

GEOL 3303: Environmental Geology (3 credits)
Spring 2020
Section 010 MWF 11:00am-11:50am (VIN 146)

Instructor: Dr. Heather L. Lehto
Email: Heather.Lehto@angelo.edu
Office hours: VIN 127, T 1-2pm (virtual), MWF 10-10:50am (in-person and virtual), or by appointment.

REQUIRED TEXTBOOK

- Environmental Geology Today, 1st Ed., by Robert L. McConnell and Daniel C. Abel¹

COURSE OBJECTIVES

At the end of this course you should be able to:

1. Evaluate an area for the following natural hazards:
 - a) Floods
 - b) Landslides
 - c) Earthquakes
 - d) Volcanoes
 - e) Coastal hazards
2. Determine the best site for a landfill
3. Create potentiometric maps from well log data
4. Determine the source of pollution given well log and surface data
5. Evaluate the potential benefit and risk from an energy resource
6. Evaluate your own contribution to climate change

HOW TO BE SUCCESSFUL IN THIS COURSE:

WORKLOAD

To be successful in a course you need to spend time studying and preparing for each class period. It is generally advised that for every hour spent in class you spend one to two hours studying, preparing, and completing course work outside of class. As this is a 3-hour course, that means you should ideally, be spending 3-6 hours per week working on this course outside of class time. This does not need to be in large hour+ blocks of time. In fact, it is more beneficial for our brains to focus on something for 20-30 minutes at a time. My suggestion for you is to break your study/work time outside of class into small, bite sized sessions that fit into the rest of your weekly responsibilities. Ultimately, you know yourself best and should find ways to manage your time the best for you to be successful. If you would like more tips, please see me.

TIME MANAGEMENT

Over the next semester we will cover 9 chapters of your textbook. I focus more on quality of instruction, rather than quantity of instructions. This means that I will cover some topics in great detail, but others I might not cover at all in class. If a topic shows up in the Study Guide, you will be responsible for understanding that topic for the exam regardless of whether we have covered it in class or not. The best way to do this is to stay up on your reading, review the Study Guides frequently throughout the semester, complete assignments, and ask questions when you need to.

Since we will be covering quite a bit of different topics, it is important to stay on top of your reading and coursework assignments from the first day of the course. A good way to help you keep track of everything you need to do for the course is to use a planner or a calendar app (e.g., Google calendar, iCal, Outlook, etc.). Enter all of your assignments and reading into your planner or calendar at the beginning of the semester so you have it all in one place. If you are using a calendar app, try setting reminders a few days or weeks ahead of time to help you remember to start work well ahead of time.

ATTENDANCE

¹ A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Research has shown that students that attend lecture regularly do better in their courses. For this reason, attendance is highly recommended, however, I won't be taking attendance except on the first day of class. We will be covering a large amount of material in lecture as well as at least one in-class assignment per chapter, which will be part of your grade.

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.

MY EXPECTATIONS FOR YOU

- Be prepared for lecture (do the reading prior to class, print off any relevant materials)
- Actively participate in lecture
- Take responsibility for your own learning (seek help if you are having a hard time)
- Be familiar with the course policies in the syllabus
- Be respectful of all persons in this classroom (arriving late, leaving early, or talking during class is distracting and discourteous)
- If you decide to use an electronic device in class to take notes, please be aware that those around you might become distracted. Please be courteous to the others in the course and keep your texting/wandering the internet/video watching to a minimum, or sit in the back row.

WHAT YOU CAN EXPECT FROM ME

- Be enthusiastic and knowledgeable about the course material
- Present course material in an organized way
- Start and end lectures on time (please feel free to remind me if I am forgetful about ending time)
- Set high standards for the class and help you meet those standards
- Treat you with fairness and respect

GETTING HELP FOR COURSEWORK

I will be holding both in-person and virtual office hours this semester (these are listed above, under my email). You are also welcome to make an appointment to meet me at a different time if you need to. In addition, if you have a question and I am in my office (or walking around the building) feel free to stop me and ask. You can also post in the I Have a Question discussion forum in Blackboard (either with your name or anonymously). I will also have a chance in class to post questions anonymously.

