

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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Hello! We are thrilled to be introducing you to the exciting world of Earth Science! 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 to discuss any concerns or issues you may have. We always encourage questions and discussion in both lecture and lab. Furthermore, we are always 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 broken into two main 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 150-point final exam that is cumulative. In addition, there will be several (3-4) homework assignments that will total 100 points. Consequently, your lecture grade is based on a total of 350 points. The laboratory will consist of in-class exercises, one quiz that will 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 and lab textbooks are 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 is one required day field trip on Saturday Nov. 8th (8 AM- 4PM) to explore the stunning regional geology of Southern California. Details will be given in class. Exercises completed during these excursions will count towards your laboratory grade, so please mark your calendars accordingly.

Absences and Missed Work:

There are typically 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 or lab 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/.

SIO 50 Schedule- Fall 2014

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.

<u>Date</u>	<u>Lecture Topic</u>	<u>(Ch. in <i>Earth</i>)</u>	<u>Lab Subject</u>
10-3	Welcome and introduction to geology	Ch. 1	NO LABS
10-6	NO CLASS (labs still meet)		Orientation
10-8	Tectonics	Ch. 3/4	
10-10	Tectonics	Ch. 3/4	Introduction
10-13	Minerals	Ch. 5	Tectonics I
10-15	Minerals	Ch. 5	
10-17	The rock cycle and igneous rocks	Ch. 6	Tectonics II
10-20	Igneous rocks	Ch. 6	Minerals I
10-22	Weathering & erosion/sedimentary rocks	Ch. 7	
10-24	Sedimentary rocks and soils	Ch. 7	Minerals II
10-27	Metamorphic rocks	Ch. 8	Igneous Rocks
10-29	Metamorphic rocks	Ch. 8	
10-31	Volcanism/review for exam	Ch. 9	Sedimentary Rocks
11-3	MIDTERM EXAM		Metamorphic Rocks
11-5	Volcanism	Ch. 9	
11-7	Glaciers and climate change	Ch. 22	Maps
Saturday November 8th – Day field trip to Salton Sea			
11-10	Glaciers and climate change	Ch. 22	Beach Walk (At SIO)
11-12	Geologic structures	Ch. 11	
11-14	Geologic structures	Ch. 11	Climate Change/Stock and flow
11-17	Earthquakes and tsunamis	Ch. 10	REVIEW for lab quiz
11-19	Geologic time	Ch. 12/13	
11-21	Geologic time	Ch. 12/13	LAB QUIZ (rocks and minerals)
11-24	Mass wasting & landscape evolution	Ch. 16	Geologic Structures
11-26	Water and hydrologic processes	Int. F	
11-28	THANKSGIVING- NO CLASS		NO W/TH LAB

<u>Date</u>	<u>Lecture Topic</u>	<u>(Ch. in <i>Earth</i>)</u>	<u>Lab (Ch. in Ludman)</u>
12-1	Streams and floods	Ch. 17	Geologic Time
12-3	Groundwater	Ch. 19	
12-5	Groundwater	Ch. 19	Fossils/Biostratigraphy
12-8	Energy and natural resources	Ch. 14/15	Water and geomorphology
12-10	Energy and natural resources	Ch. 14/15	
12-12	Sustainability and the Earth system		TBA

Final Exam: Wednesday, December 17th 3-6 pm