SIO 282 Phytoplankton Diversity Fall 2013
Tuesdays/ Thursdays, 9:30 - 10:50 a.m
3300 Hubbs
Thursday Sept 26 Course overview/Introduction
Tuesday Oct. 1 Light harvesting
Thursday Oct. 3 Light reactions of photosynthesis
Tuesday Oct 8 Dark reactions of photosynthesis
Thursday Oct 10 Alternative phototrophy
Tuesday Oct 15 Cyanobacteria
Thursday Oct 17 Green algal lineages **Quiz I**
Tuesday Oct 22 Cryptophytes/Chlorachniophytes/Euglenophytes
Thursday Oct 24 Diatoms/Bolidophytes
Tuesday Oct 29 Haptophytes
Thursday Oct 31 Dinoflagellates
Tuesday Nov 5 Genetic Manipulation of Phytoplankton: Javi Paz Yepes
Thursday Nov 7 Current literature: student presentation/discussion (2) **Quiz II**
Tuesday Nov 12 Diatom Genomics: Andy Allen JCVI
Thursday Nov 14 and Current literature: student presentation/discussion (3)
Tuesday Nov 19 SIO Phytoplankton physiology I: Vitamins Ryan Paerl
Thursday Nov 21 Current literature: student presentation/discussion (3)
Tuesday Nov 26 Current literature: student presentation/discussion (2)
Thursday Nov 28 Holiday
Tuesday Dec. 3 Phytoplankton physiology II
Thursday Dec 5. Phytoplankton physiology III Research Proposal due.

Class requirements:
1) Student presentation (25pts): Pick a paper on a phytoplankton group/topic previously covered in class. Paper must be from 20011 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 5.

Aquatic Photosynthesis by Falkowski and Raven is highly recommended.
It is on reserve at the SIO Library.

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.