

SIO 240 Marine Geology
Tu-Th (3:30-4:50), Revelle Conference Room (4301)

Chris Charles (ccharles@ucsd.edu, x45911, VH305)
Jeff Gee (jsgee@ucsd.edu, x44707, RH300D)

The purpose of this class is to give an overview of marine geology from the perspective of geochemistry, paleoceanography and plate tectonics. A tentative class outline is given below. Grades will be based on a mid-term exam (30%), a final exam (40%) and homework assignments (30%). SIO graduate students must enroll for a letter grade. Lecture notes, reading materials will be available <https://ted.ucsd.edu/>.

Date	Topic	Instructor
Sept 24	Introduction to tectonics, Earth structure	JG
Sept 29	Mid-ocean ridge processes	JG
Oct 1	Melts and hydrothermal activity at mid-ocean ridges	JG
Oct 6	Marine magnetic anomalies - determining the age of the seafloor	JG
Oct 8	Fracture zones, plate motions	JG
Oct 13	Plate motions and reconstructions	JG
Oct 15	Hotspots and intraplate features	JG
Oct 20	Processes at convergent margins	JG
Oct 22	Tectonic framework of CA	JG
Oct 27	Exam	
Oct 29	Sediment distribution and sedimentary processes	CC
Nov 3	Terrestrial and marginal sedimentary environments	CC
Nov 5	Biogeochemistry of marine sediments	CC
Nov 10	Biogeochemistry of marine sediments	CC
Nov 12	Rates and time	CC
Nov 17	Sea level	CC
Nov 19	Sea level	CC
Nov 24	Long term consequences of plate motions	CC
Nov 26	Thanksgiving	
Dec 1	Coastal CA - sedimentary environments and habitats	CC
Dec 3	Review	CC, JG
Dec 7	Final Exam (3-6 p.m.)	