

# GEOL 1405 - 102CL Environmental Science Fall 2022 MW 8:00am-10:50pm STEM 307

**Instructor Information: Christopher Hall** 

E-mail: chall23@com.edu (preferred method of communication)

Office Telephone: (409)933-8328

#### **Student hours and location:**

Office Hours: Monday 2-5

Wednesday 2-4:30 Friday 8-10 online

Office: STEM 325-37

#### Required Textbook, Materials, and Resources:

## **Required Textbooks**

• <u>Environmental Science: A Study of Interrelationships</u> e-text with Connect 16<sup>th</sup> ed. <u>Note</u>: The e-book and Connect are purchased at the time of registration, and you will gain access to the online materials once you are in Brightspace/D2L when classes begin. In addition, you will have access to the eBook through VitalSource.

## **Required Materials**

• Scantrons (4) – 882E. Purchase before the first exam. I will not provide these during exams.

### **Required Online Resources**

- COM Brightspace/D2L: <a href="http://com.brightspace.com">http://com.brightspace.com</a>. COM Brightspace/D2L will be used for online activities and more. All of the class resources are available through Brightspace/D2L.
- Reliable Internet. Connect with eText Login will be completed through Brightspace/D2L.

#### **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:**

<u>Lectures/Labs</u> – each week we will be covering material during class time and this material will involve lecture and/or lab each day. <u>Connect</u> – you will have weekly assignments to be completed for credit. There are also assignments that are for practice and do not count towards your grade. These assignments can be completed to help prepare you for exams.

<u>In class work/homework</u> – 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.

<u>Lecture Exams and Comprehensive Final Exam</u> – 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.

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

<u>Lab Practical</u> – 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 (30%) 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 (15%) Various in class and/or homework assignments will be given throughout the semester.
- 3. Connect Assignments (15%) you will have various homework assignments that cover topics discussed in class.
- 4. Comprehensive Final Exam (15%)— covers ALL the material presented in lecture and assigned as reading throughout the semester. You may use the Comprehensive Final score to replace your lowest lecture exam for the semester, if it is higher than your lowest score.

#### Laboratory Grade (25%):

- 1. Lab Daily Grade (5%) each lab will have activities to be completed for a portion of your lab daily grade.
- 2. Lab Quizzes (10%) lab quizzes will be given that cover material from previous lab activities
- 3. Lab Practical (10%) one 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	30%
Connect Homework	15%
In class work/homework	15%
Comprehensive Final Exam	15%
Laboratory Grade (25%)	
Lab Daily Grade	5%
Lab Quizzes	10%
Lab Practical	10%

#### **Grading Scale:**

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

Letter Grade	Grade Average
A	89.5% - 100%
В	79.5% - 89.4%
С	69.5% - 79.4%
D	59.5% - 69.4%
F	0 – 59.4%

#### **Lab Science Statement**

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.

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.

- <u>Connect Assignments</u> have an extended deadline that results in a 10% loss of points for each day the assignment is late. After missing the initial deadline, the maximum grade is 90%. 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 and Lab Practical are an exception and have no extended deadline.
- <u>Labs</u> will be due on the next weeks lab meeting, allowing students to improve or add to their in-class work. Students that are not in class will not be allowed to complete the activity.

- <u>In class work/homework</u> if work is given during class to be completed <u>in class</u>, 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:

- Lecture Exams: Should you anticipate an absence on an exam day you must contact your instructor by email or in person PRIOR to the absence. Your situation will be evaluated by your instructor and at the discretion of your instructor 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 illness. You must provide legitimate proof for your excuse in the case of missing an exam. Only one make-up exam is allowed during the semester. The make-up exam MUST be taken at the end of the semester, after you complete all your other course work.
- No lab exams can be made up. If you have a legitimate excuse, as outlined above, then we will discuss your options should the situation arise.
- <u>In class work/homework</u> 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.
  - <u>Assignments</u>: 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 miss lab, you may not submit that lab at a later date without an excused absence.
  - Online Assignments: Connect Assignments do not have a make-up policy due to the extended deadline feature.

    Ample time is given for each student to complete the online assignments (Connect Assignments, etc.). Failure to meet these deadlines will result in a ZERO for the assignment and no extra time will be allowed to make-up the assignment, past the extended deadline per 'Late Work Policy'. In the event of an internet outage or other internet issue, at the discretion of your instructor, your assignment may be reset to allow you to take it again. Contact must be made with your instructor within 24 hours of the problem.
  - <u>Labs</u>: There are NO MAKE-UP LABS. Arriving late to lab will 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 contact your instructor to inform them of your absence.

**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.

<u>Laboratory Attendance Policy:</u> This laboratory is designed to support the information provided by the lectures and online materials. This lab course is an introduction to fundamental biology, 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.

<u>Plagiarism</u>: 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 <u>grade of zero</u> and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

<u>Link(s) to resource(s) about avoiding plagiarism:</u> 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 Chair of the Science Department, Sheena Abernathy. <a href="mailto:sabernathy@com.edu">sabernathy@com.edu</a>.

# **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. <a href="http://www.com.edu/student-services/student-handbook.php">http://www.com.edu/student-services/student-handbook.php</a>. Students should always act in a professional manner. 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 phone use during class is not permitted. If I see repeated violations of this rule, you will be asked to leave the class and you will not get credit for that day's work. Laptops are ONLY permitted during class to take notes. *First offense*: a warning and you will be allowed to stay in class.

