

BIOL - L472 Microbial Ecology Spring Semester 2017

Class Meeting #	Date	Day	Class Topic	Kirchman reading	Brock reading
Part 1: Fundamentals of biodiversity and evolution					
1	10-Jan	T	Course introduction and overview	Chpt 1	pp 2-20
2	12-Jan	Th	Fundamentals of biodiversity	Chpt 9	pp 670-671
3	17-Jan	T	Methods in microbial diversity	Chpts 9, 10	pp 642-667
4	19-Jan	Th	Metabolic diversity: energy and matter	Chapter 11	pp 36-37, 340-406
5	24-Jan	T	Metabolic diversity: Winogradsky experiment		pp 644-646
6	26-Jan	Th	Early Earth evolution		pp 446-452
7	31-Jan	T	Contemporary evolution		pp 265-280
8	2-Feb	Th	Discussion of paper 1: Blount et al. 2012		
9	7-Feb	T	EXAM 1		
Part 2: Species Interactions					
10	9-Feb	Th	Competition	pp 109-116	p 673
11	14-Feb	T	Predation	Chpt 7	pp 501-502
12	16-Feb	Th	Mutualism	Chpt 14	pp 721-752
13	21-Feb	T	Plankton: physics of being small	pp 44-48	pp 48-51, 73-81
14	23-Feb	Th	Biofilms: attached living	pp 51-54	pp 133, 674-678
15	28-Feb	T	Extremophiles	pp 9-10	pp 134-147, 577-581
16	2-Mar	Th	Biogeography	p 167	pp 723, 753
17	7-Mar	T	Discussion of paper 2: Hillesland and Stahl (2009)		
18	9-Mar	Th	EXAM 2 (confirm choice of microbe for diversity project)		
--	14-Mar	T	SPRING BREAK		
--	16-Mar	Th	SPRING BREAK		
Part 3: Ecosystem Consequences					
19	21-Mar	T	Dormancy	pp 99-101	pp 69-73
20	23-Mar	Th	Stability and function		
21	28-Mar	T	Data analysis		
22	30-Mar	Th	Ecosystem Ecology		
23	4-Apr	T	Biogeochemistry: carbon cycle	Chpt 4-5, pp 195-203	pp 699-702
24	6-Apr	Th	Biogeochemistry: nitrogen cycle	Chpt 12	pp 703-704
25	11-Apr	T	Virus ecology	Chpt 8	pp 237-247
26	13-Apr	Th	Fermentation		
27	18-Apr	T	Human microbiome	pp 259-260	pp 788-797
28	20-Apr	Th	Discussion of paper 3: Goddard et al. 2008		
Biodiversity Projects					
29	25-Apr	T	Diversity Presentations		
30	27-Apr	Th	Diversity Presentation		
31	4-May	T	Final exam 2:45 - 4:45 PM		