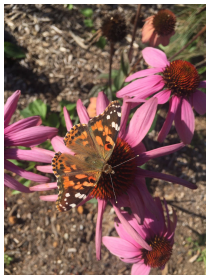
Welcome to the interdisciplinary world of AP Environmental Science. In this college-level course we will be combining our knowledge of science with that of history, political science, math, economics, sociology, psychology, the arts, and life in general. This applied science course focuses on problem solving and critical thinking, and we will examine the natural environment and consider how human activity is changing it. Laboratory and field investigations are a critical part of the course and include data collection, mathematical analysis and data interpretation. Our ongoing "citizen science" scientific research will help you develop a richer contextual understanding. I am looking forward to a challenging and rewarding year with you. Please ask for help early and often. You can usually find me in 209, 211, or the school gardens.



Ms Mendenhall
Governor Livingston High School, Berkeley Heights, NJ
GL https://www.bhpsnj.org/Page/5448
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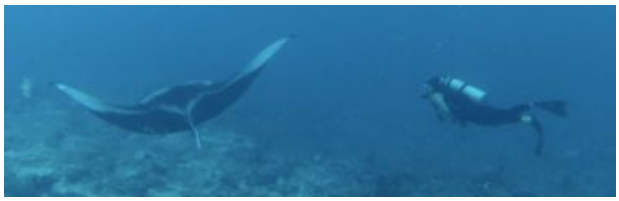

2021 AP Exam Monday, May 14 (12 pm)
80 MC | 1 Hr 30 Min | 60%
3 FRQ | 1 Hr 10 Min | 40%

Should you take the AP exam?
GL students have done well.
Check the score each college requires.
Read about the course and the exam.
Check the dates of other exams.

Do I have to take the course final?
See p.9 of the GL Student Handbook.

Honor Code

I expect that you will not cheat or plagiarize any assignments or help anyone else cheat or plagiarize assignments. This includes, but is not limited to, giving others answers, talking about an assessment with other students who have not taken it yet, copying assignments or parts of assignments, collaborating on an assignment when you are directed to complete it individually, and not using proper citation. If you are caught, the student(s) involved will be held accountable for their actions in accordance with school policy (see page 7 of the GL Student Handbook). If you are unsure about an expectation, please meet with me so I can better support you.

Expectations

Philosophy...

Actively **engage** in all activities.

Do your **own** thinking.

Complete & submit your **own** work.

Respect my time & yours.

Keep yourself and others **safe**.

The details...

Be **prepared** for class.

Participate in class discussions.

Read, **think**, discuss, & then get help.

Record your **own** data.

Solve technological issues.

Specifics...

Absent? Check the class calendar and complete missed work.

Broken iPad? See the Dojo.

Class concerns? See me.

Cell phones? Keep them in your bag.

Safety? Follow the Safety Agreement and know about toxic plants & ticks.

***Note:** Please email me with concerns.

Course Materials

Please bring a **composition notebook** and your **iPad** to class each day. You will have a physical copy of the textbook at home and a digital copy on your iPad.

Coursework & Grading

This course will be fast-paced and cover more material than non-AP courses. I expect you to be prepared for class, think critically, analyze and synthesize facts and data, and weigh competing perspectives. You should expect to spend ***at least 5 hours*** per week outside of class on course material. A total points system is used to calculate your grade and grades are automatically rounded by PowerSchool. ***Late work is not accepted*** *unless prearranged.*

1. Preparation

- **Reading Checks** are given most regular class days. **Read** and **take notes** on the assigned textbook pages **prior** to class. This knowledge forms the backbone of the course and will greatly enhance your ability to succeed. The multiple choice practice, explanatory videos, and digital flashcards on each unit website provide further review.
- **FRQ Checks** are given 4-5 times each unit. FRQs are handed in one week prior to the test using turnitin. Answering FRQs is a good way to cement your knowledge and to prepare for the AP Exam. Answer each question to the best of your ability and then check the provided College Board scoring guides. These guides provide a rubric of accepted ideas but are NOT complete answers. A full-credit FRQ answer will be specific, have a thorough explanation, and provide an example that demonstrates your understanding of the topic. Answer the questions in order, number each section, and do not restate the question.
- **Tests** occur at the end of each unit and a **cumulative exam** is given prior to the AP Exam. Each test includes 25-40 multiple choice questions and 1 FRQ similar to the practice FRQs.
- **Study skills** can always be improved. Enhance yours with this advice from Dartmouth. Key points: Read the textbook prior to the class discussion, ask questions in class, and form a study group.

2. Tasks

- **Stay organized** by following your class calendar and submitting assignments through Google Classroom.
- **Absences** require you to complete missed work in a timely manner. Check the class calendar and Google Classroom.
- **Class and lab work** should demonstrate **your own brain power**. You may discuss ideas but each person submits their own work. These assignments are due by the end of class unless otherwise stated. If you have difficulty with specific due dates, please post an explanation as a private comment on the relevant assignment. Your lab grade includes a shared class grade for clean-up. For full credit, be sure to leave the lab or field area cleaner than you found it.
- **Homework** is usually limited to reading the textbook modules and preparing the FRQs. Occasionally, I will ask you to listen to a podcast, watch a documentary, or read an article outside of class.
- **Citizen Science** is designed to help you gain a more thorough understanding of the scientific process and an in-depth knowledge of Environmental Science. It is broken up into portions due each unit, but the sooner you start collecting your data the better. Except for the Summer Assignment portion, you may work in groups of 1-2 students. You have one lab period each unit to work on it, and time after the AP Exam to complete the final paper and prepare for the symposium.
- **Extra credit** is offered each unit in the form of current events, documentaries, arboretum & garden maintenance, as well as other course-related tasks. These assignments are designed to supplement course concepts.

Course Plan

Unit 0 Introduction

Unit 1 Ecosystems *6-8%**

Unit 2 Biodiversity *6-8%*

Unit 3 Populations *10-15%*

Unit 4 Earth Systems *10-15%*

Unit 5 Land & Water *10-15%*

Unit 6 Energy *10-15%*

Unit 7 Air Pollution *7-10%*

Unit 8 Land & Water Pollution *7-10%*

Unit 9 Global Change *15-20%*

Unit 10 Review

Unit 11 Citizen Science

*AP Exam Weighting

Big Ideas

1. Energy Transfer
2. Interactions Between Earth Systems
3. Interactions Between Different Species and the Environment
4. Sustainability

Science Practices

1. Concept Explanation
2. Visual Representations
3. Text Analysis
4. Scientific Experiments
5. Data Analysis
6. Mathematical Routines
7. Environmental Solutions

Textbook & Supplemental Texts

Friedland, A. & R. Relyea (2015). *Environmental Science for AP, 2nd Edition*. United States: W.H. Freeman Publishing.
Textbooks should be returned in the condition issued. You may keep it at home and use the digital version in class.

Fleischman, P. (2014). *Eyes Wide Open: Going Behind the Environmental Headlines*. Candlewick Press.
Twenty copies were generously purchased by the GL PTO and are available at the Berkeley Heights Public Library.

Fagin, D. (2013). *Toms River: A Story of Science and Salvation*. Bantam.
Twenty copies were generously purchased by the GL PTO and are available at the Berkeley Heights Public Library.

***Revised** 1 June 2020*