SIO 30 – SYLLABUS

Lecturers: P. Castillo, marine geology and chemical oceanography; J. MacKinnon, physical oceanography; N. Holland, marine biology.

Teaching Asst: Amanda Barker and Brandon Stephens
Reference: Garrison, Oceanography (Custom Loose-leaf Version or Text), 7th (or 6th) Edition

Lectures: Tentative Schedule

Marine Geology (Castillo)
Sep. 27 F Origin of the earth and oceans
Sep. 30 M Introduction to Marine Geology
Oct. 2 W Plate tectonics - introduction
Oct. 4 F Plate tectonics - tests
Oct. 7 M Ocean margins and basins I
Oct. 9 W Ocean margins and basins II

Physical Oceanography (MacKinnon)
Oct. 11 F Physical properties of the ocean: temperature, salinity and density
Oct. 14 M Forces acting on the ocean: Coriolis and more
Oct. 16 W Forces in action: coastal upwelling and ENSO
Oct. 18 F Waves and tides
Oct. 21 M Global circulation patterns
Oct. 23 W Climate change and the ocean: the IPCC 5th assessment report

Oct. 25 F MIDTERM

Marine Chemistry (Castillo)
Oct 28 M Introduction to marine sediments
Oct. 30 W Marine sediments & ocean history
Nov. 1 F Chemistry of seawater I
Nov. 4 M Chemistry of seawater II
Nov. 6 W F Carbon cycle and CO2
Nov. 8 F Marine resources
Nov. 11 M VETERANS DAY Holiday
Nov. 13 W Ocean and environment

Biological Oceanography (Holland)
Nov. 15 F History of biological oceanography
Nov. 18 M Who's who in the sea? I
Nov. 20 W Who's who in the sea? II
Nov. 22 F Life styles in the sea I
Nov. 25 M Life styles in the sea II
Nov. 27 W Life Styles in the Sea III
Nov. 29 F THANKSGIVING Holiday
Dec. 2 M Economics of the sea
Dec. 4 W Humans and the Sea

Dec. 6 F REVIEW

Dec. 11 W (3:00 – 5:59 p.m.) FINAL EXAM