**FISH 310 Biology of Shellfish**

**Animals for lab**

**Spring 2012**

**April 2-3**  
Ocean Acidification Part I

Animals Needed:

* mussels-**40,** **LIVE**
* oysters-**40,** **LIVE**
* clams-**40,** **LIVE**
* larval oysters – (will be provided by Roberts Lab)

**April 4-5**  
Intro to Cnidaria  
Animals needed  
•    **LIVE**: Several representative members of hydrozoa (thecate and athecate), anthozoa, and scyphozoa   
•    **LIVE**: 18 Anthopleura  
•    Brine shrimp larvae  
•    Any preserved cnidaria specimens

**April 16-17**  
Mollusc 1: Introduction to Mollusca  
Animals needed   
•    Representatives of 5 classes of molluscs—can be alive or preserved, as appropriate (animals A-E)

o    Polyplacophora (chiton) - **LIVE**  
o    Cephalopoda (squid, octopus or cuttlefish)  
o    Scaphopoda (tusk shell)  
o    Bivalvia - **LIVE**  
o    Gastropoda - **LIVE**

•    Additional gastropods, bivalves and cephalopods to examine  (can be others, as available, alive or preserved, as appropriate)

o    True limpet - **LIVE**  
o    Moon snail - **LIVE**  
o    Clam - **LIVE**  
o    Dog whelk   
o    Nudibranch - **LIVE**  
o    Squid (B)  
o    Chiton (3 species) - **LIVE**

•    Molluscs to observe pedal morphology

o    Giant chiton  
o    Clam  
o    Squid  
o    Nudibranch  
o    Limpet  
o    Moonsnail

**April 18-19**  
Mollusc 2: Bivalves  
Animals needed  
•    **LIVE**: mussels (1 per student) ~40  
  
**April 25-26**  
Mollusc 4: Gastropods and Cephalopods  
Animals needed:  
•    **LIVE**: Helix  
•    **LIVE:** Nudibranchs  
•   **LIVE:** Neogastropods

**April 30-May 1**  
Arthropoda/ Crustacea 1: Introduction  
Animal needs:   
•    Chelicerates

o    **LIVE**: 1 big terrestrial spider  
o    Horshoe crab

•    Crustaceans

o    Pericarida

•    **LIVE**: Isopod  
•    Amphipod  
•    Pillbug

o    Eucarida

•    **LIVE:** shrimp  
•    Shrimp (large, preserved)  
•    **LIVE:** hermit crabs  
•    Crab (large, preserved or **LIVE**)

* **LIVE**: Barnacles

**May 2-3**  
Crustacean 2: Crab Dissection  
Animal Needs  
•    **LIVE:** Enough large crabs (Cancer spp. and/or Pugettia producta) for dissection (~18)

**May 9-10**  
Crustacean 3: Crustacean Development/ Mysids/ Euphausiids/ Copepods/ Branchiopoda/ Shrimplike critters

Animal Needs:  
•    **LIVE:** Large crab  
•    **LIVE:** Artemia nauplii (TA will hatch)  
•    **LIVE:** Crangon shrimp  
•    **LIVE:** Salt water plankton tow

o    Barnacle nauplius  
o    Brachyuran crab zoea  
o    Copepods

•    **LIVE:** Freshwater plankton tow

o    Copepods

•    Preserved  King Crab Zoea (slide)

o    Porcelain crab zoea (slide)  
o    Dungeness crab (Cancer magister) megalops (slide)  
o    Phyllosoma larva of a spiny lobster (preserved)  
o    Mysids (preserved)  
o    Euphausiids   
o    Branchipoda

•    Anostraca  
•    Notostraca  
•    Cladocera  
•    Conchostraca  
Preserved/molts/slides:  
•    Mysid statoscyst (slide from **Greg?**)  
•    Shrimp eye and crab eye slides (slide from **Greg?**)

**May 14-15**

Ecninoderms: Asteroidea, Holothuroidea, and Ophiuroidea  
Animal Needs:  
**LIVE**  
•    Cucumaria piperata  
•    Other species of cucumbers (Parastichopus and ??)  
•    Brittlestars

**May 16-17**  
Shellfish Parasites

Animal needs:

* Isopod - **LIVE**

•    Live shrimp carrying a bopyrid isopod parasite on its abdomen/gill-**LIVE**  
•    Any other cool examples of crustacean parasites