

GEOL 1104 Historical Geology Lab (1 credit)

Spring 2021

Lab Sections: 03Z W, 05F

Time: 1:00-2:50pm

ROOM: VIN 139



Instructor: Jessica A. Garza

Email: jgarza85@angelo.edu

Office hours: Virtual Office Hours MWR 3:30pm to 5:00 pm and by apt only.

REQUIRED MATERIALS:

- A face mask or face covering is required in lab at all times
- A plastic face shield is required in lab at all times (this will be provided to you on the first day of lab, you will keep this, take it home, sanitize it, and bring it back to lab for each meeting)
- 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
- Scanning App for submitting work (See Blackboard course-“Gradescope Instructions”).
- Additional materials: pencil (no pen), good eraser, basic calculator.

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.

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

ATTENDANCE POLICY

Please refer to this [Health and Safety web page](#) for updated information about campus guidelines as they relate to the COVID-19 pandemic.

How will class attendance work?

- You are required to have completed the health screening prior to attending lab. If you are flagged as potentially having COVID you will not be allowed to attend lab in-person.
- You will be required to wear face masks, face shields, and disposable gloves and maintain a 6 ft distance from others in lab at all times.
- You will be required to wash your hands before starting and before leaving lab.

- You will be required to sanitize your work station.
- NOTE: You are NOT automatically dropped if you stop attending class. So, if you want to drop the class you must do it through Ramport.

What if I'm sick?

- If you are sick (with anything, not just COVID), you are required to stay home. Rest, relax, drink plenty of fluids, and binge watch your favorite show (if you feel up to it).
- I **WILL** require a note from a doctor stating that you were ill when you are able to return to lab. You can get this from your regular doctor or from the [ASU Health Clinic](#)ⁱ.
- Please email me to let me know if you aren't feeling well so that we can make arrangements for labs or lab practicals that you may miss in your absence.

What if I have a pre-existing condition or simply don't feel safe attending in-person classes?

- You may elect to complete this lab entirely online.
- You do NOT have to give me any reason for wanting to attend online. Simply, tell me you plan to attend online only.
- You will be required to complete an alternative set of labs, pre-lab reading quizzes, and lab practicals from the safety of your home.
- There will not be **ANY** penalties for choosing to attend entirely online. I respect your choice in this matter and will do my utmost to make sure you have as close to the same experience as any other classmate as I can.
- You may also elect at **ANY** time to change to an online only format. No questions asked. Simply notify me by email so that I know why you disappeared from lab and can put you into a different group to complete the online labs (and so I don't worry).

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.

CELL PHONES AND OTHER ELECTRONIC DEVICES

You may use a laptop or tablet to take notes during class. Please do not disturb others with their use. The use of any electronic device not authorized by the instructor during a test may result in the forfeiture of your grade for that test. All electronic devices should be turned off and stored out of sight during tests.

GRADING

Number of Items	Name of item	Number of Item Dropped	Total percent of grade
2	Lab Practical	None	20%
10	Graded Lab Exercises	1 lowest	70%
9	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, that is what the 1 dropped is for.

GRADING SYSTEM

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

LAB PROCEDURE

- ❖ Upon entering lab
 - Professor/TA stands at entrance door (exit door is locked) to hand out wipes (maybe gloves).
 - Student must be wearing face covering (may need face shield)
 - Student must show electronic badges at the entrance door
 - Students get sanitizing wipes and wipe down seat and lab desk
 - Student must sanitize hands
 - Professor /TA hand out trays to students
- ❖ In Lab
 - Wear your mask, maintain 6 ft, stay at your own lab desk
- ❖ Before leaving lab
 - Student places their own tray back in the rolling cabinet
 - Students must sanitize hands
 - Leave room through exit door

FIELD TRIPS

There will be minimal opportunities for field trips this semester due to COVID. However, we will be offering an optional field trip to the state park that will be limited to a handful of students. Students will be required to abide by the same set of policies for safety as they are on campus and may be required to use additional safety measures while on the trip. Students will apply for this trip. Students who do not go on the trip will be offered an optional virtual field trip to the state park to complete at home/dorm.

CLASS COMMUNICATION AND YOUR ASU EMAIL

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.

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](#)ⁱⁱ

[Angelo State University Catalog](#)ⁱⁱⁱ

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 university's [Statement of Academic Integrity](#).^{iv}

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](#)^v, who are available for help anytime you need it. You can find them in the [University Health Clinic building](#)^{vi} 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](#)^{vii} at 325-486-6345. You can also call the ASU Crisis Helpline for non-emergency issues as well.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

ASU 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 of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).^{viii} The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

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](#)^{ix} for more information.

