GEOL 1303/1403 Fall 2024

Instructor: Kayla Gibbs

Office Hours: Online Monday and Wednesday 10-12pm, and by appt.

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Class: GEOL-1303/1403-01W Physical Geology LECTURE

Materials:

GEOL 1303 - Physical Geology
Hours: 3
A systematic study of minerals, rocks, and the processes which shape and modify the surface features of the earth. Plate tectonics, volcanoes, earthquakes, and the practical aspects of geology are studied as they relate to man's adjustments to the geologic environment.

GEOL 1403 - Physical Geology (Lecture and Lab)
Hours: 4
A systematic study of minerals, rocks, and the processes which shape and modify the surface features of the earth. Plate tectonics, volcanoes, earthquakes, and the practical aspects of geology are studied as they relate to man's adjustments to the geologic environment.

This is a cross-listed class. This means that we have students of many majors attending 1303, and environmental majors attending 1403. There will be no difference for the lecture portion of the course. The difference is that 1403 has a lab portion to their class (separate D2L lab course). All labs are completed in Mastering Geology course . No manual required.

Prerequisites: None

Student Learning Objectives:
Upon successful completion of this course, students will:

- Describe how the scientific method has led to our current understanding of Earth's structure and processes.
- Interpret the origin and distribution of minerals, rocks and geologic resources.
- Describe the theory of plate tectonics and its relationship to the formation and distribution of Earth's crustal features.
- Quantify the rates of physical and chemical processes acting on Earth and how these processes fit into the context of geologic time.
- Communicate how surface processes are driven by interactions among Earth's systems (e.g., the geosphere, hydrosphere, biosphere, and atmosphere).
- Identify and describe the internal structure and dynamics of Earth.

- Describe the interaction of humans with Earth (e.g., resource development or hazard assessment).

EDUCATIONAL OBJECTIVES:

1. To understand and apply method and appropriate technology to the study of the natural sciences.
2. To recognize scientific and quantitative methods and the differences between these approaches and the other methods of inquiry and to communicate findings, analyses and interpretation both orally and in writing.
3. To identify and recognize the differences among competing scientific theories.
4. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values and public policies.
5. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to modern culture.

INTELLECTUAL COMPETENCIES:

1. READING—the ability to analyze and interpret a variety of printed materials—books, documents and articles.
2. WRITING—the ability to produce clear, correct and coherent prose adapted to purpose occasion and audience.
3. LISTENING—analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, reading.
4. CRITICAL THINKING—think and analyze at a critical level.
5. COMPUTER LITERACY—understand our technological society, use computer-based technology in communication

Student Behavior
As adults I expect you to observe common curtesy. I will be respectful in my communications with you, I expect the same from you.

Course Outline: Topics of instruction will be internal Earth, rocks and minerals, structures, earthquakes, volcanoes, effects of wind and water, and more.

Exams and Mastering homework are due every 3-4 weeks as indicated on course calendar.

All due dates are on Sunday of week noted, by 11:59pm, except AAUC assignment.

Week Assignments due Sunday by 11:59pm	**Lecture topic**
Aug. 26-Sept 1	Intro to Mastering Ch. 1 Introduction to Geology Ch. 3 Matter & Minerals First Assignments Due 9/10, Census Date 9/8
Sept. 2 -8	

Sept. 9 -15	Ch. 4 Igneous Rocks & Intrusive Activity
Sept. 16 -22	Ch. 7 Sedimentary Rocks
Sept. 23 - 29	Ch. 8 Metamorphism & Metamorphic Rocks **Mastering Homework 1-5 and Exam 1 (Ch. 1, 3, 4, 7, 8) due 9/29**
Sept. 20 – Oct. 6	Ch. 2 Plate Tectonics
Oct. 7 -13	Ch. 5 Volcanoes and Volcanism
Oct. 14 -20	Ch. 9 Earthquakes and Earth's Interior
Oct. 21 -27	Ch. 10 Origin and Evolution of Ocean Floor
Oct. 28- Nov. 3	Ch. 11 Crustal Deformation and Mountain Building Last Day to Withdraw- October 31
Nov. 4 -10	Ch. 13 Running Water **Mastering Homework 6-10 and Exam 2 (Ch. 2,5,9,10,11) due 11/10**
Nov. 11 -17	Ch. 14 Groundwater
Nov. 18 -24	Ch. 15 Glaciers and Glaciation
Nov. 25 – Dec. 1	Ch. 16 Deserts and Wind
Dec. 2 -8	Ch. 20 Global Climate Change **Mastering Homework 11-15 and Exam 3 (Ch. 13,14,15,16,20) due 12/8**

The instructor reserves the right to change this syllabus at any time. If changes are made, you will be alerted in a timely manner.

Grades and Grading:

1303 Lecture Grade
Homework (15, one assignment per chapter) 50%
Exams (3) 50%

100-90 – A
80-89 – B
70-79 – C
60-69 – D
<60 – F

1403 Lecture Grade 70% Lab 30%
(To calculate your grade, Numerical Lecture Grade x 70% + Numerical Lab Grade x 30%= Combined Grade)

1403 Lecture Grade
Homework (15, one assignment per chapter) 50%
Exams (1-3) 50%
1403 Lab Grade
Labs (1 credit hr) 13 Labs, equally weighted. 70% of final grade.
Dynamic Study Modules (DSM) 13, equally weighted. 30% of final grade.

100-90 – A
80-89 – B
70-79 – C
60-69 – D
<60 – F

Extra credit:
No extra credit will be offered in the course.
Make-ups:
There are no make-ups in this class. Everything will be open for you so you should do work early if you are going to be away. There are extenuating circumstances, we will discuss this as need arises. Do not expect late work to be accepted.
Cheating:
Cheating will not be tolerated. In the case of cheating the offenders will be given a zero on the assignment. The incident will be reported and the department will conduct further investigations.

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors ' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty
13.99.99.R0.10 Graduate Student Academic Dishonesty

Drop Date: October 31, 2024 is the last day to drop this class. I will not drop you. If you simply stop participating, you will probably end the class with an F
Disabilities — Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Behavior — All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct). All students are expected to conduct themselves with a proper demeanor and to behave as socially conscience adults. Actions, which disrupt class and the process of instruction, are not acceptable. The instructor has the responsibility to maintain the learning environment free of disruption and actions not to conformance with good citizenship and recognition of the rights of others.

Plagiarism — Plagiarism is a criminal activity. You must cite all sources of information. Unreferenced copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles can result in a score of zero for your assignment and may result in further disciplinary action.

Early Intervention for First Year Students — Early intervention for freshmen is designed to communicate the University's interest in their success and a willingness to participate fully to help students accomplish their academic objectives. The university through faculty advisors and mentors will assist students who may be experiencing difficulty to focus on improvement and course completion. This process will allow students to be knowledgeable about their academic progress early in the semester and will provide faculty and staff with useful data for assisting students and enhancing retention. Grade reports will be mailed by the end of the sixth week of the semester

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Gee Library
Phone (903) 886-5150 or (903) 886-5835 StudentDisabilityServices@tamu-commerce.edu