

GEOL-1403-101CL Physical Geology Summer 2023 12:30 pm – 4:20pm M/TH

Instructor Information:

Professor George Njoku, gnjoku@com.edu

Student hours and location:

In-person: M/T/W 11:00 AM – 12:00 PM, Steam Building S.318

Required Textbook/Materials:

Essentials of Geology, 13th Edition by Lugens and Tarbuck, ebook, ISBN 978-0-321-94773-4.

- All registered students in this program will have full access to an ebook through D2L by the first day of class. No additional steps (registration, payments, etc.) will be required. You will simply log in to your D2L course on the first day and will be able to start reading.
- You will be billed for the Mastering/ebook if you are still registered on the census date, Wednesday, September 8th, 2021. If you withdraw from the course before then, you will not be charged.
- If you want a print book, you can purchase a loose-leaf text, of the current edition, from the campus bookstore at a reduced price.
- The Modified Mastering Geology course and the ebook that you have access to will be in the current edition, so I personally wouldn't recommend that you buy previous editions of this text. This may cause a disconnect in your learning experience (i.e. chapters/sections that are added or removed, different examples and problems, etc.).

Course Description: Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Prerequisite: The following TSI scores or equivalent developmental course are recommended: TSI Reading 351 and TSI Math 350.

Course requirements: The course consists of a textbook, homework, and lab assignments. Your assessment of the material will be through exams and lab practical.

NOTE: All work must be submitted in class and will not be accepted by email. All work must be in the original format (e.g., Word Doc) no PDF will be accepted. No work is accepted in the MAC/IOS format. Remember the college provides every student with a Microsoft 365 Office

account, so there is no reason to use the MAC/IOS format. If this causes undue hardship the instructor may waive this rule at the sole discretion of the instructor. The following contains more details about each of the exams and lab assignments:

- 1. Lecture Exams: Exams cover lecture material, readings, and discussions covered during lecture. There are four exams worth 100 points each. The format for the exam is generally multiple choice, some hot spots, some ordering exercises, and fill in the blank. Study guides for each chapter are posted with the lecture PowerPoint. You will have one week after receiving your grade to dispute any wrong answers.
- 2. Lab Practical: A lab practical is a hands-on exam that covers only what we have worked on in the lab assignments. Although, studying class material will help you in the lab as there is an overlap of the material. There are four lab practical exams worth 50 points each. The assessments will test your quantitative and empirical skills that you learn in the lab. You will have one week after receiving your grade to dispute any wrong answers.
- **3. Discussion Forums:** There will be 2 discussions. This is worth 25 points each or 50 possible points for the course.

Determination of Course Grade: 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.

Detailed Grading Formula:

Lecture Exam (4) 100 points each.400 pointsLab Practical Exam (4) 50 points each200 pointsDiscussion Post (2) 50 points each100 pointsClass Attendance (20) at 5 points each100Course Evaluation (5 points)5

805 Total Points

Grading Scale:

A =	724 - 805
B =	644 - 723
C =	563 - 643
D =	483 - 562
F =	\leq 482

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.

Grades throughout the semester are rounded. Any grade 0.1-0.4 is rounded down and any grade from 0.5-0.9 is rounded up. So, if you get a 72.4, your grade is a 72.0. If you get a 72.49, then your grade is a 73.0. Rounding is done at the sole discretion of the instructor. Final grades will be done using the same practice.

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

No make-up exams are provided without documentation due to flu, hospitalization, or a death in the immediate family. The decisions to allow make-up exams or work are at the sole discretion of the instructor.

The class calendar in the syllabus and on the class calendar in D2L have all the due dates for all homework, lab and lecture exams. Any missed homework or lab assignments submitted late will be given a grade of zero (0). No late work or missed exams will be accepted the last week of class.

Extra credit will be offered for up to 30 points during the semester. There will be an extra 5 points awarded to those who complete Course Evaluation during the last week of class.

Attendance Policy:

I will take attendance and submit these records to college administrators. After 2 unexcused absences in one week, your name will be submitted to the college "Early Alert" system, so an advisor can reach out to you to see how we can help.

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.