PLAGIARIASM

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)^x 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. Resources to help you understand this policy better are available at the [ASU Writing Center](#).^{xi}

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](#)^{xii} for more information.

TITLE IX AT ANGELO STATE UNIVERSITY

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.^{xiii}

REQUIRED USE OF MASKS/FACIAL COVERINGS BY STUDENTS

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](#)^{xiv} to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

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](#)^{xv}. [Sigma Gamma Epsilon](#)^{xvi}, the national honor society of the earth sciences is related to GEO.

MAJOR/MINOR IN GEOSCIENCE

ASU offers both a [BS in Geosciences](#) and a [Geoscience Minor](#)^{xvii} which requires 18 hours of geology courses. Good and rewarding [careers](#)^{xviii} exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers, etc.

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.

angelo.blackboard.com

<https://www.angelo.edu/content/profiles/2519-health-clinic/Templates/profiles-office-directory>

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

<https://www.angelo.edu/catalogs/>

<https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

<https://www.angelo.edu/services/counseling/>

<https://www.angelo.edu/map/?Counseling%20Services>

<https://www.angelo.edu/services/counseling/crisishelpline.php>

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

<https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

<https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

https://www.angelo.edu/dept/writing_center/academic_honesty.php

<https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

<http://www.angelo.edu/title-ix>

<http://www.texastech.edu/downloads/ttus-policy-face-coverings.pdf>

www.aapg.org

<http://www.sigmagammaepsilon.com/>

https://www.angelo.edu/dept/physics/earth_science.php

https://www.angelo.edu/dept/physics/Geosciences/geoscience_careers.php

SCHEDULE: All information is subject to change.

Students Note: All labs are due on the Friday after lab. After the Friday deadline there are no exceptions.

Week of Semester	Week of Monday:	Lab Exercises	Read Lab Manual Chapters before lab	Pre-Lab Reading Quizzes DUE: Tuesdays @ 11PM	Lab Exercise DUE: Fridays @ 11PM
Week 1	Mon 1/25	Introduction Lab Safety Quiz details: Complete on Blackboard			
Week 2	Mon 2/1	Lab 1: Rock Forming Minerals	Chapter 1	Tue 2/2 @ 11PM	Fri 2/5 @ 11PM
Week 3	Mon 2/8	Lab 2: Sedimentary Rocks: Describing and interpreting sedimentary environments.	Chapter 2	Tue 2/9 @ 11PM	Fri 2/12 @ 11PM
Week 4	Mon 2/15	Lab 3: Stratigraphy and Stratigraphic Columns	Chapter 3	Tue 2/16 @ 11PM	Fri 2/19 @ 11PM
Week 5	Mon 2/22	Lab 4: Igneous and Metamorphic Rocks	Chapter 4	Tue 2/23 @ 11PM	Fri 2/26 @ 11PM
Week 6	Mon 3/1	Lab 5: FIELD TRIP 1 - Permian trackways, San Angelo State Park	Chapter 5	Tue 3/2 @ 11PM	Fri 3/5 @ 11PM
Week 7	Mon 3/8	Review for Lab Quiz 1	-		
Week 8	Mon 3/15	LAB Practical 1: DESCRIBING ROCKS (Labs 1 – 5)	Chapters 1-5		
Week 9	Mon 3/22	Lab 6: Paleogeographic maps	Chapter 6	Tue 3/23 @ 11PM	Fri 3/26 @ 11PM
Week 10	Mon 3/29	Lab 7: Fossils, Keys to Past Life	Chapter 7	Tue 3/30 @ 11PM	Fri 4/2 @ 11PM
Week 11	Mon 4/5	Lab 8: More Common Texas Fossils	Chapters 8, 7		Fri 4/9 @ 11PM
Week 12	Mon 4/12	Lab 9: FIELD TRIP 2 – Fossil Localities near Christoval	Chapter 9:	Tue 4/13 @ 11PM	Fri 4/16 @ 11PM
Week 13	Mon 4/19	Lab 10: Paleo-Geoenvironments	Chapter 10	Tue 4/20 @ 11PM	Fri 4/23 @ 11PM
Week 14	Mon 4/26	Review for Lab Quiz 2	-		
Week 15	Mon 5/3	LAB Practical 2: FOSSILS (Labs 7 – 10)	Chapters 7-10		
Week 16	Mon 5/10	Final Exam Week: Lab does not meet			