

SIO 50: Introduction to Earth and Environmental Science

MWF 2:00 PM – 2:50 PM

Instructor: Geoffrey Cook

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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:

Because we are offering the class remotely, the traditional lecture/lab breakdown is not possible. I will do my best to substitute experiential (remote) options into the course and streamline them along with lectures. Lectures will be posted on Canvas, and I will also go through lectures with you on Zoom M/W/F during our meeting times. Please note that these lectures will be recorded and then posted to Canvas. The advantage of that is you will have synchronous and asynchronous options for reviewing the material. Everyone should read the assigned chapters in the text book. We will have a variety of quizzes and online assignments that will be based on the readings and my lecture PowerPoints. In addition, there will be a midterm and a final exam.

The course breakdown is as follows:

Mid-term exam: 25%

Final exam: 25%

Quizzes, assignments, exercises, homework: 50%

The lecture text for the class is ***Earth, Portrait of a Planet, 6th edition*** by Stephen Marshak. The book 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.

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

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 (Readings in Earth)</u>	<u>Reading quiz day (Chapters)</u>
4-1	Introduction to the Earth (Ch. 1/2)	
4-3	Tectonics (Ch. 3/4)	
4-6	Tectonics (Ch. 3/4)	4/6/20 (Ch. 1-4)
4-8	Tectonics (Ch. 3/4)	
4-10	Minerals (Ch. 5)	
4-13	Igneous Rocks (Ch. 6)	4/13/20 (Ch. 5+6)
4-15	Weathering & erosion/sed. rocks (Ch. 7)	
4-17	Sedimentary rocks and soils (Ch. 7)	
4-20	Metamorphic rocks (Ch. 8)	4/20/20 (Ch. 7+8)
4-22	Metamorphic rocks (Ch. 8)	
4-24	Volcanism (Ch. 9)	
4-27	Volcanism (Ch. 9)	4/27/20 (Ch. 9)
4-29	Review for exam	
5-1	MIDTERM EXAM	
5-4	Geologic time (Ch. 12/13)	5/4/20 (Ch. 12+13)
5-6	Fossils and biostratigraphy (Int. E)	
5-8	Geologic structures (Ch. 11)	
5-11	Geologic structures (Ch. 11)	5/11/20 (Ch. 10+11)
5-13	Earthquakes and tsunamis (Ch. 10)	
5-15	Maps (Geologic and Topographic) (No chapter)	
5-18	Glaciers and climate change (Ch. 22)	5/18/20 (Ch. 16 +22)
5-20	Mass wasting (landslides) (Ch. 16)	
5-22	Water and hydrologic processes (Int. F)	
5-25	NO CLASS (MEMORIAL DAY) (VIRTUAL DAY OFF)	
5-27	Streams and floods (Ch. 17)	5/27/20 (Ch. 17 + 19)
5-29	Groundwater (Ch. 19)	
6-1	Energy and natural resources (Ch. 14/15)	6/1/20 (Ch. 14 + 15)
6-3	Energy and natural resources (Ch. 14/15)	
6-5	Sustainability and the Earth system (No chapter)	

Final Exam: Friday, June 12th 3-6 pm