

University of Texas at El Paso (UTEP)



Earth, Environmental, and Resource Sciences
Spring 2023
Online

GEOL 1211 Principles of Earth Science – CRN 23166

Instructor: Dr. Musa Hussein

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via class messages on Blackboard (respond time 24-48 hours)

Course Description

Study of the earth as a planet. A survey of physical process operating in the atmosphere, lithosphere, and biosphere. Includes introduction to metrology, physical geology, soil, and vegetation. This course is divided into four blocks. Block one will focus on plate tectonics, and earthquakes. In block two students will learn about minerals, igneous rocks and volcanic hazards. Metamorphic rocks and deformation are significant parts of block three together with an introduction to the atmosphere. The course concluded by focusing on the climate change, global warming and the desert regions.

Learning Outcome

At the end of the course students should be able to:

- Understand plate tectonics – how it works, what it explains, what it does not explain
- Understand the interrelationships between Earth processes and products/materials
- Recognize various tectonic settings on Earth
- Demonstrate an understanding of plate tectonics and the concept of a dynamic planet
- Understand what drives geologic processes
- Identify minerals by their physical properties, identify rocks by physical properties, composition, texture, and formation and relate them to their environment of formation
- Appreciate the variety of temporal and spatial scales of cycles

- Apply physics, chemistry, biology and mathematics to solve geologic problems
- Draw connections between geology, climate, climate change, and human activities events.

Text: **Earth Science**, Tarbuck, Lutgens, and Tasa. Fifteenth Edition, Pearson.

Attendance:

This is a 100% online class. The class is asynchronous which means you can do the assignments, exams, and quizzes, on your best convenient time as long as you submit within the time limit I give you. Attendance in the course is determined by participation in the learning activities of the course. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by completion of the reading/viewing all course materials to ensure understanding of assignment requirements

Grading:

1. **Exams (Four exams 30 points each)** .The questions will relate to the textbook. Exam review will be posted before each exam.

NO MAKE-UP OR RE-OPEN OF EXAMS ARE GIVEN UNDER ANY CIRCUMSTANCES.

2. **Assignment (13 out of 14 assignments 10 point each)**

Every week you will complete one reading assignment. I expect that you will provide full detailed answer for each question, short brief answers are not preferred and will not get the full grade, Beside the correct answer I will be looking for the way you express your answers. Late assignment will lose some points, assignment that is two weeks late will not be grade and will earn 0 points. I will drop your lowest assignment.

3. **Six short (T, F) quizzes (5 points each):**

Only six quizzes. The quizzes serve to reinforce material. I assign them based on how you are doing with the material.

Grading scale:

252 - 280 = A;

224 - 251.9 = B;

196 -223.9 = C;

168 - 195.9 = D;

Below 168 =F

Incomplete Grade Policy

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an

incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

Students with Disabilities

If you think you may have a disability or if you are experiencing learning difficulties, please contact The Center for Accommodations and Support Services (CASS) Monday through Friday 8:00a.m.-5:00p.m. Phone:(915) 747-5148 Union Building East Room 106 cass@utep.edu. They will provide any necessary accommodations. You should also meet with me in order to facilitate your needs. You are expected to provide documentation of your disability in order to make special arrangements in this class.

Academic Misconduct

Academic dishonesty will be not tolerated in this class (please refer to the student conduct code handbook for details regarding university policy and definitions). Dishonesty includes, but is not limited to, plagiarism on term papers, unauthorized notes brought into an exam; copying answers from another student or letting another student copy your answers. The penalty for the first offense will be a grade of zero points on the exam or assignment. Penalty for the second offense will be an F for the course. When someone in an audience is talking, or even whispering, it can be very distracting to those nearby. Since this type of behavior is quite rude and impedes the progress of other students, it will not be tolerated and anyone doing so will be asked to leave the classroom.

Helpful Hints:

- Review material regularly - multiple short study sessions over a period of weeks are more effective than a single "cram" the night before an exam.
- Form a study group. Each member should study material on their own before meeting with the group for discussion and comparison.
- Write out definitions and answers to essay questions; use a computer, the board in an empty classroom, or something else-don't just passively read your notes!
- Ask questions
- Combine class notes, textbook, web materials, and old exams when studying – each provides a different perspective.
- Do the homework assignments. They will help your grade.
- Read your text in SMALL doses; don't plan on one massive reading session the night before the exam.
- Be sure to look at the pictures and diagrams in the text.

Technology Requirements

Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe Acrobat

Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

COURSE OUTLINE: this schedule is subject to change.

Block No.	Chapter & Topic	Due Date
Block 1	Ch. 1- Introduction to Earth Science	01/26/2023
	Ch. 4- Plate Tectonics: A scientific revolution Unfolds	02/02/2023
	Ch. 5- Earthquakes and Earth Interior	02/09/2023
Exam 1 (Friday 02/10/2023)		
Block 2	Ch. 2- Matter and Minerals	02/16/2023
	Ch. 3- Rocks: Materials of Solid Earth (Igneous Rocks)	02/23/2023
	Ch. 6- Volcanoes and other igneous activity	03/02/2023
Exam 2 (Friday 03/03/2023)		
Block 3	Ch. 3- Rocks: Materials of Solid Earth (Meta Rocks)	03/09/2023
	Ch. 7- Crustal Deformation and Mountain Building	03/23/2023
	Ch. 16- The Atmosphere: Composition, Structure and Temperature	03/30/2023
	Ch. 18- Air Pressure and Wind	04/06/2023
Exam 3 (Friday 04/07/2023)		
Block 4	Ch. 19- Weather Pattern and Severe Storms	04/13/2023
	Ch. 20- World Climate and Global Climate Change	04/20/2023
	Ch. 10- Glacial Desert and Wind	04/27/2023
	Video clips - Desertification and deforestations	05/04/2023
Exam 4 (Friday 05/05/2023)		

Important Academic Calendar Dates:

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| • Classes begin | Jan 17 |
| • Census day | Feb 01 |
| • Spring Break | Mar 13 -17 |
| • Course drop | Mar 30 |
| • Dead Day | May 05 |
| • Final Exams | May 8 - 12 |