



**GEOL 1405.101C3**  
**Environmental Science**  
**Spring 2025**  
**TTH 9:30am-12:20pm STEM 307**

**Instructor Information: Sheena Abernathy**

E-mail: [sabernathy@com.edu](mailto:sabernathy@com.edu) (preferred method of communication)

Office Telephone: (409)933-8330

**Student hours and location:**

**Office Hours:** Monday 10:00am-1:30pm, Tuesday 8:00am-9:30am, Wednesday 8:00am-9:00am, Thursday 8:00am-9:30am, Or by appointment

**Virtual Student Hours:** During all of my student hours I will be available in person or virtually. I will respond to emails as quickly as they come in and I am able to during those times. I will be available to meet with you through Microsoft Teams, but you will need to contact me ahead of time to schedule the meeting.

**Office:** STEM 325-39

**Required Textbook, Materials, and Resources:**

• **Textbooks**

- *Environment The Science Behind the Stories* 7<sup>th</sup> ed.

• **Required Materials**

- Scantrons (4) – 882E given to the professor by Thursday, January 23rd in class. (please do **not** put names on the scantrons)

**Required Online Resources**

- COM Brightspace/D2L: <http://com.brightspace.com>. COM Brightspace/D2L will be used for online activities and more. All the class resources are available through Brightspace/D2L.

**Computer Requirements**

It is your responsibility to have access to a computer with the following resources:

- Internet access through a wired Ethernet connection
- A contemporary web browser capable of viewing flash video (Chrome and Firefox usually work best)
- Java installed and updated
- COM e-mail account
- Microsoft Office (COM offers free Office 365 access to students)
- A PDF reader

You are responsible for maintaining your own online access to the course. If your computer does not allow you to complete the assignments in the course, please use the computers available on campus. Be aware that the college computers are only available during the hours of operation for the computer labs and library. It is up to you to be aware of those times and get all assignments turned in on time.

**Course Description:**

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Prerequisite: TSIA2 945-990 ELAR/CRC test AND 5 or higher on Essay OR 910-944 on CRC with 5-6 on Diagnostic Test + 5 or higher on Essay or [IRW 0320](#) with a grade of "C" or better.

**Course Requirements:**

Lectures/Labs – each week we will be covering material during class time and this material will involve lecture and/or lab each day.

In class work/homework – throughout the semester we will have various in class activities that are linked to the course material to help reinforce the information covered in lecture.

Infographic – each student will work with a group of other students (minimum of 3 students) to develop an infographic related to one of the various topics covered in class. The infographic will be graded on content, teamwork, and artistic style.

Lecture Exams and Comprehensive Final Exam – both lecture exams and the final exam will be taken during class time and will consist of multiple choice, T/F, diagram identification, and short answer style questions.

Lab Activities – you will be completing lab activities in class, and these are graded activities. These labs will be what your lab exam is based off, so it is crucial that you attend lab to complete the various lab activities.

Lab Practical – the lab practical is an exam that cover the various lab experiments that are carried out and will consist of multiple choice, fill-in-the-blank, short answer, and identification of results style questions.

## **Determination of Course Grade/Detailed Grading Formula:**

### **Lecture Grade (75%):**

1. Lecture exams (300 points) – A total of three lecture exams, each worth 100 points, will be given throughout the semester during the face-to-face lab period (see Tentative Course Outline).
2. In class work/homework (135 points) – Various in class and/or homework assignments will be given throughout the semester.
3. Practice Quizzes (90 points) – for each exam, you will have a practice quiz to be completed in D2L.
4. Comprehensive Final Exam (150 points)– covers ALL the material presented in lecture and assigned as reading throughout the semester.

### **Laboratory Grade (25%):**

1. Lab Daily Grade (100 points) – each lab will have activities to be completed for a portion of your lab daily grade.
2. Lab Project (25 points) – a lab project will be completed during the semester based on information obtained from the Biogeochemical Cycles lab activity
3. Lab Practical (100 points) – lab practical will be given at the end of the semester covering material from previous labs.

