

COURSE SYLLABUS
BIOL 4418/6418 MICROBIAL PHYSIOLOGY
SPRING SEMESTER 2015
PROFESSOR DICHRESTINA

Scheduled Time and Room: TR 3:05-4:25 PM, EST Building, room L1105

Recommended Textbook: *Brock Biology of Microorganisms* [© 2013, 13th ed., Madigan et al.]

Required Class Material: Course Packet [will be handed out prior to each class]

Office hours: By appointment [ES&T Building, room 1240]

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<u>DATE</u>	<u>LECTURE</u>	<u>PAGES (13th Edition)</u>		
January	6	Introduction	1-46	
	8	Taxonomy	447-473, 643-671	
	13	Cell Structure	48-73	
	15	Motility & Chemotaxis	73-84, 220-221	
	20	Lipid Vesicle & Cell Wall	48-73	
	22	Microbial Genomics	314-336, 623, 656-57	
	27	Energy Generation	86-108	
	29	Energy Generation	86-108	
	February	3	ATPase: Structure & Function	104-105
		5	Exam review	---
10		Exam No. 1	---	
12		Photophosphorylation	341-352	
17		Oxidative Phosphorylation I	400-409	
19		Oxidative Phosphorylation II	400-409	
24		Nitrogen Cycle	358-61, 383-85, 703-05	
26		Iron Cycle	356-58, 395, 706-08	
March		3	Sulfur Cycle	354-56, 386-88, 705-06
		5	Carbon Cycle	388-403, 699-702
	10	Exam review	---	
	12	Exam No. 2	---	
	17	No Class - Spring Break	---	
	19	No Class - Spring Break	---	
	24	Transport & Glycolysis	98-108	
	26	TCA & Fermentation	105-106, 373-382	
	31	P-P Shunt & Carbon fixation	405-408, 361-362	
	April	2	Iron Assimilation	86-87, 801-802
7		Nitrogen Assimilation	363-368	
9		Nitrogen Assimilation	363-368	
14		Sulfur Assimilation	86, 386	
16		Phosphorous Assimilation	56, 219	
21		Signal Transduction	210-225	
23		Exam review	---	
28 (Tuesday)		Final Exam (11:30 AM)	---	

GRADING SYSTEM:	<u>Exam</u>	<u>Value</u>
	No. 1	30%
	No. 2	30%
	<u>Final [Cumulative]</u>	<u>40%</u>
	TOTAL	100%

Note: Absence from exams requires written excuse from Medical Doctor (personal illness or family emergency).