

SIO 240 Marine Geology  
Tu-Th (3:30-4:50), Eckart 236

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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 (30%) and homework assignments (25%) and a project that will involve designing a short research cruise proposal (15%). SIO graduate students must enroll for a letter grade. Lecture notes, reading materials will be available <https://tritoned.ucsd.edu/>.

Date	Topic	Instructor
Sept 28	Introduction to tectonics, Earth structure	JG
Oct 3	Mid-ocean ridge processes	JG
Oct 5	Melts and hydrothermal activity at mid-ocean ridges	JG
Oct 10	Marine magnetic anomalies - determining the age of the seafloor	JG
Oct 12	Fracture zones, plate motions	JG
Oct 17	Plate motions and reconstructions	JG
Oct 19	Hotspots and intraplate features	JG
Oct 24	Processes at convergent margins	JG
Oct 26	Tectonic framework of CA	JG
Oct 31	Exam	
Nov 2	Sediment distribution and sedimentary processes	CC
Nov 7	Terrestrial and marginal sedimentary environments	CC
Nov 9	Biogeochemistry of marine sediments	CC
Nov 14	Biogeochemistry of marine sediments	CC
Nov 16	Rates and time	CC
Nov 21	Sea level	CC
Nov 23	THANKSGIVING	
Nov 28	Sea level	CC
Nov 30	Long term consequences of plate motions	CC
Dec 5	Coastal CA - sedimentary environments and habitats	CC
Dec 7	Project presentations	
Dec 11	Final Exam (3-6 p.m.)	