



GEOL-1405-221CL-FA2020

Environmental Science

Fall 2021

Monday: 6:00 pm – 8:50 PM

Wednesday: 6:00 pm – 8:50 PM

Instructor Information:

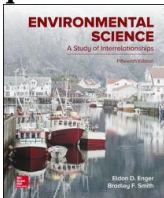
Name: Meghan Billiot
Email: Mbilliot2@com.edu
Phone: 409-933-8330

Student hours and location:

STEM #307

Office Hours by Appointment

Required Textbook/Materials:



This course is First Day Access and ebook is included in course fee. See below
The textbook listed below is **required** for this course. "*Environmental Science: A Study of Interrelationships*" (15th edition) by Enger and Smith (McGraw-Hill). Digital book via *Connect* ISBN: 1260134709

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.

Course Description: A survey of the forces, including human forces 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: The following TSI scores or equivalent developmental course: TSI Reading 351 and TSI Math 350.

Course requirements: The course consists of a textbook, in-class labs, and one required field trip. There will also be one or two additional field trips scheduled during class time to be announced in class. Your assessment of the material will be through exams and lab practicals. The following contains more details about each:

1. **Lecture Exams:** Exams cover lecture material, readings, and discussions covered during lecture. There are four exams worth 100 points each, including the final

exam which is 50% comprehensive. The format for the exam is multiple choice and will be online.

2. **Lab Practicals:** A lab practicals are usually hands-on exam that covers only what we have worked on in the lab. However, these lab practicals will be virtual also. Although, studying class material will help you in the lab as there is an overlap of the material. There are 3 lab practicals worth 100 points each.
3. **Lecture and Lab Assignments:** There will be both Lecture, Lab and Project based activities and assignments. Each Assignment will tie into the work you will be doing weekly, as well as the Final Project. These will flow through the class so that at the end of the semester, you will have all the required elements for the Final Project.
4. **Quizzes:** There will be 20 Quizzes tied to the textbook and accompanying PowerPoints.
5. **Discussions:** There will be 6 Discussions. Each Discussion will have its own Topic. The initial individuals post will be due by Thursday at 11:59 pm of the Wk these will be assigned. You will be required to respond to a minimum of 2 of your classmates no later than the following Sunday at 11:59 pm.
6. **Projects:** There will be two projects. The midterm project will be the Biome Project at 50 points. The last will be the Final Project and in PowerPoint or Prezi will be due the 2nd to last Wk of the semester on Sunday 11:59 pm.

Determination of Course Grade/Detailed Grading Formula:

The grade for this course consists of both a lecture and laboratory component. Students must earn a 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.

Lecture Exams (4)	100 Points each x 4 =	400 Points
Lab Practicals: (2) (Lab component)	75 Points each x 2 =	150 Points
Biome Project (1) (Lab component)	50 Points Each x 1 =	50 Points
Assignments (10) (Lab component)	10 Points Each x 10 =	100 Points
Quizzes (5)	20 points Each x	100 Points
Discussions (5)	5 = 20 points Each x 5 =	100 Points
<u>Final Project PowerPoint (Lab component)</u>	<u>100 Points Each x 1 =</u>	<u>100 Points</u>
		1000 Total Points

Late Work, Make-Up, and Extra-Credit Policy:

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Recognize, describe, and quantitatively evaluate earth systems, including the land, water, sea, and atmosphere, and how these function as interconnected ecological systems.	Empirical and Quantitative Skills	Final Exam Final Project Quizzes
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 Skills	Brownwood and Google Earth Satellite Lab and Assignments
3. Acquire a scientific vocabulary and critical thinking skills related to environmental science.	Critical Thinking Skills	Lecture Exam 1 Quizzes
4. Assess the effectiveness and feasibility of environmental policy and its impact.	Critical Thinking Skills	Lecture Exam 3
5. Apply the scientific method to environmental investigation.	Communication Skills	Biome/Ecosystem Project
6. Measure and observe aspects of the environment (e.g., air, water, soil) through sampling and sample analysis.	Empirical and Quantitative Skills	Lab Practical 3 Quizzes
7. Develop an assessment plan for an environmental case study.	Critical Thinking Skills	Discussions and Final Project
8. Demonstrate the collection, analysis, and reporting of data.	Communication Skills	Lab Practical 2 Quizzes
9. Demonstrate the ability to work effectively with others to support and accomplish a shared goal, while recognizing and respecting different viewpoints.	Teamwork	Discussions and Final Project

You will have 2 weeks from the original date to complete the make-up. There will be a 20 point deduction applied the work turned in late. There is no make-up for Lab Practical 3 or the Final Exam. If your illness or emergency entails missing more than one Wk of classes, then we will need to discuss a plan to catch you up on all the work you miss.

