

## 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), 7<sup>th</sup> (or 6<sup>th</sup>) 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 CO<sub>2</sub>  
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