

SIO 240 Marine Geology  
Tu-Th (2-3:20), Vaughan Hall 100

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