## **Determination of Course Grade**

### **Lecture Grade (75%)**

Lecture exams	300 points
In class work/homework	135 points
Practice Quizzes	90 points
Comprehensive Final Exam	150 points

### **Laboratory Grade (25%)**

Lab Daily Grade	100 points
Lab Project	25 points
Lab Practical	100 points

## **Grading Scale:**

Final grades assigned for this course will be based on total points earned and are assigned as follows:

<b>Letter Grade</b>	<b>Grade Average</b>
<b>A</b>	<b>89.5% - 100%</b>
<b>B</b>	<b>79.5% - 89.4%</b>
<b>C</b>	<b>69.5% - 79.4%</b>
<b>D</b>	<b>59.5% - 69.4%</b>
<b>F</b>	<b>0 – 59.4%</b>

## **Lab Science Statement**

The grade for this course consists of both a lecture and laboratory component. Students must earn 70% or better in the laboratory component to successfully pass the course. Earning less than 70% in the laboratory component will result in an F for the course regardless of the lecture grade. Passing the laboratory component and failing the lecture component will not guarantee a passing grade for the course. Deviations from this policy will be at the sole discretion of the instructor.

**Late Work, Make-Up, and Extra-Credit Policy:** Any deviations from the policies described below are at the sole discretion of the instructor.

**Late Work Policy:** The course is designed to accommodate some of life's mishaps, difficulties, or tragedies by providing extended deadlines for selected assignments. In those cases, there is a deadline extension after the initial deadline. After the extended deadline has passed, the assignment is closed, and the link may be removed. Expect that no additional time will be provided.

- Practice Quizzes have an extended deadline of two days that results in a 15% loss of points. After missing the initial deadline, the maximum grade is 85%. Please use the course outline to help schedule your time for the course to assure that you meet the assignment and assessment deadlines.
- Lecture Exams, Infographic, and Lab Practical are scheduled to be completed in class and have no extended deadline.
- Labs have no extended deadlines. Labs will be completed in class and students that are not in class will not be allowed to complete the activity.
- In class work/homework if work is given during class to be completed in class, there is no extended deadline and students that are not in class will not be allowed to complete the activity. If homework is assigned, students will have ample time to complete the work and no extended deadlines are provided.

## **Make-Up Policy:**

- Practice Quizzes do not have a make-up policy due to the extended deadline.
- Lecture Exams/Lab Practical: Should you anticipate an absence on an exam day you must contact your instructor PRIOR to the absence. Your situation will be evaluated and you may be allowed to take a make-up exam. Make-up exams will be allowed for a death in the family or a documented student illness. You must provide legitimate proof for your excuse. The

make-up exam MUST be taken within one week of the original exam date. Missed exams will not be allowed without documented evidence.

- **Labs:** There are NO MAKE-UP LABS. Arriving late to lab may result in not receiving full credit for completing the lab. You are still responsible for the material covered in lab and it is YOUR responsibility to obtain the information from a classmate.
- **In class work/homework** If you miss class on the day an assignment is due, you will receive a ZERO for the missed assignment. To prevent a grade of ZERO, you can scan and email the assignment to your instructor on the same day the assignment is due. If you are absent for an in-class assignment, there are no make-ups, and you will receive a ZERO.

**Extra-Credit Policy:** During the semester there will be opportunities for extra credit. Students are responsible for submitting any extra credit work by the due date and no late work for extra credit will be accepted.

**Attendance Policy:** Students are expected to attend all class sessions as listed on the course calendar. These attendance policies apply to both lecture and lab. Attendance will be taken at the beginning of each class. Leaving early from class (without approval from the instructor) may result in an absence for that day. IF you do have to miss class, course materials will be posted on Brightspace/D2L, but it is your responsibility to obtain any additional notes from a classmate.

**Laboratory Attendance Policy:** This laboratory is designed to support the information provided by the lectures and online materials. This lab course is an introduction to fundamental environmental science, that covers important topics in each lab meeting. Labs are designed to last most of the lab period, therefore expect to be in lab for the full time. Arriving late to lab may result in not receiving full credit for completing the lab. You are responsible for the material covered in lab and it is YOUR responsibility to obtain any notes from a classmate. **Attendance:** Lab attendance and participation are required and directly affect your weekly lab grade. Any deviations from this policy are at the sole discretion of the instructor.

