

GEOL 101 - Introductory Geology: Exploring Planet Earth, Spring 2022, Section 1001, MoWe 10:00 – 11:15 AM, TBE A-107

Faculty:

Instructor: Dr. Jeremy Koonce

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Office Hours: Monday 1:00 - 2:00 PM, Wednesday 3:00 - 4:00 PM, and by appointment

General Information:

Course format: Lecture twice a week, Laboratory once a week

Textbook: Essentials of Geology by Marshak, 6th edition

Prerequisites: None

Learning Outcomes:

After successfully completing this course, students will be able to: 1) Identify common rocks and minerals and place them in the context of the rock cycle; 2) Locate major plate boundaries around the world, and identify the geological processes and features that may accompany those boundaries; 3) Explain the surface processes that have shaped the landscape over geologic time; and 4) Explain the origins and limitations of major renewable and non-renewable resources.

Grading Policies:

- Students must pass both the lecture and the laboratory in order to pass GEOL 101.
- An average score of less than 60% in lecture will lead to a grade of F for GEOL 101.
- Either an average score of less than 60% in the GEOL 101 Lab or more than two missed lab assignments will lead to a grade of F for GEOL 101.
- Required reading means that the instructor may test on that material even if it has not been covered in lecture.
- No extra credit will be given.

Grade Calculation:

Each student's final grade will be calculated according to the following schedule. The calculated total will be rounded to the nearest integer number.

Three lecture exams (15% each)	45%
Comprehensive final exam	20%
Lecture quizzes/assignments	10%
Laboratory	25%
Total %	100%

Grade Assignment:

Final grades will be assigned according to the following schedule. The instructor may elect to curve the final grades in the students favor.

Grade	Total %	Grade	Total %
A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	0-59

Lecture Exams:

- Exam 1: Feb. 9, covers: Prelude Box P1; Chapters 1, 3, 4, 5
- Exam 2: Mar. 9, covers: Chapters 6, 7, 10; Interludes A, B2, C, E
- Exam 3: Apr. 13, covers: Chapters 8, 13, 14, 16, 17; Interludes D, F
- Final Exam: Date/time TBA, covers: Cumulative with emphasis on Chapters 2, 9, 12, 18, 19

Class Schedule

Weekly schedule showing topics for lecture and laboratory, plus required reading assignments from the class textbook. The listed date is the start of each week (Monday).

Week 1 (Jan. 17)

Lab: No labs this week

Lecture 1: Holiday

Lecture 2: Introduction, Scientific Method, Origin and Structure of the Earth

Reading: Prelude Box P1; Chapter 1

Week 2 (Jan. 24)

Lab: Physical Properties

Lecture 1: Minerals

Lecture 2: Minerals

Reading: Chapter 3

Week 3 (Jan. 31)

Lab: Mineral Identification

Lecture 1: Igneous Rocks

Lecture 2: Igneous Rocks

Reading: Chapter 4

Week 4 (Feb. 7)

Lab: Igneous Rocks

Lecture 1: Volcanism

Lecture 2: Exam 1

Reading: Chapter 5

Week 5 (Feb. 14)

Lab: Mineral and Igneous Rocks Practicum

Lecture 1: Rock Cycle

Lecture 2: Sedimentary Rocks

Reading: Interludes A, B2, C, Chapter 6

Week 6 (Feb. 21)

Lab: No labs this week

Lecture 1: Holiday

Lecture 2: Sedimentary Rocks

Reading: Chapter 6

Week 7 (Feb. 28)
Lab: Sedimentary Rocks
Lecture 1: Metamorphic Rocks
Lecture 2: Metamorphic Rocks/Dating
Reading: Chapters 7, 10

Week 8 (Mar. 7)
Lab: Metamorphic Rocks
Lecture 1: Geologic Time
Lecture 2: Exam 2
Reading: Chapter 10; Interlude E

Spring Break (Mar. 14)

Week 9 (Mar. 21)
Lab: Topographic Maps
Lecture 1: Rivers
Lecture 2: Groundwater
Reading: Chapters 14, 16; Interlude F

Week 10 (Mar. 28)
Lab: Rock Exam
Lecture 1: Winds and Deserts
Lecture 2: Mass Wasting
Reading: Chapters 17, 13

Week 11 (Apr. 4)
Lab: Groundwater
Lecture 1: Earthquakes
Lecture 2: Earth's Interior
Reading: Chapter 8; Interlude D

Week 12 (Apr. 11)
Lab: Geologic Structure
Lecture 1: Geologic Structure
Lecture 2: Exam 3
Reading: Chapter 9

Week 13 (Apr. 18)
Lab: Geologic Structure
Lecture 1: Geologic Structure
Lecture 2: Plate Tectonics
Reading: Chapter 2

Week 14 (Apr. 25)
Lab: Plate Tectonics
Lecture 1: Global Change
Lecture 2: Glaciers
Reading: Chapters 19, 18

Week 15 (May 2)
Lab: Applied Geology
Lecture 1: Energy Resources
Lecture 2: Mineral Resources
Reading: Chapter 12

Week 16 (May 9)
FINAL EXAM TBD

UNLV Academic Policies

Students taking this course are required to be familiar with the UNLV academic policies. [Read the current UNLV Academic Policies.](#)

GEOL 101 Policies

Office Hours

My office hours (see above) are times that I have set aside to answer student questions in person. Please feel free to stop by and knock on my door during those times. I will be happy to answer your questions to the best of my ability. If my scheduled office hours are not convenient for you, please email me and schedule an appointment at an alternate time.

Attendance

It is important to attend class because I will cover a lot of material, answer questions, and provide guidance on exams. Students who miss class are responsible for the material that was presented. It is often helpful to request notes from a classmate.

Missed Work

Exams, quizzes, assignments, and labs missed due to absence will receive a grade of zero unless the instructor is provided with advance notification of an exception for a religious holiday or university-sponsored extracurricular activity as specified in the University Catalog. In the case of an excused absence, the nature and format of the make-up work will be at the instructors' discretion.

Laboratory

All GEOL 101 students are required to enroll in a zero-credit laboratory section.

First Week Schedule

Unless stated otherwise on the course syllabus, the GEOL 101 laboratory meets the first week of each semester.

Administrative Drops/Classroom Conduct

All students are required to be familiar with university policies and procedures in the current UNLV Undergraduate Catalog. Importantly, we follow the policies on Administrative Drops/Classroom Conduct as stated in the most recent UNLV Undergraduate Catalog. Any student that does not comply with these requirements, and conducts themselves in a manner that is disruptive and interferes with the right of other students to learn, or of the instructor to teach will be administratively dropped from the course.

Non-enrolled Guests

Students are not allowed to bring guests, including children to either lecture or laboratory.

Academic Misconduct

This course operates under a "zero tolerance" policy. Any student who commits cheating or plagiarism will receive a grade of F for the class.

Changes to the Syllabus

The course schedule is tentative, minor adjustments may be made during the course of the semester. The instructor also reserves the right to change topics to reflect world events. Students will be provided with an updated syllabus if significant changes are necessary.