

GEOL 1104 Historical Geology Lab (1 credit)

Spring 2022

Lab Sections: 01Z M, 02Z W

Time: 1:00-2:50pm

ROOM: VIN 139



OUR COURSE

Instructor: Mrs. Jessica A. Garza, M.S.

Email: Jessica.garza@angelo.edu

Office hours: Virtual Office Hours: MW 9am-10am, Noon-1pm. T Noon-1pm. OR by appointment.

COURSE DESCRIPTION

Laboratory activities designed to accompany Geology 1304. The laboratory includes experiments involving the interpretation of four billion years of Earth history recorded in rocks, including evolutionary changes and the use of fossils in time and space.

REQUIRED MATERIALS:

- Required LAB MANUAL: *ASU Historical Geology Lab Manual*, by Heather L. Lehto (purchase from ASU Bookstore)
- ASU email account that you check regularly
- [Blackboard](#) course site
- Additional materials: pencil (no pen), good eraser, basic calculator.

STUDENT LEARNING OUTCOMES

You will learn about rocks and minerals that make up Earth and the sometimes subtle and often destructive processes that shape it. You will learn and test fundamental concepts about meteorite impacts, volcanoes, earthquakes, river flooding, oil and gas resources, groundwater, and plate tectonics. Many examples will be from West Texas and western North America. Problem-solving techniques that you will learn and practice:

- Use multiple working hypotheses
- Be skeptical: look for ways to test hypotheses
- Make sketches: they help in visualizing the world in three dimensions
- Quantify events and processes when possible
- Apply the Principle of Uniformitarianism
- Study and work together
- Get as much practice or experience as you can
- Carefully defend your thinking when answering questions.
- Learning outcomes will be evaluated by lab assignments and lab quizzes

COURSE DELIVERY AND ATTENDANCE: You are expected to attend every lab meeting. Attendance will be recorded each day. If you must miss lab, contact me right away. **No late assignments.** Lab and homework assignments cannot be turned in after graded assignments are returned and answers are posted.

CELL PHONES AND OTHER ELECTRONIC DEVICES: All electronic devices should be turned off and stored out of sight during lab.

FIELD TRIPS: On field trips you will get a chance to apply concepts discussed in class to describe and interpret outcrops of rocks, fossils, and sediments. We will go on 2 required field trips during lab time (see course schedule for dates). You are responsible for getting to the field trip locations. You will be provided with detailed information before each trip. Contact your lab instructor if you need a ride!

On optional weekend trips we will travel in university vans and most expenses will be covered. More information to be provided later.

GRADING

Number of Items	Name of item	Number of Item Dropped	Total percent of grade
2	Lab Practicals	None	20%
10	Graded Lab Exercises	1 lowest	70%
6	Pre-lab Quiz	1 lowest	10%

Make-up lab practicals will be given ONLY under extenuating circumstances. Prior email notification is needed for a make-up lab practical. To make-up a lab you will need to either attend a different session during the week you missed or speak to you professor for alternate arrangements. You may not make-up the field trip. There will be no makeup pre-lab quizzes given, however one pre-lab quiz will be dropped.

GRADING SYSTEM

Percentage range	Grade
100-90%	A
89-80%	B
79-70%	C
69-60%	D
59-0%	F

CLASS PREPARATION, ASU EMAIL & BLACKBOARD: Since class announcements will be routinely distributed via Blackboard which is connected to your ASU email, you will need to regularly check your email account and our course Blackboard site (daily). All course correspondence will be through your ASU email account and Blackboard. Please see the email policy in Bb for more details. ASU provides Internet and email services to you at any of the computer labs on campus. Call 942-2911 to set this up if necessary.

LIFE HAPPENS CLAUSE

Life happens to all of us. Despite our best efforts, some days nothing seems to go right. Your car breaks down on the way to school, you run out of the house without something and have to go back despite the fact that you were already running late, your boss calls you into work, or your child is sick and you have to go pick them up from daycare/school. Or, you get so overwhelmed that everything seems too much to deal with. If this happens to you, please email me. We will figure out what to do to keep you on track in the course. Whether that means extra tutoring sessions, deadline extensions, or something else. Please don't suffer in silence. I want to help out, you just need to let me know what is going on.

General Policies

GENERAL POLICIES RELATED TO THIS COURSE: All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)
- [Angelo State University Catalog](#)

KNOW THE ASU HONOR CODE: Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

ACADEMIC INTEGRITY: Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU. The College of Science and Engineering adheres to the Statement of [Academic Integrity](#)

PLAGIARISM: Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#) in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft. In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list. Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the [ASU Writing Center](#).

COPYRIGHT POLICY: Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS: A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#) for more information.

INCOMPLETE GRADE POLICY: It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#) for more information.

DROP DATE: April 28, 2022 is the last day to drop/withdraw, Regular Term, Spring 2022. The appropriate form must be submitted by 5:00 p.m. Central Time.

