

**COURSE SYLLABUS**  
**BIOL 4418/6418 MICROBIAL PHYSIOLOGY**  
**SPRING SEMESTER 2012**  
**PROFESSOR DICHRESTINA**

**Scheduled Time and Room:** TR 3:05-4:25 PM, EST Building, room L1118

**Recommended Textbook:** *Brock Biology of Microorganisms* [© 2009, 12th ed., Madigan et al.]

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

**Office hours:** MWF 3:00 – 6:00 PM or by appointment [ES&T Building, room 1240]

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<u>DATE</u>		<u>LECTURE</u>	<u>PAGES (12<sup>th</sup> Edition)</u>
<b>January</b>	10	Intro & Taxonomy: Traditional	1-65, 367-397
	12	Taxonomy: Molecular	367-397, 652-674
	17	Cell Structure	66-94
	19	Motility & Chemotaxis	95-106, 235-236
	24	Lipid Vesicle & Cell Wall	66-94
	26	Microbial Genomics	343-366
	31	Energy Generation	107-132
<b>February</b>	2	ATPase: Structure & Function	107-132
	7	Exam review	---
	9	<b>Exam No. 1</b>	---
	14	Photophosphorylation	578-590
	16	Oxidative Phosphorylation I	641-651
	21	Oxidative Phosphorylation II	641-651
	23	Nitrogen Cycle	624-626, 602-604, 700
<b>March</b>	28	Iron Cycle	599, 636, 703
	1	Sulfur Cycle	596-598, 627-629, 701
	6	Carbon Cycle	631-644, 694-698
	8	TBA	---
	13	Exam review	---
	15	<b>Exam No. 2</b>	---
	20	<b>No Class - Spring Break</b>	---
<b>April</b>	22	<b>No Class - Spring Break</b>	---
	27	Transport & Glycolysis	122-132
	29	TCA & Fermentation	122-132, 612-623
	3	P-P Shunt & Carbon fixation	646-650, 591-594
	5	Iron Assimilation	109-110, 824-825
	10	Nitrogen Assimilation	604-610
	12	Nitrogen Assimilation	604-610
<b>May</b>	17	Sulfur Assimilation	109, 627-628
	19	Phosphorous Assimilation	76, 232
	24	Signal Transduction	225-241
	26	Exam review	---
	3 (11:30 AM)	<b>Final Exam</b>	---

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

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