

## SYLLABUS

### Marine Microbial Ecology OCB 4993 / OCB 6993

DATE	TOPIC	Reading
26 Aug	Microbial communities I: Phytoplankton diversity	1-27
28 Aug	Phytoplankton dynamics and production	28-47
2 Sep	NO CLASS – EXTENDED LABOR DAY WKEND	
4 Sep	Microbial communities II: Bacterioplankton diversity	48-54; addtl. material
9 Sep	Bacterioplankton distribution and production	53-69
11 Sep	Control of bacterial production, growth efficiency	addtl. material
16 Sep	Microbial communities: protozoa and microzooplankton	80-99
18 Sep	Symbiosis and mixotrophy in marine protozoa	addtl. material
23 Sep	Benthic microbial communities	100-121
25 Sep	Structure of microbial food webs	122-144
30 Sep	Bacterivory – interactions between grazers and prey	addtl. material
2 Oct	Discussion Day	
7 Oct	MIDTERM EXAM 1	
9 Oct	Sources of detritus and dissolved organic matter	145-147; addtl. material
14 Oct	Physiological groups of marine bacteria	148-160; 164-169
16 Oct	Bacteria and the sulfur cycle; photosynthetic bacteria	169-180
21 Oct	Bacteria of the nitrogen cycle	160-164
23 Oct	Uptake and regeneration of nutrients by bacteria	addtl. material
28 Oct	Nitrification and the marine nitrogen cycle	addtl. material
30 Oct	Marine nitrogen fixation	addtl. material
4 Nov	Discussion Day	
6 Nov	MIDTERM EXAM 2	
11 Nov	VETERANS DAY – UNIVERSITY CLOSED	
13 Nov	The role of marine viruses	addtl. material
18 Nov	Marine microbial food web models	181-203
20 Nov	Techniques in microbial ecology I: standing stocks	204-215
25 Nov	Techniques in microbial ecology II: bacterial production	215-229
27 Nov	THANKSGIVING – UNIVERSITY CLOSED	
2 Dec	Techniques in microbial ecology III: grazing activity	237-244
4 Dec	Final discussion day	
9 Dec	FINAL EXAM	

Reading assignments refer to the textbook Y.I. Sorokin (1999): Aquatic Microbial Ecology.