

Botany 330 - Algae - Syllabus 2009`

Th, Sept. 3	Introduction to the Algae	Care and use of microscopes/Project Descriptions
Tu, 8	Roles of Algae in Biogeochemistry	Use of Prescott Keys
Th, 10	Algae in Food Webs and other Biotic Associations – Student Presentations	Quantification of phytoplankton: Use of Sedgewick/Rafter cells and inverted microscope
Tu, 15	Technological Applications of Algae	Quantification of cultured algae: Use of hemacytometer and electronic particle counter
Th, 17	Phylogeny, Molecular Systematics and Applications	DNA extraction/Project Selection
Tu, 22	Cyanobacteria I	Cyanobacterial diversity
Th, 24	Cyanobacteria II	Field trip
Tu, 29	Endosymbiosis and the Origin of Eukaryotic Algae Student Presentations	Culture methods
Th, Oct. 1	Cryptomonads	Culture methods, continued
Tu, 6	Euglenoids	Flagellate diversity
Th, 8	Haptophytes	Flagellate diversity
Tu, 13	Dinoflagellates	DEMO: fluorescence microscopy and photomicroscopy
Th, 15	Ochrophytes I: Diatoms	Diatoms of Lake Wingra
Tu, 20	Other Ochrophytes	More diatoms; xanthophytes
Th, 22	Brown Algae	Individual project time/lab exam review time
Tu, 27	No lecture	Midterm lab exam: covers specimens from 9/22 to 10/22
Th, 29	Brown Algae	Brown, red, & green seaweeds
Tu, Nov. 3	Red Algae	Brown and red algae, cont.
Th, 5	Intro. to Greens, Prasinophytes	Green algal diversity (Prasinophytes)
Tu, 10	Ulvophyceans	Green algal diversity, cont. (Ulvophyte and Trebouxiophyte cultures)
Th, 12	Trebouxiophyceans	Green algal diversity, continued (Chlorophyceans I)
Tu, 17	Chlorophyceans	Green algal diversity, continued (Chlorophyceans II)
Th, 19	Charophyceans	Green algal diversity, continued (Chlorophyceans III)
Tu, 24	Phytoplankton Ecology	Green algal diversity, continued (Charophytes)
Tu, Dec. 1	Phytoplankton Ecology II	Using the logistic equations
Th, 3	Periphyton Ecology	Periphyton techniques
Tu, 8	Marine Ecology	Individual project time/lab exam review time
Th, 10	No Lecture	Lab exam; covers specimens from 10/29 to 11/24
Tu, 15	Oral Project Presentations	Oral Project Presentations