

EOSC475 Marine Microbiology - LECTURE OUTLINE 2010

Unit	Topic	Assignments	
Basic Oceanography	Mon. Jan. 4	Outline & introduction	
	Wed. Jan. 6	Currents, gyres, mixing,	
	Fri. Jan. 8	Upwelling & Western intensification	
	Mon. Jan. 11	Vertical & thermohaline circulation	
	Wed. Jan. 13	Light & nutrients	
Marine Microbial Communities	Fri. Jan. 15	History of discovery – size and abundance	Basic Oceanography Diagnostic
	Mon. Jan. 18	Major groups of microbes in the sea	
	Wed. Jan. 20	Biomass: Vertical distribution	
	Fri. Jan. 22	Biomass: Relationships	
	Mon. Jan. 25	Biomass: Production; Redfield ratio; C:N	
Marine Microbial Production	Wed. Jan. 27	Intro to Problem-Solving	
	Fri. Jan. 29	Bacterial Production	
	Mon. Feb. 1	Measuring bacterial production	Due: E-project Topic
	Wed. Feb. 3	Measuring bacterial production	
	Fri. Feb. 5	Sources of Carbon and DOM	Problem Set 1
	Mon. Feb. 8	Class discussion: Dead, Alive, or Sleeping?	
	Wed. Feb. 10	In class review	
	Fri. Feb. 12	Mid-term Examination	
Mid-term Break	Mon. Feb. 15		
	Fri. Feb. 26		
The Fate of Microbial Production	Mon. Mar. 1	Sources of Carbon and DOM	Due: E-Project Annotated Bibliography
	Wed. Mar. 3	Sources of Carbon and DOM	
	Fri. Mar. 5	Flagellate Grazing	
	Mon. Mar. 8	Viral Lysis	Basic Molecular Biology Diagnostic
	Wed. Mar. 10	Estimating viral-mediated mortality	
Problem Solving	Fri. Mar. 12	Problem-Solving In-Class Workday	
	Mon. Mar. 15	Topic One	
	Wed. Mar. 17	Topic Two	
	Fri. Mar. 19	Topic Three	
Diversity in Microbial Communities: Organisms	Mon. Mar. 22	Bacteria, Archea and the Tree of Life	
	Wed. Mar. 24	Molecular tools	
	Fri. Mar. 26	Viral diversity	Due: E-Project Statement of Importance
	Mon. Mar. 29	Omics: genes to proteins	
Diversity in microbial communities: Processes	Wed. Mar. 31	Viruses and geochemical cycles	
	Fri. Apr. 2	No class	
	Mon. Apr. 5	No class	
	Wed. Apr. 7	Anaerobic respiration: The sediment is alive!	
	Fri. Apr. 9	Anamox: Novel symbioses?	
	Mon. Apr. 12	Class discussion: Photorhodopsin	
	Wed. Apr. 14	Hypoxic/Anoxic Zones	Due: E-Project
Final Exam			