

## SIO 30 – SYLLABUS

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

Teaching Asst: Sara Shen & Brandon Stevens

Reference: Garrison, Oceanography (Custom Loose-leaf Version or Text), 8<sup>th</sup> (or 7<sup>th</sup>) Edition

### Lectures: Tentative Schedule

#### Marine Geology (Castillo)

Oct. 03 F Origin of the earth and oceans  
Oct. 06 M Introduction to Marine Geology  
Oct. 08 W Plate tectonics - introduction  
Oct. 10 F Plate tectonics - tests  
Oct. 13 M Ocean margins & basins I  
Oct. 15 W Ocean margins & basins II  
Oct. 17 F Introduction to marine sediments  
Oct. 20 M Marine sediments & ocean history

#### Biological Oceanography (Holland)

Oct. 22 W History of biological oceanography  
Oct. 24 F Who's who in the sea? I  
Oct. 27 M Who's who in the sea? II  
Oct. 29 W Life styles in the sea I  
Oct. 31 F Life styles in the sea II  
Nov. 03 M Life Styles in the Sea III  
Nov. 05 W Economics of the sea  
Nov. 07 F Humans and the Sea  
Nov. 10 M MIDTERM EXAM

#### Physical Oceanography (MacKinnon)

Nov. 12 W Physical properties of the ocean: temperature, salinity and density  
Nov. 14 F Forces acting on the ocean: Coriolis and more  
Nov. 17 M Forces in action: coastal upwelling and ENSO  
Nov. 19 W Waves and tides  
Nov. 21 F Global circulation patterns  
Nov. 24 M Climate change and the ocean  
Nov. 26 W TBA  
Nov. 27-28 Thanksgiving Holiday

#### Marine Chemistry (Castillo)

Dec. 01 M Water & ocean chemistry I  
Dec. 03 W Water & ocean chemistry II  
Dec. 05 F Water & ocean chemistry III  
Dec. 08 M Marine resources I  
Dec. 10 W Marine resources II  
Dec. 12 F Ocean & environment

Dec. 13-20 W (3:00 – 5:59 p.m.) FINAL EXAM