- a. Additional Offenses: you will be asked to leave the class/lab and receive an absence for the day.
- b. During exams, no electronics will be allowed out. 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. Due to safety reasons, friends, spouses, and children are not allowed in lab.
- 3. 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 required to meet with Kris Kimbark, Associate VP for Student Success and Conduct, before being allowed to return to class if the instructor allows it.

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.

# **Fall 2022 Tentative Course Outline**

Week	Date	Topic/Chapter Reading	Due Dates for Activities/Assignment(s)
1	8/22	Intro to Course	O8/24-Connect Orientation Video, SmartBook 2.0
		Chapter 1-Environmental Interrelationships	Overview, Chapter 1 SmartBook, Student Info Sheet, and
	8/24	Chapter 1 cont'd	About Me Discussion Board Due
		Lab Safety	O8/26-Chapter 1 Assignment Due
2	8/29	Chapter 2-Environmental Ethics	O8/29-Chapters 2 and 3 SmartBook Due
	0, 2,	Chapter 3-Risk, Economics, and Environmental	_
	8/31	Concerns	○9/2-Chapters 2 and 3 Assignments Due
		Lab 1- Nutrients in Estuaries. HABS	
3	9/5	NO CLASS	○9/7-Chapter 4 SmartBook Due
	9/7	Chapter 4-Interrelated Scientific Principles	○9/9-Chapter 4 Assignment Due
		Lab 2 – Experimental Design. SMOG	Con Chapter Trisbighment Buc
4	9/12	Lecture Catch-up/In Class Activity	
	9/14	EXAM 1 (Ch. 1-4)	
5	9/19	Chapter 5-Interactions: Environments and	○9/19-Chapter 5 SmartBook Due
	9/21	Organisms	09/23-Chapter 5 Assignment Due
	0/25	Lab 3 – USACE, Plankton ID, Water Quality	1 0
6	9/26	Chapter 6-Kinds of Ecosystems and	○9/26-Chapters 6 and 7 SmartBook Due
	9/28	Communities Chapter 7-Populations: Characteristics and	09/30-Chapters 6 and 7 Assignments Due
		Issues	
		Lab 4 – Population Dynamics. Plant Study	
7	10/3	Chapter 11-Biodiversity Issues	0.10/2 Chantan 11 Carant Darla Dara
,	10/5	Lab 5 – Biodiversity Ex., NOAA Coral Reef	○10/3-Chapter 11 SmartBook Due
0		• '	○10/7-Chapter 11 Assignment Due
8	10/10	Lecture Catch-up/In Class Activity	
9	10/12	EXAM 2 (Ch. 5-7, 11)	
9	10/17	Chapter 8-Energy and Civilizations Chapter 9-Nonrenewable Energy Sources	O 10/17-Chapters 8 and 9 SmartBook Due
	10/19	Lab 6 - TBD	O 10/21-Chapters 8 and 9 Assignments Due
10	10/24	Chapter 10-Renewable Energy Sources	○10/24-Chapters 10 and 12 SmartBook Due
		Chapter 12-Land Use Planning	0 10/28-Chapters 10 and 12 Assignments Due
	10/26	Lab 7 - TBD	O 10/28-Chapters 10 and 12 Assignments Due
11	10/31	Chapter 13-Soil and Its Uses	○10/31-Chapters 13 and 14 SmartBook Due
	11/2	Chapter 14-Agricultural Methods and Pest	
		Management	O11/4-Chapters 13 and 14 Assignments Due
		Lab 8 – Soil Characteristics and Plant Growth	
12	11/7	Lecture Catch-up/In Class Activity	
	11/9	EXAM 3 (Ch. 8-10, 12-14)	
13	11/14	Chapter 15-Water Management	O 11/14-Chapters 15 and 16 SmartBook Due
	11/16	Chapter 16-Air Quality Issues	O11/18-Chapters 15 and 16 Assignments Due
	11/10	Lab 9 – Test Water and Air Quality	"W" Day for Dropping November 18 <sup>th</sup>
14	11/21	Chapter 17-Climate Change	0.11/01/01 / 17 110 0 / 17 1 10
14	11/21	Chapter 18-Solid Waste Management and	○11/21-Chapters 17 and 18 SmartBook Due
	11/23	Disposal	O11/25-Chapters 17 and 18 Assignments Due
		Lab 10 - TBD	
15	11/28	Chapter 19-Environmental Regulations	○11/28-Chapters 19 and 20 SmartBook Due
		Chapter 20-Environmental Policy and Decision	O 12/2-Chapters 19 and 20 Assignments Due
		Making	0 12/2-Chapters 17 and 20 Assignments Due
	11/30	LAB PRACTICAL	
16	12/5	Lecture Catch-up/In Class Activity	
	12/7	COMPREHENSIVE FINAL EXAM	

#### **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.<a href="https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf">https://build.com.edu/uploads/sitecontent/files/student-services/Student\_Handbook\_2019-2020v5.pdf</a>. 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 Michelle Brezina at 409-933-8124 or <a href="mvaldes1@com.edu">mvaldes1@com.edu</a>. The Office of Services for Students with Disabilities is located in the 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 October 5. *The last date to withdraw from the 16-week session is November 18th*. The last date to withdraw for the 2<sup>nd</sup> 8-week session is December 1.

**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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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 <a href="maintenanger-deanost-center/">deanofstudents@com.edu</a> or <a href="maintenanger-center/">communityresources@com.edu</a>.