Nature, the Environment, and Ecology
Biology 1360
Fall 2025

Instructor Information: Marsha Williams, Lecturer
Department of Biology
The University of Texas at Tyler
3900 University Blvd, Tyler, TX 75799
Office: HPR 107

Office hours: T Th 9:30 – 11:00 a.m., or by appointment
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Class hours: T Th 11:00 am – 12:20 pm
Room RBS 2019

Course Description: This course fulfills the STEM core requirement by offering students a broad overview of the field of environmental studies. This course emphasizes local, regional, and global concerns and welcomes students from all areas. This course satisfies the STEM requirement of the Core Curriculum.

Student Learning Objectives: After this class you should be able to…

- Describe and understand how humans depend on the natural environment and the ways we exploit or steward those resources.
- Describe the concept of a natural ecosystem.
- Describe and understand human impacts, such as pollution, climate change, population growth, etc., on our environment.
- Learn how humans can sustainably use and develop the earth's natural resources.
- Understand the significance of environmental science to your daily life and apply the knowledge acquired in making educated decisions as a member of society.

Evaluation and Grading:

	Percentage of Grade	**Grade Distribution**	
Exam 1	20	**Percentage**	**Grade**
Exam 2	20	90-100%	A
Exam 3	20	80-89%	B
Final	25	70-79%	C
Participation	15	60-69%	D
		50-59%	F
Total	**100%**		

Recommended Textbook: Cunningham, W.P., M. A. Cunningham and C. M. O'Reilly. 2023. **Environmental Science: Inquiry and Applications. Tenth edition.** McGraw-Hill Education, New York, NY.

Attendance: Attendance is **essential** to success in this class. If you miss class, it is your responsibility to contact another student to get notes and other announcements made during the lecture. Be aware that if you do not attend the lecture on a regular basis, you will **not** be able to make an A in the class as Participation (e.g., attendance, in class activities, etc.) is worth **15%** of the final grade.

Class Content and Schedule

Understanding Our Environment (Ch. 1), Environmental Systems: Matter, Energy, and Life (Ch. 2), Evolution, Species Interactions, and Biological Communities (Ch. 3), Human Populations (Ch. 4), Biomes and Biodiversity (Ch. 5), Environmental Conservation (Ch. 6)

September 25th - Exam 1 (covers Ch. 1 – 6 and in class activities/assignments)

Food and Agriculture (Ch. 7), Environmental Health and Toxicology (Ch. 8), Climate (Ch. 9), Air Pollution (Ch. 10), Water Resources and Pollution (Ch. 11)

October 23rd - Exam 2 (covers Ch. 7-11 and in class activities/assignments)

Environmental Geology and Earth Resources (Ch. 12), Energy (Ch. 13), Solid and Hazardous Waste (Ch. 14), Economics and Urbanization (Ch. 15), Environmental Policy and Sustainability (Ch. 16)

November 20th - Exam 3 (covers Ch. 12-16 and in class activities/assignments)

Thursday, Dec 9th 11:00 a.m. - 1:00 p.m. - Final Exam (Comprehensive)

Important Dates:

Labor Day: September 1st: no classes
Nov 3rd: Last Day to Drop with a "W"
November 24th – 28th: Thanksgiving break, no classes
December 9th: Final Exam begins at 11:00 a.m.

Exam policy: There will be three regular exams and one final exam. The final exam will be cumulative, meaning that it will cover everything presented during the entire semester, including the new material since the last exam. To dispute a wrong answer on any exam, write a few sentences explaining why you think you should get credit. Disputes must be submitted within one week after the exam, must be typed, and must be handed to me in person. Phones and computers must be put away during exams and ball caps must be removed or turned backwards.

Make-up Exams: If you have a valid reason, **with documentation**, I will offer you a make-up exam. Valid excuses include sporting or other university-related events, a death in the family, or serious illness requiring doctor's notes.

Canvas: Students should log onto Canvas **ASAP** and carefully read all announcements. Canvas and student email should be checked **DAILY** for new announcements or messages. On Canvas you will find lecture outlines and other material that will be very helpful for you as you take this course. All course grades will be uploaded to Canvas so students will be able to view and calculate their current course grade at any time.

Artificial Intelligence (AI) Statement (compiled from the Clemson University website (https://media.clemson.edu/otei/documents/AI-use-statements.pdf) and Dr. Bill, UT Tyler Biology Dept.)**:**

The use of artificial intelligence (AI) tools is integrated into the work for this course. AI tools will be used intentionally to support course learning, and learning outcomes include developing your ability to use these tools effectively. Your ethical use of AI tools must be documented and cited, and you must be able to demonstrate understanding of the content of any work submitted. Please be aware that you are accountable for the responsible, ethical use of these tools. Concerns regarding potential violations of this policy will be reviewed fairly through the appropriate university academic integrity process.

Remember, AI is a tool, just like a pencil or a computer. However, unlike most tools you need to acknowledge using it. Pay close attention to whatever information you use in your own work that is produced from AI and explain how/what you used at the end of assignments. Basic attribution rules still apply. Cite everything,

i. Use your prompt as the article title in your citation manager.
ii. The software name (Open AI, ChatGPT, etc.) should be cited as the Author
iii. The date that you access the query can be the publication date – Day, Month and year.
iv. Copy and paste the website address for future access.

Some caveats of using AI are discussed below.

The quality of the prompts used is critical to generating successful AI results. If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to obtain better outcomes. This will take practice, and we will strive to improve our skills over the course of this semester.

Don't automatically trust the information the system compiles for you. Assume it is incomplete or inaccurate, until you verify the information with trusted sources. AI works best as a tool when you already have some understanding of the topic being researched. Please note you must always verify the sources that the AI platform provides.

Use your best judgement to determine if/where/when to use these tools. They don't always make products easier and/or better. You should also realize that most of these tools are not designed to work with the scientific literature, rather they rely heavily on popular works and older works that are open to the public; therefore, content and style may be worse than what you can do yourself.