

# **SIO 50: Introduction to Earth and Environmental Science**

**MWF 2:00 PM – 2:50 PM**

**York 4080A**

**(Lab room: York 3030)**

**Instructor:** Geoffrey Cook

**Office:** 366 Galbraith Hall (Main Campus); 303 Vaughan Hall (SIO)

**Phone:** 534-3406

**Office Hours:** Thursday 12-1 PM in Galbraith 366; and by appointment

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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 100-point final exam that is cumulative. In addition, there will be 5, 5 point, in-class quizzes totaling 20 points and 2 homework assignments totaling 55 points. Consequently, your lecture grade is based on a total of 275 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, 5<sup>th</sup> edition* by Marshak. The lab text is *Laboratory Manual for Introductory Geology, 3<sup>rd</sup> 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.

## ***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. 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/](http://www.ucsd.edu/current-students/_organizations/academic-integrity-office/).

## SIO 50 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.

<u>Date</u>	<u>Lecture Topic</u>	<u>(Ch. in <i>Earth</i>)</u>	<u>Lab Subject</u>
3-28	Welcome and introduction to geology		<b>NO M/TU labs</b>
3-30	Tectonics	Ch. 3/4	
4-1	Tectonics	Ch. 3/4	Introduction
4-4	Tectonics	Ch. 3/4	Tectonics I
4-6	Minerals	Ch. 5	
4-8	Minerals	Ch. 5	Tectonics II
4-11	Igneous rocks	Ch. 6	Minerals I
4-13	Igneous rocks	Ch. 6	
4-15	Weathering & erosion/sedimentary rocks	Ch. 7	Minerals II
4-18	Sedimentary rocks and soils	Ch. 7	Igneous Rocks
4-20	Metamorphic rocks	Ch. 8	
4-22	Metamorphic rocks	Ch. 8	Sedimentary Rocks
4-25	Volcanism	Ch. 9	Beach Walk (At SIO)
4-27	Volcanism/review for exam	Ch. 9	
4-29	<b>MIDTERM EXAM</b>		Metamorphic Rocks
5-2	Geologic structures	Ch. 11	Maps
5-4	Geologic structures	Ch. 11	
5-6	Earthquakes and tsunamis	Ch. 10	REVIEW for lab quiz
5-9	Geologic time	Ch. 12/13	<b>LAB QUIZ (rocks and minerals)</b>
5-11	Geologic time	Ch. 12/13	
5-13	Geologic time	Ch. 12/13	Geologic Structures
5-16	Mass wasting & landscape evolution	Ch. 16	Fossils/Biostratigraphy
5-18	Water and hydrologic processes	Int. F	
5-20	Streams and floods	Ch. 17	Geologic Time
5-23	Groundwater	Ch. 19	Water and geomorphology
5-25	Glaciers and climate change	Ch. 22	
5-27	Environmental issues		Volcanoes
5-30	<b>MEMORIAL DAY (NO CLASS)</b>		<b>NO M/TU LAB</b>
6-1	Energy and natural resources	Ch. 14/15	
6-3	Sustainability and the Earth system		TBA

**Final Exam: Friday, June 10<sup>th</sup> 3-6 pm in York 4080A**