

Environmental Science

Ms. Maher - 2025/26

Grading Scale

Competency Score	Description
4	Integrating the Outcome expectations
3.5	Applying the Outcome expectations
3	
2.5	
2	Approaching the Outcome expectations
1.5	Not Yet achieving the Outcome expectations
1	
.5/M	Missing (Absent or Never Completed within the two-week late work deadline).

Grades will be determined based on the following criteria:

10% I can fully complete assignments, meet deadlines, and/or come to an agreement with my teachers in advance when I need an extension.

8% I can plan and carry out scientifically sound investigations.

8% I can develop and/or make use of modeling.

8% I can develop a claim with reasoning based on multiple pieces of evidence.

8% I can collect, organize, represent and analyze data in meaningful ways.

8% I can research, describe and communicate scientific concepts.

25% I can explain how organisms interact within a complex ecosystem.

25% I can analyze and make predictions regarding the impact of changing water systems.

Welcome!

Environmental science is the study of ecology as well as how humans affect the environment and ways to address environmental problems. It is an interdisciplinary approach involving biology, chemistry, earth science, economics, and political science.

Materials

1 3-ring binder -or- three-subject notebook (8 ½ x 11) with a separate folder

Pens and pencils

Essential Questions

- How does one live responsibly in the local, national and global community?
- How can we balance ecological integrity and economic development?
- In what ways does the environment affect the health of my family and me, and how do our actions affect the environment?

Class Expectations

1. Be respectful. To your peers, to your teacher, to the materials, and to the classroom.
2. Be kind. Not only to those around you, but to yourself as we waded through the course together.
3. Be punctual. I will always do my best to make good use of your time, and it is easier to do that when everyone is present.

FAQ's

Q: Do we have homework tonight?

A: Possibly! Homework can take many forms, and may be a written task, video, or reading assignment. Often, you will be asked to finish classwork that was not completed for homework.

Q: Will this be on the test?

A: Any material covered in class is fair game, and may show up on assessments. If we are covering it, assume you are responsible for understanding it.

Q: I didn't do well on an assignment. Can I try again?

A: In accordance with the schoolwide policy, students are encouraged to view their grades as measures of their learning, and look towards future opportunities in order to demonstrate understanding.

Course Outline

Unit 0: Thinking Like a Scientist

September

- Hypothesis Development
- Experimental Design
- Data Analysis

Unit 1: Introduction to Environmental Science

October

- Human Impact
- Environmental Health Hazards
- Sustainability Practices

Unit 2: Ecosystems

October - December

- World Biomes
- Energy and Relationships
- Population Growth

Unit 3: Climate Change

December - January

- Carbon Emissions
- Heat Islands
- Sustainable Forestry

Unit 4: Land Use and Agriculture

January - February

- Types of Agriculture
- Soil Conservation
- Sustainable Farming

Unit 5: Earth's Systems and Resources

March - April

- Earth's Spheres
- Natural Resources
- Weather and Climate Patterns

Unit 6: Water Use

April - May

- Watersheds and Surface Water
- Marine Biomes and Fishing
- Wetlands and Water Pollution

Unit 7: Urbanization, Sustainability, & Environmental Justice

June

- Sustainable Cities
- Water Crisis
- Climate Refugees

Enduring Understandings

For a given environmental issue students can identify:

- both the human and non-human impacts
- key stakeholders and their points of view
- alternative solutions and their potential consequences
- whether information is reliable, and how to separate fact from fiction
- common misconceptions

Students can describe how environmental degradation impacts the health and welfare of both human and nonhuman communities.

Students can explain and exemplify concrete actions, for both individuals and communities, which promote environmental sustainability.

Getting Help

I'm here to help! I check my email regularly and will typically get back to you within a few hours.

Don't struggle in silence! If you're having a hard time with anything, come talk to me.

Contact: amaher@sof.edu

Late Work

Students have one week to complete Missing work. If it is not completed within this timeframe, the M (equivalent to a 45) will lock in the gradebook and students will focus on new work.

NOTE: When students have Missing work due to absences, students are only able to make up the work if their absence is formally excused ahead of time.

Cell Phones

Your phones, headphones, and smart watches should be in your Yondr pouches at all times. Any phones seen during class will be confiscated until the end of the day, and out lunch privileges will be lost.

Academic Integrity

Each student must pursue their academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong.

Absence Policy

If a student is absent or sick, it is their responsibility to get class notes and handouts from online or a classmate. The student is responsible for checking online or asking the teacher for make-up work. I can always be reached through email.

Note: I reserve the right to alter or change any of the above content at any time if deemed necessary. All changes will be communicated to students appropriately.

