

GEOL 1103 Physical Geology Lab (1 credit)

Fall 2020

Lab Section: 02Z T 1:00-2:50pm

ROOM: VIN 139

Instructor: Dr. Heather L. Lehto
Email: Heather.Lehto@angelo.edu
Office hours: VIN 127, M 3-4pm, T 11am-12pm, F 10-11am

REQUIRED MATERIALS:

- LAB MANUAL: GEOL 1103, Physical Geology Laboratory Manual, Heather L. Lehto
- ASU email account that you check regularly
- [Blackboard](#)ⁱ course site

STUDENT LEARNING OBJECTIVES

Learning outcomes will be evaluated on exams, lab projects, and an IDEA course evaluation

- Identify and interpret the formation of rocks and minerals.
- Analyze and interpret the orientation of geologic layers beneath the surface of the Earth through the creation of:
 - Block diagrams
 - Geologic cross sections

ATTENDANCE POLICY

You are expected to attend all scheduled lab meetings. Please inform me ahead of time if you will need to be absent for any reason including religious holidays.

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 lab. 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	Percent of grade per item	Number of Item Dropped	Total percent of grade
2	Lab Practicals	5% each	None	10%
8	Graded Lab Activities	10% each	None	80%
6	Pre-lab Reading Quiz	2% each	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 your 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

PRE-LAB READING QUIZZES

You will complete the Pre-lab Reading Quizzes in Blackboard. For each Pre-lab Reading Quiz you will complete a list of questions based on the reading for the lab that week.

FIELD TRIPS

On field trips you will get a chance to apply concepts discussed in class to describe and interpret outcrops of rocks and sediments. On the optional weekend trips we will travel in university vehicles. No special equipment is required but space is limited! You may go on more than one optional trip, but you can only use one field trip project to replace a single lab assignment grade. The tentative schedule:

1. *Archaeology Fair and Elementary School Science Nights*: Saturday in September at Fort Concho (Archaeology Fair) and evenings to be announced (Science Nights). Opportunities for sharing basics of rocks, fossils, and maps with students, their parents, and interested people of all ages.
2. *Kickapoo Cavern*: Saturday, October 26. This field trip will head to the Kickapoo Cavern to explore a wild cave. There are no trails in the cave, so you must be sure-footed. We will be led by a cave guide and shown the wonders of a dead cave of historical significance. Leaders:
3. *Big Bend National Park*: Friday-Sunday, November 19 – 21. Physical Geology field trip to Big Bend National Park: hike and sketch Cretaceous stratigraphy in Santa Elena Canyon, describe Tertiary volcanic rocks in Tuff Canyon, hike to the top of the Lost Mine Trail in the Chisos Mountains. Leaders: Joe Satterfield,
4. *Favorite San Angelo Area Outcrops*: Saturday, December 4. We will meet early in the morning and return in the mid-afternoon. We will visit little-known outcrops just north of San Angelo, including Rattlesnake Hill, Edith Spring, Spence Reservoir, and the Divide Roadcut. Leaders: Joe Satterfield,

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.

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.

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](#)^v
- [Angelo State University Catalog](#)^{vi}

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](#).^{vii}

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.

PLAGIARISM

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

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)^{xiii}

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).^{xiv}

INFORMATION ABOUT COVID-19

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

MODIFICATIONS TO THE SYLLABUS

This syllabus, including grade evaluation and course schedule, is subject to modification. 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](#)^{xvi}. [Sigma Gamma Epsilon](#)^{xvii}, 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](#)^{xviii} which requires 18 hours of geology courses. Good and rewarding [careers](#)^{xix} 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.

ii <http://blackboard.angelo.edu>

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

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

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

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

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

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

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

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

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

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

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

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

xiv <https://www.angelo.edu/title-ix>

xv <https://www.angelo.edu/covid-19/>

xvi www.aapg.org

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

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

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

SCHEDULE: All information is subject to change.

Week #	Date of Lab	Pre-lab Quiz Due	Pre-lab Reading	Lab Exercise
1	August 24	None	Provided in Blackboard	1: What is a Geologist?
2	August 31	Aug. 26 @11:59pm	pg. 18-30	2: Rock-forming minerals
3	September 7 No classes Sept. 6			No labs this week!!!
4	September 14	Sept. 13 @11:59pm	pg. 35-37	3: Igneous Rocks
5	September 21			No labs this week!!
6	September 28	Sept. 20 @11:59pm	pg. 42-48	4: Sedimentary Rocks
7	October 5	Sept. 27 @11:59pm	pg. 54-57	5: Metamorphic Rocks
8	October 12			Lab Practical 1: Minerals and Rocks (Labs 2-5)
9	October 19		pg. 62-63	6: San Angelo State Park Field Trip
10	October 26	Oct. 25 @11:59pm	pg. 68-73	7: Block diagrams of folded and faulted rocks
11	November 2	Nov. 1 @11:59pm	pg. 90-92	8: Constructing a geologic cross section
12	November 9			8: Constructing a geologic cross section (continued)
13	November 16			Review for Lab Practical 2
14	November 23 No classes Nov. 24, 25, & 26			No labs this week!!!
15	November 30			Lab Practical 2: Topographic and geologic maps (Labs 1 and 6-8)