

GEOL 1610 – Introduction to Geology 5W2, Summer 2023

CAREFULLY READ ALL FIVE PAGES OF THIS SYLLABUS. YOU WILL HAVE ACCESS TO THIS COURSE IN CANVAS ON THE FIRST DAY OF CLASS, JUNE 26, 2023.

Welcoming Remarks

Welcome! This is GEOL 1610 – Introduction to Geology. My name is Paul Hudak, and I look forward to working with you this semester. Feel free to contact me by email (hudak@unt.edu), which I read frequently. Alternatively, I can speak with you over the phone or via Zoom if that works better for you.

About Me

I am a professor and undergraduate advisor in the Department of Geography and the Environment at UNT. Originally, I am from northern California, but have also lived in southern California, Wyoming, Pennsylvania, and of course Texas. Prior to coming to UNT in 1992, I received a B.S. in geology from Allegheny College, M.S. in geology from Wright State University, and Ph.D. in geography, emphasis in water resources, from the University of California at Santa Barbara. At UNT, I teach various courses in geology, water resources, and research methods, as well as supervise interns and graduate students. I also have an active research program, with current interests in groundwater monitoring and remediation, environmental geology, and wetland mitigation. My hobbies include observing nature, gardening, fixing up an old truck, and hanging out with my collies.

Readings (Free!)

Textbook: Physical Geology – 2nd Edition, by Steven Earle. Click the “Textbook” link under the “Introduction” module in Canvas, and download this pdf to your desktop for future access.

Earthshots: <https://eros.usgs.gov/image-gallery/earthshots/more-information>

Course-Level Objectives

Upon successful completion of this course, students will be able to:

1. Describe the earth’s composition and geological processes
2. Analyze interactions between humans and geological processes
3. Apply geological principles to the interpretation of rocks and natural events

Schedule

This course consists of four modules, each requiring readings, a monitored discussion, two assignments (lab component of course), and a quiz. Discussions and assignments will be

available in Canvas from the beginning of the course to their respective due dates. Quizzes will only be available from 12:01 a.m. – 11:59 p.m. on their respective due dates.

Module 1: June 26 – July 3

Chapter 1 – Introduction to Geology

Chapter 2 – Minerals

Chapter 3 – Intrusive Igneous Rocks

Chapter 4 – Volcanism

Earthshots – (1) Read all four tabs: More Information, Introduction to Remote Sensing, The Landsat Program, and What the Colors Mean. (2) Click Earthshots (top left), then the Natural Disasters tile, then the Read More button under Mount St. Helens.

Complete Discussion 1, Assignments 1 and 2, and Quiz 1 by 11:59 p.m., July 3

Module 2: July 4 – July 12

Chapter 6 – Sediments and Sedimentary Rocks

Chapter 7 – Metamorphism and Metamorphic Rocks

Chapter 5 – Weathering and Soil

Chapter 15 – Mass Wasting

Chapter 13 – Streams and Floods

Complete Discussion 2, Assignments 3 and 4, and Quiz 2 by 11:59 p.m., July 12

Module 3: July 13 – July 20

Chapter 14 – Groundwater

Chapter 16 – Glaciation

Earthshots – Click Glaciers, then Read More under Bear Glacier and Hubbard Glacier

Chapter 17 – Shorelines

Chapter 18 – Geology of the Oceans

Chapter 11 – Earthquakes

Complete Discussion 3, Assignments 5 and 6, and Quiz 3 by 11:59 p.m., July 20

Module 4: July 21 – July 28

Chapter 9 – Earth's Interior

Chapter 10 – Plate Tectonics

Chapter 12 – Geological Structures

Chapter 8 – Measuring Geological Time

Complete Discussion 4, Assignments 7 and 8, and Quiz 4 by 11:59 p.m., July 28

Assignments include background information and hyperlinks clickable in Canvas. However, please read your textbook to reinforce and augment information presented in Canvas. Please contact me, preferably at least a day before an assignment is due, if you need help with that assignment.

Quizzes consist of 50 multiple choice questions; they will be straightforward and reflect major concepts in the readings. For example, I might ask what processes create soil, but would not expect you to memorize a soil classification system, nor would I ask you about soil types of Canada. Moreover, I might ask about properties of minerals, but would not expect you to recite long mineral formulas.

To review for quizzes, read and contemplate the summary and review questions at the end of each chapter. See Appendix 2 of the textbook for answers to these questions.

Here are some additional review questions:

[www.geog.unt.edu/~hudak/Exam 1 Examples.pdf](http://www.geog.unt.edu/~hudak/Exam%201%20Examples.pdf)
[www.geog.unt.edu/~hudak/Exam 2 Examples.pdf](http://www.geog.unt.edu/~hudak/Exam%202%20Examples.pdf)
[www.geog.unt.edu/~hudak/Exam 3 Examples.pdf](http://www.geog.unt.edu/~hudak/Exam%203%20Examples.pdf)
[www.geog.unt.edu/~hudak/Exam 4 Examples.pdf](http://www.geog.unt.edu/~hudak/Exam%204%20Examples.pdf)

Each quiz will only cover the readings in its module noted above. For example, you will only be tested on Chapters 9, 10, 12, and 8 in Quiz 4.

You may use your textbook and notes, but no other external sources, when taking quizzes. Once you access a quiz, you will have a single 90-minute session to complete it. Please plan ahead and secure a quiet space with a **STRONG AND RELIABLE INTERNET CONNECTION**.

DO NOT WAIT UNTIL THE END OF THE DAY TO COMPLETE A QUIZ OR ASSIGNMENT. GIVE YOURSELF ADEQUATE TIME IN CASE OF UNFORESEEN CIRCUMSTANCES. CANVAS WILL TERMINATE ACCESS TO THE ASSIGNMENT OR QUIZ AT THE END OF THE DAY.

STUDY BEFORE TAKING EACH QUIZ, OR ELSE YOU WILL RUN OUT OF TIME TRYING TO LOOK UP UNFAMILIAR INFORMATION.

You must take the quizzes by yourself. Do not share information about them with anyone else. Please be aware, Canvas has extensive cheating and plagiarism detection capability. Cheating, plagiarism, and other forms of academic dishonesty are completely unacceptable and have dire consequences (see section on academic dishonesty below).

Grading

Quizzes=400 points, Discussions=76 points, Assignments=226 points

Total=702 points (A=628-702, B=558-627, C=488-557, D=418-487, F=less than 418)

Extra Credit

The Department of Geography does not allow extra credit assignments (work not specified on a course syllabus).

Academic Integrity Policy

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Students who cheat or plagiarize will receive a "0" for that particular assignment or exam. Additionally, the incident will be reported to the Office of Student Rights and Responsibilities for further penalty. According to the UNT catalog, the term "cheating" includes, but is not limited to: (a) use of any unauthorized assistance in taking quizzes, tests, or examinations; (b) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (c) the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; (d) dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or (e) any other act designed to give a student an unfair advantage. Altering a returned test and claiming a grader or scanning machine made an error is also considered cheating. The term "plagiarism" includes, but is not limited to: (a) the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and (b) the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website \(https://disability.unt.edu/\)](https://disability.unt.edu/).

Prohibition of Discrimination, Harassment, and Retaliation Policy

UNT prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information,

veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The university takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (<https://deanofstudents.unt.edu/conduct>) to learn more.