Earth Processes

Last Updated: Tue, 12/30/2025

Course prefix: EAS

Course number: 2600

Section: A

CRN (you may add up to five):
21255 35406

Instructor First Name: Samantha

Instructor Last Name: Wilson

Semester: Spring

Academic year: 2026

Course description:

This course introduces students to the fundamental principles of Earth science and examines how these principles apply to a wide range of practical and societal issues that affect daily life. Course topics emphasize the interrelationships among plate tectonics, Earth surface processes, geologic structures, natural resources, and natural hazards. Upon successful completion of the course, students will be able to interpret and analyze the geologic processes that shape the landscapes encountered in everyday environments.

Course learning outcomes:

- Develop a qualitative understanding of plate tectonics and its driving forces
- Describe Earth's minerals and rocks, how they are formed, and their physical properties
- Distinguish Earth's internal structure based on physical and chemical properties
- Describe the chemical and physical mechanisms that alter and deform rocks
- Define and apply stratigraphic principles to reconstruct geologic history
- Determine the forces responsible for shaping Earth's landscapes

Required course materials:

Canvas & Laptop

Recommended (not required) Text: Grotzinger, J.P., and Jordan, T.H., Understanding Earth, ISBN: 1-4641-3874-5. There is a newer edition with similar content, but any page recommendations are based on the 7^{th} edition.

Grading policy:

Grading: You can check your current grades at any time on Canvas > Grades. The breakdown of grading is below.

Exams 40%

Average of exam scores (3 lecture exams and 1 cumulative final)

Class Participation 35%

Assignments will be announced during lectures & on Canvas

Labs 25%

Average of lab scores

Course total 100%

Exams: Lecture exams will test previously discussed topics. There will be three lecture exams. Please check schedule for exam dates (exam dates are subject to change). Exams will be timed and closed notes. This means no internet tabs, no phone, no notes, no textbook, no friends, and pretty much no to everything except for your knowledge. The cumulative final will cover all lectures (~lecture 1-25). Any cheating will receive a 0 for that exam and a report will be sent to The Office of Student Integrity for Academic Misconduct.

Class Participation: We will have a variety of in class participation activities and online "homework" type of activities that we will assign throughout the course. Length and time allotted to complete such assignments will vary and be more specifically discussed within the course lecture and announced on Canvas. One in-class participation activity will dropped (this does not include HW assignments).

Labs: No lab manual purchase is required. There is a separate Canvas site for your lab materials. All handouts, quizzes, grading policies, grades, TA contact information and

time slots are posted there. Lab material is posted on Canvas. See separate lab syllabus for more information about how your laboratory grade will be determined.

Grading Scale: For P/F grading, passing is a 70.0 or higher. For a letter grade please see scale below.

Grade Percentage

A 90.0 – 100

B 80.0 – 89.9

C 70.0 – 79.9

D 65.0 – 69.9

F<65.0

Re-grades: Any assignment may be submitted for re- grading because of an error up to one weekafter the assignment grade is released. Although I am always happy to discuss your work with you at anytime, once that initial week has passed, there will be no changes made in grades.

Grade Curve: Depending on the distribution of student scores at the end of the course, the scores may be curved to reflect the scale described above (**up to the instructor's discretion**).

Extra Credit: To be fair to all students, no extra credit will be offered.

Attendance policy:

It is strongly recommended that you attend all lectures. If you must miss a lecture, it is your responsibility to complete any assignments and learn the material you missed by carefully reviewing the lectures and emailing the instructor and/or lecture TA.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Inquiry and Analysis
- Problem-Solving
- Teamwork