

SIO126 Marine Microbiology

Time and location: MWF 9-9:50. York 4080A

Instructor: Brian Palenik, 3110 Hubbs Hall, SIO
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Office hours: By appointment

TA: none

Course web site: ted.ucsd.edu

The lecture notes (ppt slides) will be available usually on the day of the lecture.

Sections: W 10-10:50 York 3030 we be used for occasional review sessions as needed.

Grading: There will be three quizzes and a final exam. The final exam will count for 35% of the grade. The lowest quiz score will be dropped and the remaining two will count for 50%. The quizzes will be a combination of multiple choice, short answer, and short essay and will cover the material immediately preceding them. The final will be comprehensive and will be similar to the quizzes in format. Three assignments will count for 5% each.

Cheating: The University imposes strict guidelines on academic integrity (www-senate.ucsd.edu/manual/appendices/app2.htm) and these will be enforced. Anyone caught cheating will receive an F for the course and will be reported to the Academic Integrity coordinator. Please bring a photo ID to all exams and quizzes. You may be required to sign an attendance sheet when you turn in your exams.

Recommended Texts: Marine Microbiology: Ecology and Applications. C. B. Munn. 1st or 2nd Ed (On reserve at Geisel). There will be required reading posted on Ted.

Review Articles: An entire issue of Nature Reviews Microbiology has been devoted to marine microbiology (5:2007). <http://www.nature.com/nrmicro/focus/marinemicrobiology/index.html>

DATE	TOPIC	READING
Jan 4 M	Introduction to the marine environment: Physics and Chemistry A	M (Ch. 1,p.7-14)
Jan 6 W	Physics and Chemistry B	
Jan 8 F	Physics and Chemistry C	
Jan 11 M	The Prokaryotic Cell	M(Ch.3)
Jan 13 W	Methods in Marine Microbiology A	M (Ch. 2, p.25-40)
Jan 15 F	Methods in Marine Microbiology B	
Jan 18 M	Holiday	
Jan 20 W	Phylogenetic Diversity of Marine Prokaryotes	M (Ch. 5)
Jan 22 F	Quiz 1	
Jan 25 M	Metabolic Diversity A	M (Ch. 4)
Jan 27 W	Metabolic Diversity B	"
Jan 29 F	Metabolic Diversity C	
Feb 1 M	Eukaryotic Diversity A	M (Ch. 7)

Assignment 1 Due in class

Feb 3 W	Eukaryotic Diversity B	"
Feb 5 F	Marine Viruses	M (Ch. 8)
Feb 8 M	The Microbial Loop	M (Ch. 9)
Feb 10 W	Peter Franks: TBA	M (Ch. 12,p.270-277)

Feb 12 F Quiz 2

Feb 15 M	Holiday	
Feb 17 W	Cold Deep Sea and Hydrothermal Vents	
Feb 19 F	Sea Ice/Changing Oceans	

Assignment 2 Due in class

Feb 22 M Paul Jensen: Marine Microbes and Natural Products

Feb 24 W Munn: Ecology and Applications of Marine Microbiology, 1st Edition, Chapter 11