Syllabus for:
GEOL 4315 004 Topics in Geological Sciences 28303 (Undergraduate)
GEOL 5315 003 Selected Topics-Geological Sci 28314 (Graduate – M.S.)
GEOL 6315 004 Adv Topics in Geological Scien 28322 (Graduate – Ph.D.)
Spring semester 2026
10:00-11:30 on Monday and Wednesday
Geology Building 320

University of Texas at El Paso (UTEP)
Department of Earth, Environmental and Resource Sciences

INSTRUCTOR INFORMATION

Dr. Lily Jackson (she/her/ella), Assistant Professor
Written Communication: via email: ljjackson2@utep.edu or Blackboard.
Office Location: Geology Building, Room 201D
Office Hours:

- Face-to-Face: Monday, 8:00 - 9:00 AM in my office, or by appointment (times TBD)
- Virtual: by appointment (times TBD)

COURSE DESCRIPTION

This course introduces the requirements, structure, and content of the Professional Geoscientist (PG) licensure process, with a primary focus on preparing students for the Fundamentals of Geology (FG) exam. Students will examine the Texas Geoscience Practice Act, ethics and professional conduct, and effective strategies for exam preparation. The course will review core geoscience concepts, test-taking techniques, and the legal and professional responsibilities of licensed geoscientists.

COURSE OBJECTIVES

By the end of the course, students will be able to:

- Explain the purpose and scope of the Texas Geoscience Practice Act.
- Recognize the role of ethics, professional responsibility, and public welfare in geoscience practice.
- Understand the application process, eligibility requirements, and timeline for PG licensure.
- Understand the structure and subject areas of the ASBOG® FG and PG exams.
- Review and reinforce core geoscience concepts relevant to the FG and PG exams.
- Develop a personal plan and timeline for licensure preparation and career advancement.

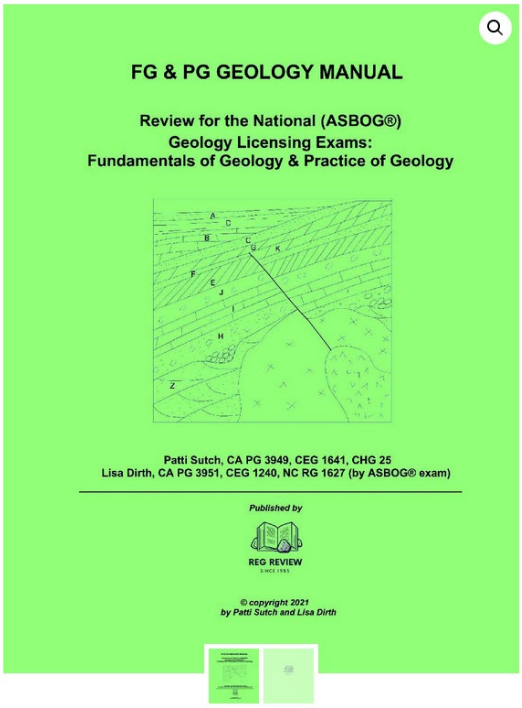
ATTENDANCE, PARTICIPATION, AND ABSENCE POLICY

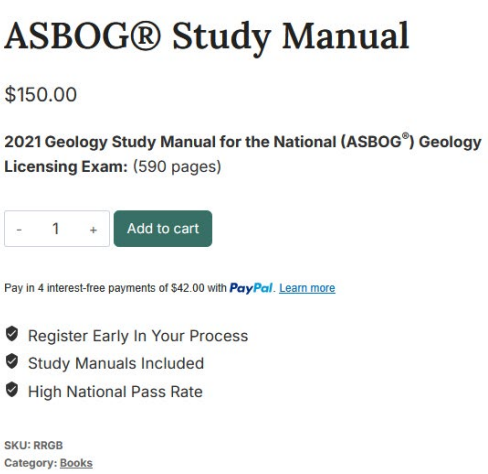
This course is intended to be interactive; participation is essential. If you know you will miss classes this semester due to planned travel or other planned commitments, please let me know at the beginning of the semester so that it will not affect your participation grade.

SUGGESTED MATERIALS

It is highly suggested that you buy the FG and PG Geology Manual from regreview. The same manual can be used for the FG and PG exams, so it is worth the investment. Below is the direct link

to the suggested manual. I have not found it anywhere else other than this link:
https://regreview.com/product/books-4/





Grading:

Your final grade is based on

Grading scale: 90-100=A; 80-90=B; 70-80=C; 60-70=D; <60% =F

Grade item/category	**Weighted percent of final grade**
Final practice exam*	30*
All other practice exams and practice problem sets†	30†
Participation#	30#
Personal plan and timeline	10
Total	100

Explanation of grade items/categories

*Your final practice exam will be graded based on the improvement of your score from your first practice exam. The % improvement will be added to a base score equal to the median or average (whichever is higher) of the class's raw final practice exam scores.

†All other practice exams/practice problem sets, and assignments will be graded as either a 1 (if completed) or a 0 (if not completed).

#Participation for the undergraduate section 4313 includes taking part in class activities, discussions, grading, etc.