Attendance Policy:

Attendance and attention to the class is reciprocal to effort. Points are not deducted for lack of attendance. You are an adult and expected to attend lectures and labs to pass this class. I understand that “life happens” and you will miss some classes. I expect you to notify me of your absence, by email or text. With notification, I will consider the absence to be “excused” and will not count it against you.

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. (Faculty may add additional statement requiring monitoring and communication expectations via Blackboard or other LMS)

Academic Dishonesty: Any incident of academic dishonesty 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 disciplinary 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 a 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 disciplinary action. Examples of plagiarism include:

1. Submitting someone else’s work with or without their knowledge
2. Paraphrasing or copying from a source (such as the internet, or books, or journals/magazines) without proper citation
3. Turning in a paper that was prepared through a website service
4. Copying materials straight from source text (even if it is from the internet), providing the appropriate citation (e.g. Works Cited or Bibliography) but leaving out quotation marks or in-text citation.

Link to resources about ways to avoid, or check for, plagiarism:

<http://en.writecheck.com/ways-to-avoid-plagiarism/>
<http://www.duplichecker.com/> <http://www.plagiarismchecker.com/>

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(s) with me, you continue to have your concern(s) please contact Sheena Abernathy, Science Department Chair, at sabernathy@com.edu or (409) 933- 8330.

Course outline: (include calendar with lecture topics, due dates)

2021	Wk.	Lecture Topic (Ch.)	Lab Activities and Assignments
Aug 23-29	1	LS Chap 1: Environ. Interrelationships?	<ul style="list-style-type: none"> • Intro to class • Intro to Lab and Maps • <i>Discussion 1: Introduce yourself: Why you chose your Article Topic, Provide 2 questions you would like to study further,</i> Intro of Semester Project • Chapter assignments
Aug 30-Sep 5	2	LS Chap 2: Environmental Ethics LS Chap 3: Environmental Risk	<ul style="list-style-type: none"> • Topographic Maps Continued • Lab: Topo / Aerial / Google Earth Intro • Chapter assignments
Sep 6-12	3	LS Chap 4: Interrelated Scientific Principles	<ul style="list-style-type: none"> • <i>Discussion 2: What Made you Curious?</i> • Lab: Topo / Aerial / Google Earth • Chapter assignments

Sep 13-19	4	Exam 1: Ch. 1-4/ Lab Exam Topographic Map	
Sep 20-26	5	LS Chapter 5: Interactions: Environments & Organisms	<ul style="list-style-type: none"> • Lab: Intro Minerals and Activities • Assignments • Intro to Biome/Ecosystem Project • Chapter assignments
8/27-10/3	6	LS Chapter 6: Kinds of Ecosystems and Communities LS Chapter 7: Populations: Characteristics and Issues	<ul style="list-style-type: none"> • Lab: Rocks and Ores • Chapter assignments
10/4-10	7	LS Chap. 11: Biodiversity Issues	<ul style="list-style-type: none"> • Minerals, Rocks and Ores Review • Intro to Biome/Ecosystem Project • Chapter assignments
10/11-17	8	Exam 2: Ch. 5-7, 11 Complete any missing labs and project work Lab Exam: Minerals, Rocks and Ores	
10/18-24	9	LS Chap. 8: Energy and Civilization: Patterns of Consumption LS Chap. 9: Nonrenewable Energy Sources	<ul style="list-style-type: none"> • <i>Discussion 3</i>: Historical Discoveries and Inventions • Alternative Fuels Great Energy Debate • Chapter assignments
10/25-31	10	LS Chap. 10: Renewable Energy LS Chap. 12: Land-Use Planning	Lab: Presentations of Alternative Fuel Chapter assignments
11/1-7	11	LS Chap. 13: Soil and its Uses LS Chap. 14: Agricultural Methods and Pest Management	<ul style="list-style-type: none"> • Lab: Soil Introduction • Lab: Soil Quality and Testing • Chapter assignments
11/8-14	12	Exam 3: Ch: 8-14 (not 11) Lab Exam Presentation of Alternative Fuel and Soil Questions	
11/15-21	13	LS Chap. 15: Water Management LS Chap. 16: Air Quality Issues	<ul style="list-style-type: none"> • Lab: Water Quality • <i>Discussion 4</i>: Climate Change • Chapter assignments
11/22-28	14	LS Chap 17: Climate Change LS Chap. 18: Solid Waste Management and Disposal	<ul style="list-style-type: none"> • Project: Biomes Due • Chapter assignments • November 19, last day to drop "W"
11/29-12/5	15	LS Chap 19: Environ. Regulations: Hazardous Waste, LS Chap 20: Environmental Policy	<ul style="list-style-type: none"> • Lab: Waste management • <i>Discussion 5</i>: • Final Projects Due •
12/6-10	16	FINAL EXAMS	

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://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.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.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 1st 8-Wksession is October 6. The last date to withdraw from the 16-Wksession is November 19. The last date to withdraw for the 2nd 8-Wksession is December 2.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N 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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.