

EARTH SCIENCE
Geography 1710.005 – Fall 2025
Course Syllabus

GAB 104, T, TH 11-12.20.

INSTRUCTOR: Dr. Harry Williams

Office: EESAT 210G

Email: HarryF.Williams@unt.edu

Class Canvas page: GEOG 1710.005: access to quiz and exam scores and to reviews and class announcements. You cannot access lectures or quizzes on Canvas; the class Canvas page does not include lab grades.

Office hours: T, TH 2-4, and by appointment.

COURSE DESCRIPTION: the Earth Science class is a broad introduction to the study of the physical characteristics of the earth. It includes the lithosphere (rocks, soil), atmosphere, hydrosphere (oceans, lakes, rivers, rainfall) and biosphere (plants). The first part of the course deals mainly with weather and climate. The second part concerns geology and landforms of rivers, deserts and coasts.

COURSE OBJECTIVE: the objective of the course is to gain a basic understanding of the major features, processes and interactions of the physical environment of the earth's surface.

COURSE GRADE: your grade will be based on your lab grade, lecture quizzes and lecture exams.

LABS: You must be registered for an earth science lab - the lab is worth 30% of your final grade.

Labs give you hands-on experience on a variety of earth science topics e.g. finding locations on campus and on a globe, making weather observations, analyzing soils. Teaching, testing and grading of the lab work is the responsibility of your lab TA (Teaching Assistant). Labs are 1 hour, 20 minutes and are scheduled in room 390 in the Environmental Science Building (EESAT). Note that every week there are pre-lab and post-lab assignments to be completed on your lab Canvas page. Labs begin in week 2, but there are pre-lab activities, so check the lab Canvas page before attending your first lab.

LECTURE QUIZZES: a short quiz follows every lecture. You are encouraged to take good notes during lectures; you may refer to your notes when answering the quizzes. The two lowest quiz grades will be dropped. The 25 quizzes are worth 30% of your final grade (1.2% each).

LECTURE EXAMS: there are four multiple-choice lecture exams, worth 40% of your final grade (10% each). Exams will consist of 50 multiple-choice questions selected from preceding quizzes and lectures. Exams are closed book (no notes). Scantrons will be supplied.

ATTENDANCE: attendance is **required** in this class. The quizzes also serve as a record of attendance. Students with three or more unexcused* absences may be dropped from the course (* some absences, e.g. illness, may be excused; "official" documentation must be provided).

COURSE TEXT BOOK: Required: None; **Optional:** Christopherson, R.W. and Birkeland, G.H. 2015. Geosystems, 9th edition. This is an older edition of this book; inexpensive used copies can be found online. Most of the lecture material is based on this book. This book is not required; it is simply suggested for students who like to have a textbook to accompany the lectures.

LAB MANUAL: Department of Geography, University of North Texas Earth Science Laboratory Manual, 30th edition.

Extra Credit: The Department of Geography and the Environment does not allow extra credit assignments (work not specified on a course syllabus).

ADA Statement: the Department of Geography and the Environment, in cooperation with the Office of Disability Accommodation, complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written request before

the 12th class day so that I can make the necessary arrangements needed. Cheating and Plagiarism Statement: Students caught cheating or plagiarizing 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. 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. *Students are responsible for retaining all graded materials in event of a grade dispute.

Geography and the Environment
University of North Texas

Dr. Harry Williams

EARTH SCIENCE
Geography 1710.005 - Fall 2025
Lecture, Quiz and Exam Schedule

DATE	TOPICS
Aug. 19	1. Introduction; course organization; what is earth science? No quiz.
21	2. The science in earth science; location on Earth; latitude and longitude; quiz 1.
26	3. Topographic maps; Geographic Information Systems; quiz 2.
28	4. Earth-Sun relations; quiz 3.
Sept. 2	5. Seasons; quiz 4.
4	6. Introduction to the atmosphere; quiz 5.
9	7. Solar energy and temperature I; quiz 6.
11	EXAM 1
16	8. Solar energy and temperature II; quiz 7.
18	9. Atmospheric pressure and winds; quiz 8.
23	10. Winds and ocean currents; quiz 9.
25	11. Atmospheric moisture and humidity; quiz 10
30	12. Atmospheric moisture and stability; quiz 11.
Oct. 2	13. Air masses, fronts and storms; quiz 12.
7	EXAM 2
9	14. Climatic regions; quiz 13.
14	15. Minerals and rocks I; igneous rocks; quiz 14.
16	16. Minerals and rocks II; sedimentary and metamorphic rocks; quiz 15.
21	17. Plate tectonics; quiz 16.
23	18. Weathering and mass wasting; quiz 17.
28	19. River landscapes; quiz 18.
30	EXAM 3
Nov. 4	20. Desert landscapes; quiz 19.
6	21. Coastal landscapes; quiz 20.
11	22. Soil formation; soil properties; quiz 21.
13	23. Geology, climate, soils, vegetation and topography in North Texas; quiz 22
18	24. Physical geography and society I: global warming; quiz 23.
20	25. Physical geography and society II: urban impacts; quiz 24.
24-30	THANKSGIVING – no classes
Dec. 2	26. Physical geography and society III: TBD; quiz 25.
4	26. Review, Q&A session, Quiz 25 returned (optional).
9	FINAL EXAM Tuesday Dec. 9, 10.30 – 12.30.