I will do my best to respond to your needs quickly and efficiently. I will answer all course emails within 24 hours during the week and within 48 hours on the weekends. I will use the D2L Announcement feature and email for all communications.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Describe how the scientific method has led to our current understanding of Earth's structure and processes.	Communication Skills	Lecture Exam 1
2. Interpret the origin and distribution of minerals, rocks and geologic resources.	Critical Thinking Skills	Lab Practical 1
 Describe the theory of plate tectonics and its relationship to the formation and distribution of Earth's crustal features. 	Communication Skills	Lecture Exam 2
4. Quantify the rates of physical and chemical processes acting on Earth and how these processes fit into the context of geologic time.	Critical Thinking Skills	Lecture Exam 1
 Communicate how surface processes are driven by interactions among Earth's systems (e.g., the geosphere, hydrosphere, biosphere, and atmosphere). 	Communication Skills	Lecture Exam 2
6. Identify and describe the internal structure and dynamics of Earth.	Communication Skills	Lecture Exam 3
7. Describe the interaction of humans with Earth (e.g., resource development or hazard assessment).	Communication Skills	Earthquake Hazards/Risks Exercise
8. Classify rocks and minerals based on chemical composition, physical properties, and origin.	Empirical and Quantitative Skills	Lab Practical 2
9. Apply knowledge of topographic maps to quantify geometrical aspects of topography.	Critical Thinking Skills	Lab Practical 3
10. Identify landforms on maps, diagrams, and/or photographs and explain the processes that created them.	Critical Thinking Skills	Lab Practical 4
11. Differentiate the types of plate boundaries and their associated features on maps and profiles and explain the processes that occur at each type of boundary.	Critical Thinking Skills	Lecture Exam 2
 Identify basic structural features on maps, block diagrams and cross sections and infer how they were created. 	Critical Thinking Skills	Final Exam
 Demonstrate the collection, analysis, and reporting of data. 	Teamwork	Earthquake Exercise

Academic Dishonesty:

Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Papers will not be accepted in MAC and PDF format. 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 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 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. PDF documents inserted Latin characters or filled in spaces with white colored characters are considered an attempt to bypass the plagiarism checker and will be a zero!
- 5. 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: <u>http://en.writecheck.com/ways-to-avoid-plagiarism/</u> <u>http://www.duplichecker.com/</u> <u>http://www.plagiarismchecker.com/</u>

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 Science and Engineering Department Chair, Prof. Abernathy at (409)933-8330 or <u>sabernathy@com.edu</u>.

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 Student_Handbook_2022-2023_v4.pdf (com.edu). 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 with 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 accommodation is requested to contact Kimberly Lachney at 409-933-8919 or klachney@com.edu. 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 1st 5-week session is June 30. The last date to withdraw from the 10-week session is July 31. The last date to withdraw for the 2nd 5-week session is August 4.

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 or communityresources@com.edu.

Five Week Course Outline

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Modules	Lecture Topic (Chapters)	Lab Activities	Due
Models 1 & 2			
		Tectonics	
Models 3	Matter/Minerals. Discussion 1	Intro to minerals	
	Assigned.		
Model 4	Igneous Rocks	Intro to Igneous	
		Rocks	
Model 4 Cont.	Igneous Rock Cont.		
Exam 1	Lecture Exam 1	Lab Exam 1	
	8		
Model 6	Sedimentary Rocks		
		Intro to	Discussion 1
	Wietamor pine Rocks		Due
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	Lecture Exam 2	Lau Exam 2	
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Model 10			
	Assigned		
		maps	
	6		
12	water		
		Lab Exam 3	
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Model 13	Crustal Deformation		
Model 14	Shorelines		
Model 15	Geologic Time	Geologic Maps	Discussion 2
	AUGUST 4, 2023- LAST DAY	and time	Due
	TO WITHDRAW CLASS		
Model 16	TO WITHDRAW CLASS Climate Change		
Model 16			
Model 16		Lab Final Exam	
Model 16		Lab Final Exam	
		Lab Final Exam	
Model 16 Lecture Final Exam		Lab Final Exam	
	Model 4 Model 4 Cont. Exam 1 Model 5 Model 6 Model 7 Lecture Exam 2 Models 8 & 9 Models 8 & 9 Model 10 Lecture Exam 3 Model 13 Model 14	ModulesLecture Topic (Chapters)Models 1 & 2Geologic Principles and Plate TectonicsModels 3Matter/Minerals. Discussion 1 Assigned.Model 4Igneous RocksModel 4 Cont.Igneous Rock Cont.Exam 1Lecture Exam 1Model 5Weathering & Erosion AND Sedimentary RocksModel 6Sedimentary RocksModel 7Metamorphic RocksModel 8 & 9Earthquakes/Earth EvolutionModel 10Volcanoes. Discussion 2 AssignedModels 11 & 3Running water & Ground waterLecture Exam 3Crustal DeformationModel 13ShorelinesModel 14Shorelines	ModulesLecture Topic (Chapters)Lab ActivitiesModels 1 & 2Geologic Principles and Plate TectonicsLab Intro & Plate TectonicsModels 3Matter/Minerals. Discussion 1 Assigned.Intro to mineralsModel 4Igneous RocksIntro to Igneous RocksModel 4 Cont.Igneous Rock Cont.Exam 1Exam 1Lecture Exam 1Lab Exam 1Model 5Weathering & Erosion AND Sedimentary RocksIntro to Sedimentary RocksModel 6Sedimentary RocksIntro to Metamorphic RocksModel 7Metamorphic RocksIntro to Metamorphic Rocks.Model 8 & 9Earthquakes/Earth Evolution AssignedIntro Lat/Long.Models 11 & 3Running water & Ground waterIntro to Topographic mapsModel 13Crustal DeformationLab Exam 3Model 14ShorelinesGeologic Maps and time

*This syllabus is subject to change by the instructor