

SIO 50: Introduction to Earth and Environmental Science
MWF 2:00 PM – 2:50 PM
York 4080A
(Lab room: York 3030)

Instructor

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Office Hours: by appointment

Hello! We are thrilled to be introducing you to the exciting world of geology! Regardless of your background, we believe you will find the class both interesting and informative. Throughout the quarter, we ask that you remember that we are here to help you further your education, so please do not be inhibited to visit me during office hours, seek help/guidance, or discuss any concerns or issues you may have. We always encourage questions and discussion in class and are happy to re-address or clarify concepts. We want this to be a positive and useful learning experience for each and every one of you!

Class Organization:

This class is comprised of two components: a lecture that will make up 60% of the grade, and a laboratory section that will make up 40% of your grade. The lecture portion of class will consist of a 100-point midterm exam and a 125-point final exam. In addition, there will be several homework assignments and/or quizzes that will total 100 points. Consequently, your lecture grade will be based on a total of 325 points. The laboratory will consist of in-class exercises, one quiz that will each count as a lab exercise, and a field exercise.

The lecture text for the class is *Earth, Portrait of a Planet, 4th edition* by Marshak. The lab text is *Laboratory Manual for Introductory Geology, 2nd Ed* by Ludman and Marshak. The lecture text is recommended, the lab text is required. You are responsible for reading the chapters assigned, and the exams will include material covered in the text. Please note, however, that there will be information covered in class that is not covered in the book. Consequently, regular attendance in lecture, coupled with effective note-taking is perhaps the best way to succeed in this class.

Field trips:

There will be one weekend (Saturday only) field trip to explore local geology. Details will be given in class shortly. Exercises completed during this excursion will count towards your laboratory grade.

Absences and Missed Work:

There will be no make-up examinations. In the case of legitimate conflicts, notification is required at least one week before the regularly scheduled examination. In the case of deaths, accidents, or sickness, notification is appreciated as soon as possible and is required within one week of the regularly scheduled examination time. *All excuses must be in writing.*

Classroom Conduct:

Disruptions during lecture will not be tolerated. Disruptive behavior including talking, excessive noise, poor behavior towards other students or instructors/TAs, arriving late/leaving early, reading newspapers in class, inappropriate language/comments in lecture/lab or on-line, or ringing cell phones will result in your being asked to leave the class. It is to your benefit to arrive on time because most announcements and assignments occur at the beginning of lecture/lab.

Academic Integrity- Students' Responsibilities:

Students are expected to complete the course in compliance with the instructor's standards. No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort. University policies, regulations, and standards of conduct can be found on the Academic integrity office website at http://www.ucsd.edu/current-students/_organizations/academic-integrity-office/.

Schedule

General Note: This syllabus is an outline of proposed events. It is subject to change; however, never without notification, and never to advance the due dates of assignments.

Date	Lecture Topic	(Ch. in <i>Earth</i>)	Lab (Ch. in Ludman)
3-31	Welcome and introduction to geology	Ch. 1	NO LABS
4-2	Origin of Earth/Earth's anatomy	Ch. 1/2	
4-4	Plate Tectonics	Ch. 3/4	Introduction
4-7	Plate Tectonics	Ch. 3/4	Introduction (Ch.1)
4-9	Minerals	Ch. 5	
4-11	Minerals	Ch. 5	Topographic Maps (Ch.9)
4-14	Rock Cycle and Igneous Rocks	Int. A/Ch. 6	Tectonics I (Ch. 2)
4-16	Igneous Rocks	Ch. 6	
4-18	Weathering & Erosion/Sedimentary Rocks	Ch. 7	Tectonics II (Ch. 2)
4-21	Sedimentary Rocks/soils	Ch. 7	Minerals I (Ch. 3+4)
4-23	Metamorphic Rocks	Ch. 8	
4-25	Metamorphic Rocks	Ch. 8	Minerals II (Ch. 3+4)
4-28	Volcanism	Ch. 9	Igneous rocks (Ch. 5)
4-30	Volcanism	Ch. 9	
5-2	MID TERM EXAM		Sedimentary rocks (Ch. 6)
5-5	Structural Geology	Ch. 10	Metamorphic rocks (Ch. 7)
5-7	Structural Geology	Ch. 10	
5-9	Earthquakes and Tsunamis	Ch. 10	Beach Walk (at SIO)
5-12	Geologic Time: relative time and stratigraphy	Ch. 12/13	Review for lab quiz
5-14	Geologic Time: absolute dating & geo. Time scale	Ch. 12/13	
5-16	Mass Wasting & Landscape Evolution	Ch. 16	LAB QUIZ (rock and mineral ID)
5-19	Water and hydrologic processes	Int. F	Structures (Ch. 15)
5-21	Streams and floods	Ch. 17	
5-23	Groundwater	Ch. 19	Geologic Time (Ch. 17)
5-26	NO CLASS- MEMORIAL DAY		NO M/TU LABS
5-28	Coastal geology	Ch. 18	
5-30	Glaciers and climate change	Ch. 22	Water (Ch. 12)

<u>Date</u>	<u>Lecture Topic</u>	<u>(Ch. in <i>Earth</i>)</u>	<u>Lab (Ch. in Ludman)</u>
6-2	Glaciers and climate change	Ch. 22	Geomorphology (Ch. 8, 10,13)
6-4	Energy and Natural Resources	Ch. 14/15	
6-6	Energy and Natural Resources	Ch. 14/15	Make up

**Final Exam: Friday, June 13, 3-6 pm
York 4080A**