ENVS 131 – Introduction to Environmental Studies

Oxford College of Emory University, Spring 2023

Course Information

- Instructor: Dr. Heather Black
- Contact: heather.black@emory.edu
- Office Hours (OSB 223a):
 - MW 10-11 am
 - R 2:30-4 pm
 - F11-1 (Online)



- Lecture: TR 11:30-12:45; OSB 201
- Lab: W 2:30-5:15; OSB 201
- Textbook: The Environment and You Christensen, Leege, and Juliana 3rd edition

Course Description

As the world's population grows, humans are placing a greater demand on the Earth's resources, increasing the volume and extent of pollution, and causing a rapid change in the world's climate, biogeochemical cycles, and ecosystems.

This course introduces you to the scientific study of our natural environment, as well as the physical, social, political, and economic causes of environmental problems, and strategies to mitigate or manage these issues.

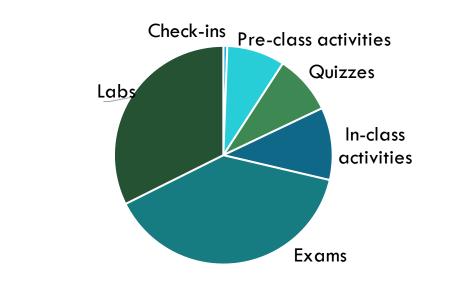
As members of society, we are collectively responsible for the environmental impacts and must also be responsible for making educated decisions when influencing environmental issues, electing policy-making officials, and choosing our personal lifestyles. Information learned in this class should aid you in making these decisions.

Sustainability and Environmental Studies

As the world's population grows, humans are placing a greater demand on the Earth's resources, increasing the volume and extent of pollution, and causing a rapid change in the world's climate, biogeochemical cycles, and ecosystems. This course introduces you to the scientific study of our natural environment, as well as the physical, social, political, and economic causes of sustainability and environmental problems, and strategies to mitigate or manage these issues. As members of society, we are collectively responsible for environmental impacts and must also be responsible for making educated decisions for future generations when influencing environmental issues, electing policy-making officials, and choosing our personal lifestyles. Information learned in this class should aid you in making those decisions.

Grading

Grade	Percent		Points
А А-	935-1000 895-934	 Professor check-ins (2 at 3 pts. each) 	6
B+	865-894	 Pre-class activities (22 at 4 pts. each) Quizzes (9 at 10 pts. each) 	88 90
В В-	835-864 795-834	 In-class activities (22 at 5 pts. each) 	110
C+	765-794	Exams (4)Lab (332 pts. total)	400
C C-	735-764 695-734	 Activities (10 at 20 pts. each) 	200
D+	655-694	Research project (132 pts. total)	132
D F	595-654 0-594	TOTAL	1026



Time Commitment

Each credit hour corresponds to a minimum of 3 hours of work per week. ENVS 131QE is a 5-credit course, which corresponds to 15 hours of work per week.

We will spend ~3 hours together in lecture and 3 hours in lab, leaving you ~9 hours of work to complete outside of class/lab each week.

If you are spending significantly more or less time than this each week, please come talk to me so that we can remedy the situation.

Labs

Environmental Science is a very hands-on field and as such, each week a ~3-hour lab class will be held to better understand the environmental concepts and methods. Attendance is mandatory in lab classes; labs typically cannot be made up. You must earn at least 200 pts from the lab portion in order to pass the course.

Labs are meant to supplement lecture material – to give opportunities for you to apply new knowledge. You will work in research teams. Most of the labs will take place outside – expect to be outside even if conditions are uncomfortable and dress appropriately. As labs supplement lecture material, material covered in labs will appear on your exams, including plant and organism identification.

Pre-Class and In-Class Activities

We will employ a flipped-classroom pedagogy where you will work through readings, videos, podcasts, formative quizzes, etc. before class and participate in discussions and activities during inperson classes (supplemented with lectures).

Pre-class activities will be posted on Canvas and are due before the start of class to ensure that you are prepared to participate in that day's in-class activity. You will always can ask questions about pre-class material during class time.

Some in-class activities will be graded based on correctness and others based on participation and completion. To earn full points on any in-class activity, you need to be an engaged participant. While I will work with you to help you catch up, generally there will be no make-ups for in-class activities.

Exams

There will be 4 exams throughout the course of the semester: 3 during the semester + 1 during the finals time period. Each exam will be cumulative, where ~50% of the material on the exam is new (i.e., what has been covered **since the previous exam**) and ~50% of the material is old (i.e., material that was covered **in the previous exams**).

All 4 exams are worth a total of 400 points, which is 39% of your final grade.

- •Exam 1 worth 70 points, which is 7% of your final grade.
- •Exam 2 worth 90 points, which is 9% of your final grade.
- •Exam 3 worth 110 points, which is 11% of your final grade.
- •Exam 4 worth 130 points, which is 13% of your final grade.

Quizzes

Cooperative quizzes will be administered throughout the semester to check for content understanding and to ensure you are engaging in distributive studying.