**Communicating with your instructor:** ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. Responses can be expected within 24 hours during the week or 48 hours if it is the weekend.

Student Learner Outcomes	Core Objectives	Assessed Via this Assignment
1. Recognize, describe, and quantitatively evaluate earth systems, including land, water, sea, and atmosphere, and how these function as interconnected ecological systems.	Empirical and Quantitative	Exams
2. Assess environmental challenges facing humans caused by their interaction with the physical and biological environment (e.g. population growth, energy resources, food production, pollution, water and resource use).	Critical Thinking	Exams
3. Acquire a scientific vocabulary and critical thinking skills related to environmental science.	Critical Thinking	Exams
4. Assess the effectiveness and feasibility of environmental policy and its impacts.	Critical Thinking	Exams
5. Apply the scientific method to environmental investigation.	Communication	Lab Activity
6. Measure and observe aspects of the environment (e.g., air, water, soil) through sampling and sample analysis.	Empirical and Quantitative	Lab Activity
7. Develop an assessment plan for an environmental case study.	Critical Thinking	Lab Activity
8. Demonstrate the collection, analysis, and reporting of data.	Communication	Lab Activity
9. Students will demonstrate the ability to work effectively with others to support and accomplish a shared goal, while recognizing and respecting different viewpoints.	Teamwork	Lab Activities

**Academic Dishonesty:** Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

**Plagiarism:** Plagiarism is using someone else’s words or ideas and claiming them as your own. Plagiarism is a very serious offense. Plagiarism includes paraphrasing someone else’s words without giving proper citation, copying directly from a website and pasting it into your paper, using someone else’s words without quotation marks. Any assignment containing any plagiarized material will receive a **grade of zero** and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

**Link(s) to resource(s) about avoiding plagiarism:** <https://owl.english.purdue.edu/owl/resource/589/01/>

**Student Concerns:** If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Dean of Academic Programs, Dr. Barney at (409)933-8727 or [rbarney@com.edu](mailto:rbarney@com.edu).

**Classroom Conduct Policy:**

College of the Mainland requires that students enrolled at COM be familiar with the Standards of Student Conduct, which can be found in the on-line Student Handbook. <https://www.com.edu/student-services/student-handbook.html>. Students should act in a professional manner at all times. Disruptive students will be held accountable according to college policy. Any violations of the Code of Conduct will result in a referral to the Office for student Conduct and may result in dismissal from this class.

**Behavioral Expectations** Each student is entitled to an environment conducive to learning. Any situation that prevents students from learning or the instructor from teaching is considered to be a disruption. Please be respectful of your fellow students and the instructor by adhering to the following:

1. Cell phones can be used sparingly during class, but if the use begins to be a disruption to yourself, other students, or the instructor, you will be asked to put the device away. Certain devices can be used to view content on the internet; however, this is at the discretion of the instructor. Laptops are ONLY permitted during class to take notes. Surfing the internet or checking email from your laptop is not permitted. Students are not permitted to have earbuds, headphones, etc. during lecture time. **During exams, no electronics will be allowed out. Items not allowed include, but are not limited to, cell phones, laptops, tablets, ear buds, headphones. If the student has any of these devices out during an exam, the exam will be taken from the student, and they will receive a zero for that exam.**
2. Students can be removed from the class if they are exhibiting disruptive behavior as deemed by the instructor. Repeated incidents will result in automatic withdrawal from the class. Students who display this conduct will be removed from the class and a Conduct Referral Form may be submitted to the Dean of Students.

**Course policies are subject to change.** It is the student's responsibility to check Brightspace/D2L for corrections or updates to the syllabus. Any changes will be posted in Brightspace/D2L.

