your nights outside. Each page should have a picture from each night with you in it and a short reflection on your experience for that night whether it was a positive or negative experience or a mixture of both. Describe how God was present (or not) during the night.

DUE DATE: These assignments will be due on Friday, August 14, 2020 by 2:00 pm. As we aren't sure if we will be meeting in person or not, I will let you know the best way to submit them when we get closer to that date.

Email me with any questions: [dbranconier@xavierprep.org](mailto:dbranconier@xavierprep.org)

**Go Saints!! Go APES!!**