INFORMATION ABOUT COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)ⁱ web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

ASU Assistance

COUNSELLING SERVICES: Our mental health is just as important as our physical health, particularly now that we are being socially distant. Humans are social creatures who need contact with other people to stay mentally healthy. During this time, it is more important than ever to seek help if you need it. You can always call or email me if you need to talk about something, but I also strongly encourage you to reach out to the [ASU Counseling Services](#)ⁱⁱ, who are available for help anytime you need it. You can find them in the [University Health Clinic building](#)ⁱⁱⁱ or by calling 325-942-2371 Monday through Friday from 9am-3pm. Need help outside those hours? For emergencies call 911 or the [ASU Crisis Helpline](#)^{iv} at 325-486-6345. You can also call the ASU Crisis Helpline for non-emergency issues as well.

STUDENTS WITH DISABILITIES:

1. "Angelo State University is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), and subsequent legislation."
2. The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student's responsibility to initiate such a request by contacting the Office of Student Affairs, University Center, Room 112 at (325) 942-2047 or (325) 942-2211(TDD/FAX) or by e-mail at studentservices@angelo.edu to begin the process. The Office of Student Affairs will establish the particular documentation requirements necessary for the various types of disabilities. Reasonable accommodations will be made for students determined to be disabled or who have documented disabilities.

TITLE IX: The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345. For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Our Course Continued

MODIFICATIONS TO THE SYLLABUS: This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice. The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

GEOLOGIC EXHIBITION ORGANIZATION (GEO):

GEO, the student organization of all interested in geology (not just majors/minors), meets almost every Wednesday @ 6:00PM. GEO is a student chapter of the [American Association of petroleum Geologists](#). Sigma Gamma Epsilon, the national honor society of the earth sciences is related to GEO.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU! See the [BS in Geoscience requirements](#). A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers.

MY FINAL NOTE:

It is my goal to make this class both interesting and informative for you. With a reasonable amount of effort, it should be possible for everyone to meet the course objectives and earn a passing grade. With additional effort, aptitude, and investment of time, students may earn even higher course grades. If at any time you run into difficulties with the material, or need assistance or clarification, please do not hesitate to ask for help. I am here for you, and I will be glad to entertain any reasonable requests.

<https://blackboard.angelo.edu/>

¹ <https://www.angelo.edu/current-students/student-handbook/>

¹ <https://www.angelo.edu/academics/catalog/>

¹ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

¹ <https://www.angelo.edu/current-students/disability-services/>

¹ <https://angelo.policystat.com/policy/10659448/latest/>

¹ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

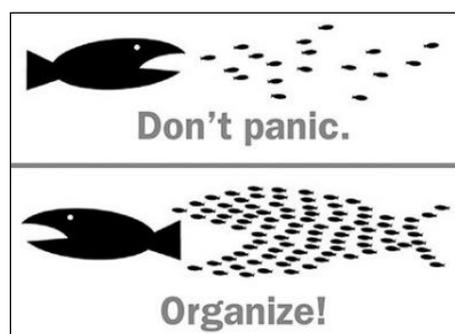
¹ https://www.angelo.edu/current-students/writing-center/academic_honesty.php

¹ <https://angelo.policystat.com/policy/10659368/latest/>

¹ <https://www.angelo.edu/incident-form>

¹ <https://www.angelo.edu/title-ix>

¹ <https://www.angelo.edu/covid-19/>



Course Calendar

TENTATIVE CALENDAR: Physical Science course calendar.

Students Note: **All labs are due at the start of the next lab period.**

Week of Semester	Week of Monday:	Lab Exercises	Read Lab Manual Chapters before lab	Pre-Lab Reading Quizzes DUE: Sundays @ 11PM
Week 1	Mon 1/17	No Lab; Purchase Lab Manual		
Week 2	Mon 1/24	Lab 1: Rock Forming Minerals	Chapter 1	Sun 1/23 @ 11PM
Week 3	Mon 1/31	Lab 2: Sedimentary Rocks: Describing and interpreting sedimentary environments.	Chapter 2	Sun 1/30 @ 11PM
Week 4	Mon 2/7	Lab 3: Stratigraphy and Stratigraphic Columns	Chapter 3	Sun 2/6 @ 11PM
Week 5	Mon 2/14	Lab 4: Igneous and Metamorphic Rocks	Chapter 4	Sun 2/13 @ 11PM
Week 6	Mon 2/21	Lab 5: FIELD TRIP 1 - Permian trackways, San Angelo State Park	Chapter 5	
Week 7	Mon 2/28	Review for Lab Quiz 1		
Week 8	Mon 3/7	LAB Practical 1: DESCRIBING ROCKS (Labs 1 – 5)		
	Mon 3/14	Spring Break		
Week 9	Mon 3/21	Lab 6: Paleogeographic maps	Chapter 6	Sun 3/20 @ 11PM
Week 10	Mon 3/28	Lab 7: Fossils, Keys to Past Life	Chapter 7	Sun 4/3 @ 11PM
Week 11	Mon 4/4	Lab 8: More Common Texas Fossils	Chapter 8	
Week 12	Mon 4/11	Lab 9: FIELD TRIP 2 -Christoval Fossils	Chapter 9	
Week 13	Mon 4/18	Lab 10: Paleo-environments	Chapter 10	
Week 14	Mon 4/25	Review for Lab Quiz 2		
Week 15	Mon 5/2	LAB Practical 2: FOSSILS (Labs 6 – 10)	-	
Week 16	Mon 5/19	Final Exam Week: Lab does not meet	Chapters 6-10	