GEOL-1403-101CL
Physical Geology
Fall 2021
9:30 am – 12:20 pm M/W

Instructor Information:
Professor John Mohr, jmohr@com.edu, Google Text/Voice: 830-719-4930

Student hours and location:
In-person: M/W 12:30 pm – 1:30 pm, Steam Building S.318
THU 10:30 am – 12:30 pm, Steam Building S.318
Virtual: TUE 9:00 am – 12:30 pm, Teams Classroom

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 Blackboard by the first day of class. No additional steps (registration, payments, etc.) will be required. You will simply log in to your Blackboard 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, lab assignments, and an optional paper. Your assessment of the material will be through exams and lab practicals.

NOTE: All work must be submitted in Blackboard 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 an 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 final exam is 40% comprehensive. The format for the exam is generally multiple choice, some hot spots, some ordering exercises, and fill in the blank. I will post study guides at least one week prior to the exam. You will have one week after receiving your grade to dispute any wrong answers.
2. **Lab Practicals:** 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 practicals worth 75 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. **Lab Assignments:** The labs will all contain background material used to guide you through the assignments we complete. In addition to the background material, there are about 15 worksheets you will print out and bring to class to submit throughout the semester (about 25 points for each lab section) to be completed and turned in prior to each Lab Practical.
4. **Discussion Forums:** There will be 4 discussions. Each post, opened the first week of class and following each exam, will require one initial thread by each student with a minimum of two responses to other students. This is worth 25 points each or 100 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 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.

Detailed Grading Formula:

Lecture Exams (4)	100 Points each	400 Points
Mastering Homework (15)	~7 Points each	100 Points
Discussions (4)	25 Points each	100 Points
Lab Practicals: (4)	75 Points each	300 Points
Lab Assignments: (4)	~25 Points each	100 Points
		1000 Total Points

Your grade can be calculated at any point in the semester by the following formula: Your total points to date, divided by total points possible, times 100 to get your current grade. For example:

if we complete a possible of 175 points. If your total points to date are 150 points, then you have 150/175 x 100 = 85.7, or a B.

Grading Scale:

A = 900 - 1000
B = 800 – 899
C = 700 – 799
D = 600 – 699
F = ≤ 599

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. Blackboard grading is provided as a courtesy to indicate your current grade during the semester. However, the final grade is taken from the instructor's Excel gradebook.

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 and 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 Blackboard have all the due dates for all homework, lab assignments, and exams. Any missed homework or lab assignments submitted late will only be given half credit. 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. Including 10 points of extra credit offered for filling out the Course Evaluation, usually due the last week of class.

Attendance Policy:
I will take attendance and submit these records to college administrators. After 3 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 Blackboard Announcement feature to send you reminders of assignments due and upcoming exams.

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
3. 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
5. 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
12. Identify basic structural features on maps, block diagrams and cross sections and infer how they were created.	Critical Thinking Skills	Final Exam
13. 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 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. 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:
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 with me, you continue to have questions, please contact Sheena Abernathy, Science Department Chair at (409) 933-8330 or sabernathy@com.edu .

Course Outline:

2021 Dates	Modules	Lecture Topic (Chapter)	Lab Activities	Due	Mastering Assignments	Due
Aug 23	Module 1	Intro to Geologic Principles (1)	Lab Introduction	9/15	Intro to Mastering (0)	8/29
Aug 24	Module 2	Plate Tectonics (2)	Plate Tectonics	9/15	Intro to Planet Earth (1)	8/29
Aug 30	Module 3	Matter & Minerals (3)	Introduction to Mineral ID	9/15	Plate Tectonics (2)	9/5
Sep 1		Matter & Minerals (3)	Mineral Identification	9/15	Minerals (3)	9/5
Sep 6		***College Closed – Labor Day***				
Sep 8	Module 4	Igneous Rocks (4)	Introduction to Igneous Rocks	9/15	Igneous (4)	9/12
Sep 13		Igneous Rocks (4)	Igneous Rocks	9/15		
Sep 15		**Lecture Exam 1**	**Lab Practical 1**			
Sep 20	Module 5	Weathering & Erosion (6)	Intro to Sedimentary Rocks	10/6	Weathering (6)	9/26
Sep 22	Module 6	Sedimentary Rocks (7)	Sedimentary Rocks	10/6	Sedimentary (7)	9/26
Sep 27	Module 7	Metamorphic Rocks (8)	Intro to Metamorphic Rocks	10/6	Metamorphic (8)	10/3
Sep 29		Metamorphic Rocks (8)	Metamorphic Rocks	10/6		
Oct 4		**Lecture Exam 2**	Rock Cycle and Review Day	10/6		
Oct 6			**Lab Practical 2**			
Oct 11	Module 8	Earthquakes (9)	Intro to Latitude/Longitude	11/3	Earthquakes (9)	10/17
Oct 13	Module 9	Earth's Evolution (19)	Earthquake EQCT Exercise	11/3	Earth's Evolution (19)	10/17
Oct 18	Module 10	Volcanoes & Hazards (5)	Introduction to Topographic Maps	11/3	Volcanoes (5)	10/24
Oct 20	Module 11	Running Water (13)	Topographic Maps	11/3	Running Water (13)	10/24
Oct 25		Running Water (13)	Topographic Maps	11/3		
Oct 27	Module 12	Groundwater (14)	Stream Processes	11/3	Groundwater (14)	10/31
Nov 1		**Lecture Exam 3**	Review Day			
Nov 3			**Lab Practical 3**			
Nov 8	Module 13	Crustal Deformation (11)	Strike & Dip	12/1	Deformation (11)	11/14
Nov 10		Crustal Deformation (11)	Geologic Blocks	12/1		
Nov 15	Module 14	Shorelines (17)	Geologic Maps	12/1	Shorelines (17)	11/21
Nov 17		Shorelines (17)	Geologic Maps	12/1		
Nov 19		***W-Day***				
Nov 22	Module 15	Geologic Time (18)	Geologic Maps & Time	12/1	Geologic Time (18)	11/28
Nov 24		Geologic Time (18)	Relative Dating	12/1		
Nov 25/26		***Happy Thanksgiving***				
Nov 29	Module 16	Climate Change (20)	Review Day		Climate Change (20)	12/5
Dec 1		Final Exam Review	**Lab Practical 4**			
Dec 6		**Final Exam**	NO LAB			
Dec 8		NO CLASS	NO LAB			

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 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 Fall semester is November 19th.

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 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.