### Spring 2025 Tentative Course Outline

Week	Date	Topic/Chapter Reading	Due Dates for Activities/Assignment(s)
1	1/14	Intro to Course Chapter 1-Science and Sustainability	○ 1/16- Student Info Sheet Due ○ 1/16- About Me Discussion Board Due ○ 1/19- Beginning of Semester Thoughts Discussion Due
	1/16	Chapter 1 cont'd Chapter 2-Earths Physical Systems Lab Safety	
2	1/21	Chapter 2-Earths Physical Systems cont'd	○ 1/23-4 Scantrons Due to Professor ○ 1/26-Nutrient Cycles Handout Due
	1/23	Chapter 5-Environmental Systems and Ecosystem Ecology (Part) Lab 1-Biogeochemical Cycles (+ <i>Lab Project</i> )	
3	1/28	Chapter 3-Evolution and Population Ecology	
	1/30	Chapter 11-Biodiversity Lab 2-Biodiversity Lab	
4	2/4	Chapter 4-Species Interactions and Community Ecology	○ 2/9-Biomes Handout Due ○ 2/9-Practice Quiz #1 Due
	2/6	Chapter 5-Environmental Systems and Ecosystem Ecology (Part) Lab 3-Changing Ecosystems	
5	2/11	Lab 1 Lab Project Completed	○ 2/16-Biogeochemical Cycles Lab Project Due
	<b>2/13</b>	<b>EXAM 1 (Ch.1-5, 11)</b>	
6	2/18	Chapter 6-Ethics, Economics, and Sustainable Development	
	2/20	Chapter 7-Environmental Policy Lab 4-Tragedy of the Commons	
7	2/25	Chapter 8-Human Population	○ 2/25-How Many People Video Questions Due
	2/27	Chapter 14-Environmental Health and Toxicology Lab 5-Ecological Footprint	
8	3/4	Chapter 19-Fossil Fuels and Energy Efficiency	○ 3/9-Practice Quiz #2 Due
	3/6	Chapter 20-Conventional Energy Alternatives Chapter 21-Renewable Energy	
9	3/11	Lab 6-Renwable/Nonrenewable Energy	
	3/13	<b>EXAM 2 (Ch.6-8, 14, 19-21)</b>	
SPRING BREAK			
10	3/25	Chapter 9-Underpinnings of Agriculture	○ 3/30-Soil Triangle Handout Due
	3/27	Lab 7-Soils Discuss Infographic Group Assignment	
11	4/1	Chapter 15-Freshwater Systems	○ 4/3-Infographic Topic Due ○ 4/6-Watershed Handout Due
	4/3	Lab 8 – Pond Ecology	
12	4/8	Chapter 16-Marine and Coastal Systems	○ 4/10-Coral Bleaching Activity Due
	4/10	Lab 9-Water Quality	
13	4/15	Chapter 17-Atmosphere, Air Quality, and Pollution Control	
	4/17	Lab 10-Air Quality	
14	4/22	Chapter 18-Global Climate Change	○ 4/27-Practice Quiz #3 Due ○ 4/27-Infographic Due
	<b>4/24</b>	<b>LAB PRACTICAL</b>	
15	4/29	End of Semester Wrap-up	○ 5/4-End of Semester Wrap-up Discussion Due
	<b>5/1</b>	<b>EXAM 3 (Ch.9, 15-18)</b>	
16	<b>5/6</b>	<b>COMPREHENSIVE FINAL EXAM</b>	
	5/8	Grade Review Day	

## Institutional Policies and Guidelines

**Grade Appeal Process:** Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook [https://www.com.edu/student-services/docs/Student\\_Handbook\\_2024-2025\\_v2.pdf](https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf). *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

**Academic Success & Support Services:** College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

**ADA Statement:** Any student with a documented disability needing academic accommodations is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: [AccessibilityServices@com.edu](mailto:AccessibilityServices@com.edu)

Location: COM Doyle Family Administration Building, Student Success Center

**Textbook Purchasing Statement:** A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Withdrawal Policy:** Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1<sup>st</sup> 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2<sup>nd</sup> 8-week session is April 30.

**FN Grading:** The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

**Early Alert Program:** The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

### Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at [deanofstudents@com.edu](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto:communityresources@com.edu).

### Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.