

EARTH SCIENCE
Geography 1710.005 – Fall 2026
Course Syllabus

Lyceum, University Union, TuTh 11:10AM - 12:30PM

INSTRUCTOR: Dr. Harry Williams

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Class Canvas page: GEOG 1710.005: access to online quizzes, quiz and exam scores and reviews and class announcements. You cannot access lectures on Canvas; the class Canvas page does not include lab grades (there is a separate Canvas page for labs).

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. 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 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. Quizzes are on canvas. Each quiz opens at the end of a lecture and closes 24 hours later. You are encouraged to take good notes during lectures; you may refer to your notes when answering the quizzes. The 22 quizzes are worth 33% of your final grade (1.5% each).

LECTURE EXAMS: there are seven multiple-choice lecture exams, worth 37% of your final grade (5.3% each). Exams will consist of 50 multiple-choice questions selected from preceding quizzes and lectures. Exams are closed book (no notes). Exams are taken in class. Scantrons will be supplied. An exam review will be posted on canvas about a week before each exam.

ATTENDANCE: attendance is **required** in this class. 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, e.g. doctor’s note**). Roll will be taken at the beginning of selected lectures.

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, 31st 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.

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Lecture, Quiz and Exam Schedule

DATE	TOPICS
Aug. 18	Introduction; course organization; what is earth science? No quiz.
20	The science in earth science; location on Earth; latitude and longitude; quiz 1.
25	Topographic maps; Geographic Information Systems; quiz 2.
27	Earth-Sun relations; quiz 3.
Sept. 1.	EXAM 1
3	Seasons; quiz 4.
8	Introduction to the atmosphere; quiz 5.
10	Solar energy and temperature I; quiz 6.
15	EXAM 2
17	Solar energy and temperature II; quiz 7.
22	Atmospheric pressure and winds; quiz 8.
24	Winds and ocean currents; quiz 9.
29	EXAM 3
Oct. 1	Atmospheric moisture and humidity; quiz 10
6	Atmospheric moisture and stability; quiz 11.
8	Air masses, fronts and storms; quiz 12.
13	EXAM 4
15	Minerals and rocks I; igneous rocks; quiz 13.
20	Minerals and rocks II; sedimentary and metamorphic rocks; quiz 14.
22	Plate tectonics; quiz 15.
27	EXAM 5
29	Weathering and mass wasting; quiz 16.
Nov. 3	River landscapes; quiz 17.
5	Desert landscapes; quiz 18.
10	EXAM 6
12	Coastal landscapes; quiz 19.
17	Geology, climate, soils, vegetation and topography in North Texas; quiz 20.
19	Physical geography and society: global warming; quiz 21.
24	Thanksgiving
26	Thanksgiving
Dec. 1	Physical geography and society: White Rock Creek study; quiz 22.
3	Review, Q&A (optional)
8	FINAL EXAM