- Part 1: You will independently take the quiz.
- Part 2 (optional): You can re-take a similar quiz but will work in a group (not the exact same questions as Part 1, but on the same material).
- Your final score is 75% from Part 1 and 25% from Part 2.
- If you choose not to complete the group quiz, only your grade from Part 1 will count.

Quizzes are administered at the start of class. Late arrivals will not be given additional time and cannot take Part 1 if Part 2 has already or is about to begin.

Canvas Page

All assignments, videos, articles, and additional information will be posted on our class <u>Canvas</u> page.

Communication will be through announcements and Canv as messages.

Check our class Canv as page frequently to stay up to date.



Classroom Philosophy

Our classroom:

- Is an interactive learning
 community
 - Requires our attention
 - Is a safe place

Our interactions should follow these general guidelines:

- Listen respectfully without interrupting
 - Integrate the ideas of others with your own as any conversation moves forward
 - Criticize ideas, not individuals
 - Avoid inflammatory
 language

Course Policies

Attendance

Regular attendance is vital. Both lecture and lab courses will have in-class assignments each day that cannot be made up outside of class. More points are available than are needed to get 100% in class to allow for a few absences (illness, studying, travel, mental health, a great new Netflix show, etc.). Exceptions will be made for extenuating circumstances.

Academic Integrity

The <u>Oxford College of Emory University Honor Code</u> defines various forms of Honor Code violations. All assignments that are turned in for a grade fall under the regulations of the Honor Code and must represent the student's own work.

Accommodations

If you have Academic Accommodations, please let me know as soon as possible so we can communicate with the <u>Office of</u> <u>Accessibility Services</u>.

Religious Holidays

Please communicate your <u>religious holiday</u> needs within the first two weeks of the semester so that we can make an accommodation plan together.

Preferred Name and Gender Pronouns

Dr. Black's preferred gender pronouns are SHE/HER. I will gladly honor your request to address you by an alternate name and/or gender pronoun than your legal name. Please advise me of this early in the semester so that I may make appropriate changes to my records.

Mental Health

Emory University strives to ensure all our students have a rewarding and successful college experience. To that purpose, Emory students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work.



Policy Flexibility

NEVER hesitate to ask for clarification on these policies or about potential exceptions.

I will try to support you in any way I can. If you need something, just ask!



Late Work

All assignments except for the project can be submitted late with a 10% reduction per day.



Cell Phones

Please keep phones out of sight and on silent during classes.

Tentative Schedule

Class	Date	Торіс	Due
1	11-Jan	Course Overview	
	12-Jan	No Lab	
2	13-Jan	Sustainability, Science, and Systems Thinking	
3	18-Jan	Earth Systems	
	19-Jan	Lab: Is it Science? Understanding Evidence	
4	20-Jan	Biogeochemicals and Soil	Quiz 1
5	25-Jan	Population Dynamics	
	26-Jan	Lab: Introduction to Scientific Investigation	
	27-Jan	Class Canceled	
6	1-Feb	Community Interaction and Change	Quiz 2
	2-Feb	Lab: Getting to Know Your Environment - Plant ID and Invasive Species	
7	3-Feb	EXAM !	
8	8-Feb	Biodiversity	
	9-Feb	Lab: Investigating at Oxford House	
9	10-Feb	Ecological Communities	
10	15-Feb	Ethics, Economics, Government, and Environmental Health	Quiz 3
	16-Feb	Lab: Primary Succession on Granite Outcrops	
11	17-Feb	Human Population Growth and Control	
12	22-Feb	Solid Waste	Quiz 4
	23-Feb	Lab: Soil Organism Diversity I	
13	24-Feb	EXAM 2	
14	1-Mar	Agriculture and Ecology of Food	

	2-Mar	Lab: Soil Organism Diversity II	
15	3-Mar	Agriculture and Ecology of Food	Quiz 5
	8-Mar	Spring Break - No Class	
	9-Mar	Spring Break - No Class	
	10-Mar	Spring Break - No Class	
16	15-Mar	Habitat Loss	Quiz 6
	16-Mar	Lab: Ecosystem Services and Wetland Delineation	
17	17-Mar	Environmental Health	
18	22-Mar	Water Quantity - Droughts and Floods	
	23-Mar	Lab: Stream Assessment I	
19	24-Mar	EXAM 3	
20	29-Mar	Water Quality	Quiz 7
	30-Mar	Lab: Stream Assessment II	Hypothesis, Prediction, Methodology
21	31-Mar	Tri-State Water Wars	
22	5-Apr	Energy	Annotated Bibliography
	6-Apr	Lab: Group Research Projects	
23	7-Apr	Energy	Quiz 8
24	12-Apr	Energy	
	13-Apr	Lab: Group Research Projects	Project Check I
25	14-Apr	Climate Change	
26	19-Apr	Climate Change	Quiz 9
	20-Apr	Lab: Climate Change	
27	21-Apr	Course Wrap-Up	
	22-Apr	ENVS Poster Symposium	Research Reflection
	TBD	EXAM 4	EXAM 4