

**SIO 277 Deep Sea Biology Fall 2013 Instructor: Lisa Levin
2:00-3:20 Tues./Thursday Vaughan 100 (Also lectures for SIO 286)**

- Sept. 26 Introduction, History of Deep-Sea Biology
- Oct. 1 Deep-Sea Environments, Technology and Tools
- Oct. 3 Faunal composition, depth zonation
- Oct. 8 Benthic communities: size, abundance, trophic composition
- Oct. 10. Species diversity
- Oct. 15. Reproduction, life histories and population dynamics
- Oct. 17 Animal-sediment interactions
- Oct. 22 Protozoa (*Research Proposal Abstract Due*)
- Oct. 24 **(QUIZ)** Genetics and Physiology
- Oct. 29 Hydrothermal Vent Ecology (*Challenger Forward Assignment Due*)
- Oct. 31 Vent physiology and biochemistry (Horst Felbeck)
- Nov. 5 Meso pelagic and bathypelagic ecology (Tony Koslow)
- Nov. 7. Fisheries and seamount ecology – Human impacts (Tony Koslow)
- Nov. 12 Methane seeps
- Nov. 14 *Osedax* and Whale Falls (Sigrid Katz)
- Nov. 16. Student Cruise I (7 AM – 10:00 PM) Arrive Mar Fac at 6 AM
- Nov. 19 Deep-sea microbiology (Doug Bartlett)
- Nov 21 Benthic-pelagic coupling /Climate Change I
- Nov. 23 Student Cruise II (7 AM – 10 PM) Arrive Mar Fac at 6 AM
- Nov. 26 **(QUIZ)** OMZs, biogenic reefs (Coral/Sponge), Climate change II
(*Deep-sea Futures proposals due*)
- Nov. 28 HOLIDAY
- Dec. 3 Hadal ecology and exploration
- Dec. 5. Human exploitation and conservation
- Dec. 12 – 3PM to 6PM (*Deep-Sea Futures Symposium = Final Exam*)
- Grading: Offered for a Letter Grade (default) or Satisfactory/Unsatisfactory (if not using the course to complete degree requirements)

Note: If you are enrolled in SIO 286 (but not SIO 277) you must attend these lectures, take quizzes and participate in cruise but do not need to complete the written assignments or give a research presentation, as you will have other assignments in SIO 286