

SIO 282 Phytoplankton Diversity
3300 Hubbs Hall 9-10:20am

Thursday September 22 Course Overview/Introduction

Tuesday September 27 Light Harvesting

Thursday September 29 Culturing phytoplankton/ Start enrichments

Tuesday October 4 Light Reactions of Photosynthesis

Thursday October 6 Dark Reactions of Photosynthesis

Tuesday October 11 Alternate Phototrophy

Thursday October 13 Cyanobacteria

Tuesday October 18 **QUIZ 1**/Green Algal Lineages

Thursday Oct 20 Cryptophytes/Chlorachniophytes/Euglenophytes

Tuesday October 25 Diatoms/Bolidophytes

Thursday October 27 Haptophytes

Tuesday November 1 Dinoflagellates

Thursday November 3 **QUIZ 2** (SIO retreat)

Tuesday November 8 Phytoplankton physiology I: Vitamins

Thursday November 10 Phytoplankton physiology II

Tuesday November 15 Current literature: student presentation/discussion?

Thursday November 17 Current literature: student presentation/discussion

Tuesday November 22 Current literature: student presentation/discussion

Thursday November 24 Holiday

Tuesday November 29 Current literature: student presentation/discussion

Thursday December 1 Last day of class **Proposal Due**

Class requirements:

1) Student presentation (25pts): Pick a paper on a phytoplankton group/topic previously covered in class. Paper must be from 2011 or later. Send this paper to classmates a week in advance. Prepare an introduction to the paper using other literature (eg 2 or so slides). Then walk through the paper figures. Answer questions, lead discussion.

Other students must read and prepare a least one question in advance based on the paper.

2) 2 quizzes (20 pts each)

3) Research Proposal (35 pts) Due Dec 1.

Aquatic Photosynthesis by Falkowski and Raven is highly recommended.

Research Proposal

Project Description. Maximum 5 pages total, containing the following:

The use of the sub-sections listed below is recommended, organized as appropriate.)

1. "Conceptual Framework" or "Objectives" or "Specific Aims"
2. "Rationale and Significance" or "Background"
3. "Hypotheses" or "Research Question (s)"
4. "Research Approach" or "Experimental Plan" or "Research Design"
5. "Broader Impacts"

References Cited (maximum 3 pages) See GPG for format guidelines.