#Participation for graduate sections 5315 & 6315 includes what is stated above for 4313, plus leading a topic or subtopic.

Topics:

In this course, we will review material from eight content domains:

- General and Field Geology
- Mineralogy, Petrology, and Geochemistry

- Sedimentology, Stratigraphy, and Paleontology
- Geomorphology, Surficial Processes, and Quaternary Geology
- Structure, Tectonics, and Seismology
- Hydrogeology
- Engineering Geology
- Economic Geology and Energy Resources

COURSE OUTLINE/SCHEDULE
This schedule is subject to change.

Topic Review may include discussions, team exercises, practice problem sets or exams.
Group Discussions will be ~30 - 60 minutes long and may include topics such as networking, job-hunting, and interviews. Group discussions are for you to share your own experiences with your peers.

1	W 1/21	**Course introduction**, overview of Professional Geologist licensure. Survey confidence in topics and testing.
2	M 1/26 & W1/28	**1/26 NO CLASS, complete the reading assignment.** **1/28 Discussion on assigned reading.** Test-taking strategies.
3	M 2/2 & W2/4	**Practice exam.**
4	M 2/9 & W2/11	**Practice exam peer review.** Discuss and agree on schedule of topics, assign graduate topic/subtopic leads.
5	M 2/16 & W2/18	**Topic review.**
6	M 2/23 & W2/25	**Topic review.** Jeporady.
7	M 3/2 & W3/4	**Topic review.** Guest speaker TBD.
8	M 3/9 & W3/11	**Topic review.** Course feedback 1.
9	M 3/16 & W3/18	**SPRING BREAK, NO CLASS**
10	M 3/23 & W3/25	**Topic review.** Group discussion: resumes.
11	M 3/30 & W4/1	**Topic review.**
12	M 4/6 & W4/8	**Topic review.** Group discussion: interviews.
13	M 4/13 & W4/15	**Topic review.** Personal plan with timeline due with feedback from peers.
14	M 4/20 & W4/22	**Topic review.** Course feedback. Quiz.
15	M 4/27 & W4/29	**Topic review.** team exercises.
16	M 5/4 & W5/6	**Final practice exam.**
17	May 11-15	**Spring final exams, NO CLASS**

Drop/withdrawal date
The drop/withdrawal deadline is April 2nd.

COURSE COMMUNICATION:
•Office Hours: I will have office hours for your questions and comments about the course. My office hours are in-person; however, you can request a virtual meeting, and I will send you a Zoom link. Please see the days and times at the top of this syllabus.
•Email: UTEP e-mail is the best way to contact me. I will make every attempt to respond to your e-mail within 24 hours of receipt. When e-mailing me, be sure to email from your UTEP student e-mail account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.
•Announcements: Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

DEADLINES AND LATE WORK
Due dates for assignments will be set on an assignment-to-assignment basis. Late assignments will not be accepted unless their due dates fall on dates that you (the student) previously disclosed OR in the event of an emergency or e.g. illness.

MAKE-UP WORK
Make-up work will be given only in the case of a documented emergency or for dates absences that you have provided notice of. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a zero. It is therefore important to reach out to me—in advance if at all possible—and explain with proper documentation why you missed a given course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.

ACCOMMODATIONS POLICY
The University is committed to providing reasonable accommodations to students with documented disabilities. Students who become pregnant may also request reasonable accommodations, in accordance with state and federal laws and regulations and University policy. Accommodations that constitute undue hardship are not reasonable. To make a request, please register with the UTEP Center for Accommodations and Support Services (CASS). Contact CASS at 915-747-5148, email them at cass@utep.edu, or apply for accommodations online via the CASS portal.

ILLNESS PRECAUTIONS
Please stay home if you have symptoms of a communicable illness. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations.

COURSE DROP POLICY
According to UTEP Catalog, "At the discretion of the instructor, a student can be dropped from a course because of excessive absences or lack of effort. A grade of "W" will be assigned before the course drop deadline and a grade of "F" after the course drop deadline." See Policies and Regulations in the UTEP Undergraduate Catalog for a list of excuse absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I will drop you from the course. I will provide 24 hours advance notice via email.

SCHOLASTIC INTEGRITY
Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Community Standards for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.

GUIDANCE ON ARTIFICIAL INTELLIGENCE
Using AI for study and brainstorming
Some AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, can be beneficial during study, and you are welcome to explore them for that purpose. However,

keep in mind that AI-generated ideas are not your own and may hinder your ability to think critically and creatively about a problem. It is also important to remember that these technologies often "hallucinate" or produce materials and information that are inaccurate or incomplete—even providing false citations for use.

That said, you are not allowed to submit any AI-generated work in this course as your own. If you use any information or materials created by AI technology, you are required to cite it like you would any other source. Consider how this will affect your credibility as a writer and scholar before doing so. Any direct use of AI-generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Community Standards.

COURSE RESOURCES: Where you can go for assistance

UTEP provides a variety of student services and support. Please refer to the QR code below for a listing of campus resources or visit https://www.utep.edu/advising/student_resources/student-success-resource-hub.html.