Another valuable source of help are your fellow classmates. It is helpful to get to know a few people in class and exchange contact info. You might also consider forming a student study group that meets regularly to work on assignments or study for exams. A good peer support system is invaluable in this and future geology courses.

TECHNICAL SUPPORT

Should you need help with Blackboard, Rampart, ASU email accounts, passwords resets, etc. you can contact the [ASU IT Help Desk](#)¹ (325-942-2911). They should be able to help you troubleshoot your issue and resolve it. If they can't fix the issue please let me know, especially if it will affect your ability to complete your coursework.

COURSE WEBPAGE

We will be using Blackboard frequently during the semester. Please make it a habit to check in on the course regularly so that you don't miss important announcements or assignments.

GRADING

Number of Item	Name of Item	Percent per item	Number of items dropped	Total for all items
10	Assignments	5%	2	40%
4	Exams	5%	1	15%
1	Final Exam	10%		10%
1	Research Paper	20%		20%
1	Comments on Peer's Rough Draft	5%		5%
1	Oral Presentation	10%		10%

ASSIGNMENTS

There will be 10 assignments that will be completed either in-class or as homework. All assignments will be available on Blackboard should you miss the class the day we start an assignment in class. Your two lowest assignments will be dropped from your grade.

EXAMS

There will be four (4) exams given during the semester that will cover the material from lecture, the readings, and the assignments. One exam will be dropped from your grade. If you miss an exam, due to extenuating circumstances, please let me know as soon as you can so that we can schedule a make up exam time.

FINAL EXAM

One (1) comprehensive final exam will be given during the scheduled final exam time. There will be more information available on the final near the end of the semester. We will spend two days in class reviewing for this final exam.

RESEARCH PAPER

You will have an 8-10 page research paper due at the end of the semester. You will need to have your topic approved by me before you get started, to ensure that your topic is neither too broad nor too narrow for the size of paper you will be writing. There is also a list of deliverables that will be included as part of your grade for the research paper. These tasks are designed to help you stay on time with the writing process and not leave everything until the last minute, as many of us are all sometimes guilty of (myself included).

I will provide you with the grading rubric I will use to grade your research paper to help guide you. We will also spend time in class learning about how to put together a research paper, including how to perform each of the items listed in the chart below.

Your paper topic will need to be related to the wastewater cleaning process, anywhere along the way from toilet to stream. It's important to choose a topic that has enough research available so that you can discuss it in 8-10 pages. We will talk about how to choose a topic in class. However, if you have questions or need assistance in choosing a topic please see me.

Item	Due by
Topic approved	January 28
Annotated Bibliography	February 4
Outline	February 28
Rough Draft	March 28
Rough Draft Comments	April 8
Oral Presentations	April 25-29
Final Draft	April 25

ORAL PRESENTATION

At the end of the semester you will present a 5-10 minute oral presentation on your research paper topic. This presentation can be anything of your choosing, from a powerpoint talk to a pre-recorded video. Be creative and have fun with this! Just make sure you are conveying the important points of your paper in your presentation.

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

As members of this university community, we are all expected to maintain honesty and integrity in our work. If a student is found guilty of any form of dishonesty in academic work they may be subject to disciplinary action and possible expulsion from ASU.

To get more information about how to maintain honesty in your work see the university's [Statement of Academic Integrity](#).^{iv} If you are still unsure or have any questions, please come see me.

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.

If you believe that you are entitled to reasonable accommodation, you may do so by contacting 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](#).^v 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 me 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](#)^{vi} for more information.

PLAGIARISM

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. Copying material word-for-word into a piece of writing without quotation marks and the source of the quotation is plagiarism.

The vast majority of students that have plagiarized, didn't intend to. Instead, they were uninformed or misinformed about what constitutes plagiarism. To avoid a mistakes like this check out the [ASU Writing Center](#)^{vii} or ASU's [Academic Integrity policy](#)^{viii} in the Student Handbook.

The best way to avoid plagiarism is to paraphrase (re-write) information in your own words. Ne way to paraphrase is by taking bulleted notes while doing your research and then using only those notes during the writing process. You can find other tips by searching the internet or talking to me.

STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS

If you intend to observe a religious holy day that will take you away from class please let me know, preferable before the absence. This allows us to come up with a plan to complete the missed work. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)^{ix} 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](#)^x

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](#)^{xi} (325-942-2371), the [24-Hour Crisis Helpline](#)^{xii} (325-486-6345), or the [University Health Clinic](#)^{xiii} (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

Despite my best planning, sometimes things don't go according to plan. In those cases I may need to modify this syllabus, including grade evaluation and course schedule. If it becomes necessary for me to modify the syllabus in any way I will post an updated version on our course in Blackboard and post an announcement to advise of the changes.

SCHEDULE: All information is subject to change.

Week of	Lecture Topic	Reading	What is due?
January 17	Monday, January 17 (No Classes)		
January 19	Syllabus and Study Guides		
January 21	Library visit		
January 24	What is a Research Paper?		
January 26	Annotated Bibliography Rivers and Flooding	Ch 9	
January 28	Rivers and Flooding (continued)		Research Paper Topic Approved
January 31	Rivers and Flooding (continued)		
February 2	Landslides	Ch 10	
February 4	Landslides (continued)		Annotated Bibliography Due
February 7	Landslides (continued)		Assignment: Floods
February 9	Creating an Outline		
February 11	Earthquakes	Ch 6	
February 14	Earthquakes (continued)		Assignment: Slope Stability
February 16	Earthquakes (continued)		
February 18	Exam 1: Chapters 9, 10		
February 21	Volcanoes	Ch 5	
February 23	Volcanoes (continued)		Assignment: Paleoseismicity
February 25	Volcanoes (continued)		
February 28	Coastal Hazards	Ch 11	Outline Due
March 2	Coastal Hazards (continued)		
March 4	Coastal Hazards (continued)		Assignment: Volcanic Hazards
March 7	Writing your paper		
March 9	Exam 2: Chapters 5, 6, 11		
March 11	TBD		Assignment: Coastal Hazards
March 14-18	Spring Break!		
March 21	Waste Management	Ch 22	
March 22	Waste Management (continued)		
March 25	Reviewing a paper & Groundwater Resources	Ch 8	
March 28	Groundwater Resources (continued)		Rough Draft Due
March 30	Water Pollution	Ch 18	
April 1	Water Pollution (continued)		Assignment: Landfill Site
April 4	Water Pollution (continued)	Ch 18	
April 6	No Class		Assignment: Potentiometric Map
April 8	No Class		Rough Draft Comments Due
April 11	Energy Resources	Ch 15, 16, 17	Assignment: Energy Resources
April 13	Energy Resources (continued)		Assignment: Contamination
April 15	Exam 3: Chapters 8, 18, 22		
April 18	Parts of a good presentation		
April 20	Climate Change	Ch 20	Assignment: Climate Change
April 22	Climate Change		
April 25	Oral Presentations		Final Draft Due
April 27	Oral Presentations		
April 29	Oral Presentations		
May 2	Exam 4: Chapters 15, 16, 17, & 20		
May 4	Evaluations and Final Exam Review		
May 6	Final Exam Review (Continued)		
May 11	Final Exam: 10:30am-12:30pm		

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- i <https://www.angelo.edu/administrative-support/information-technology/>
 - ii <https://www.angelo.edu/current-students/student-handbook/>
 - iii <https://www.angelo.edu/academics/catalog/>
 - iv <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
 - v <https://www.angelo.edu/current-students/disability-services/>
 - vi <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>
 - vii https://www.angelo.edu/current-students/writing-center/academic_honesty.php
 - viii <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
 - ix <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
 - x <https://www.angelo.edu/incident-form>
 - xi <https://www.angelo.edu/current-students/counseling-services/>
 - xii <https://www.angelo.edu/current-students/counseling-services/crisishelpline.php>
 - xiii <https://www.angelo.edu/current-students/health-clinic/>
 - xiv <https://www.angelo.edu/title-ix>
 - xv <https://www.angelo.edu/covid-19/>