

Welcome to the interdisciplinary world of Environmental Science. In this 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. I am looking forward to a rewarding year with you. Please ask for help early and often. You can usually find me in on email, in 211, or the school gardens.



Ms Mendenhall

GL website

Course website

Email lmendenhall@bhpsnj.org

Zoom <https://zoom.us/j/4963175829> (apes)

Coursework & Grading

Preparation, participation, and your overall contributions to the success of our class are important factors in your grade. A total points system is used and grades are automatically rounded by PowerSchool. Lab reports and projects may be submitted late for credit minus a letter grade, but smaller assignments will not be accepted late. Final Exam exemptions follow school policy (see the GL Student Handbook).

- **Reading Checks** Read the assigned textbook material and complete the reading guide. Your understanding will be assessed with multiple choice and short answer reading checks. This knowledge forms the backbone of the course and will greatly enhance your ability to succeed on the multiple choice portion of tests. *10-20 points per unit*
- **Class and Homework** You should be able to complete most coursework in class. Any work not completed becomes homework. Some assignments are short, such as completing an activity, discussing it with your colleagues, and answering a few individual questions about it. Others will be more time consuming. All assignments are submitted through Google Classroom. Use the unit **websites** to see a list of required work, the block **calendar** to see what we do in class each day (especially if you are absent), and Google Classroom to confirm you have submitted everything on time. *20-50 points per unit*
- **Lab & Field Work** There are 2-4 lab and/or field assignments each unit, one of which is part of your Citizen Science work. For each lab, there are three parts to complete; 1. Pre-lab reading and questions, 2. Lab/field work, and 3. Post-lab assessment. 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. Some labs are completed in one day while others take multiple weeks. I expect you to make up missed lab work outside of class time. All work is submitted through Google Classroom. *25-50 points per unit*
- **Tests** Each unit has a full period test. Questions are primarily based on the textbook but may also include questions from class and lab & field work. *100-200 points per unit*
- **Extra Credit** Each unit has extra credit opportunities including documentaries, podcasts, current events, and outdoor work. These are designed to augment your understanding of course material and to connect what you are learning to what is currently happening in the world. *20 extra credit points per unit*

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 the GL Student Handbook). If you are unsure about an expectation, please meet with me so I can better support you.

Expectations

- Please arrive **on time** to class and lab. Unexcused missed class and lab time is made up during lunch.
- Come to class **prepared** to work every day. This includes having your iPad fully charged and required apps installed. Coming unprepared to class may impact your grade.
- Stay **organized** and complete your work on time. This includes having a dedicated notebook or section of a notebook for your Reading Guide questions, and submitting all work on time through Google Classroom. See the Tech Dojo if you have technical difficulties.
- Have **respect** for yourself and others, and be supportive of one another. Respect the classroom, your classmates, and me by cleaning up your desk and lab areas before you leave.
- Please share anything that comes up that may prevent you from being prepared prior to coming to class. This may include a religious holiday, death in the family, vacation, etc. Accommodations will be made.
- If you are **absent**, check the block calendar, unit website, and Google Classroom for missed work and notes. All **assignments** and **tests** must be **made up in a timely fashion**. Not doing so will result in parent contact and may result in a zero.

Objectives of Field & Lab Work

- Critically observe environmental systems;
- Develop and conduct well-designed experiments;
- Utilize appropriate techniques and instrumentation;
- Analyze and interpret data;
- Think analytically and apply concepts to the solution of environmental problems;
- Make conclusions and evaluate their quality and validity;
- Propose further questions for study;and
- Communicate accurately and meaningfully about observations and conclusions.

Course Plan

- Unit 1: Sustainability & Global Development *Chapters 1, 2*
- Unit 2: Biodiversity & Ecology *Chapters 4, 5, 7*
- Unit 3: Environmental Systems & the Living World *Chapters 3, 6*
- Unit 4: Energy Resources & Consumption *Chapters 17, 18*
- Unit 5: Population, Cities & Waste *Chapters 8, 10, 19*
- Unit 6: Land, Water & Food Resources *Chapters 11, 12, 13*
- Unit 7: Air Pollution & Climate Change *Chapters 15, 16*
- Unit 8: Water Pollution & Human Health *Chapters 9, 14*

Course Themes

1. Science is a process.
2. Energy conversions and the cycling of matter underlie all ecological processes.
3. The Earth itself is one interconnected system.
4. Humans alter natural systems.
5. Environmental problems have a cultural and social context.
6. Human survival depends on developing practices that will achieve sustainable systems.

Textbook

Wiggins, G., A. Thanukos, J. Scotchmoor, M. Lisowski, J. Withgott (2011). *Environmental Science: Your World, Your Turn*. United States: Pearson.