

BISC 333 – LECTURE INFORMATION – FALL 2014

Course Description: Bisc 333 General Microbiology is a course designed to introduce students to the basic physiology and diversity of microorganisms. The class will focus on key cellular aspects that differentiate microorganisms from other larger forms of life, and inform students on several organisms from throughout the microbial phylogenetic spectrum.

Instructor: Dr. Patrick Curtis (pdcurtis@olemiss.edu, Office: Shoemaker 402)

Office Hours: Wednesdays, 12-2

Lecture: MWF 10:00 – 10:50, Shoemaker 323

Textbook: Brock Biology of Microorganisms, 14th Edition

Attendance: While attendance will not be recorded, exams will include material covered in lecture, which may include material not in the textbook. It is highly recommended that students attend all lectures if at all possible.

NO CELL PHONE DISRUPTIONS WILL BE TOLERATED IN LECTURE
Cell phone disruptions will have dire consequences for you and your classmates

Grades: The final grade will be composed of equal parts the grades from the midterm exam, the final exam, and the laboratory component. The grade of the laboratory component will be discussed in the individual laboratory sections.

Grading Scale

90-100%	A
80-89%	B
70-79%	C
60-69%	D
59%-below	F

Conflicts: Make up exams are generally NOT given except under exceptional circumstances, such as a death in the immediate family or a serious illness, or other circumstances such as religious beliefs and observances and formal participation in scheduled activities of officially recognized groups, such as field trips in other courses and athletic teams. If you have a conflict with any scheduled exam this semester (including the final), contact Dr. Curtis as soon as possible. If you are forced to miss an exam, provide Dr. Curtis with a written statement explaining the reason for the absence and supply supporting evidence. If health related, a note from your physician or nurse is required.

Students with Special Needs: If you are a student with special disability needs, please schedule an appointment with Dr. Curtis.

Tentative Schedule (subject to change)

Date	Topic	Textbook pages
Mon, Aug 25	Introduction to Microbiology	13-20
Wed, Aug 27	Essential Chemistry for Microbiology	N/A
Fri, Aug 29	Microbial Metabolism Part 1 (Energy)	79-86
Mon, Sep 1	Labor Day – no class	
Wed, Sep 3	Microbial Metabolism Part 2 (Fermentation/Respiration)	86-95
Fri, Sep 5	Metabolic Diversity Part 1	385-92
Mon, Sep 8	Metabolic Diversity Part 2/Biogeochemical Cycles	393-400, 408-15
Wed, Sep 10	Microbial Cell Biology Part 1 (Cell wall/membrane)	32-47
Fri, Sep 12	Microbial Cell Biology Part 2 (Cell Structures)	47-52
Mon, Sep 15	Microbial Growth	144, 149-57, 171-8
Wed, Sep 17	Review – bring questions to class	
Fri, Sep 19	Exam 1	
Mon, Sep 22	Basic Molecular Biology Part 1 (DNA Replication)	108-20
Wed, Sep 24	Basic Molecular Biology Part 2 (Transcription)	120-124
Fri, Sep 26	Basic Molecular Biology Part 3 (Translation)	127-35
Mon, Sep 29	Regulation of Gene Expression (Part 1)	216-21, 236-39
Wed, Oct 1	Regulation of Gene Expression (Part 2)	222-3
Fri, Oct 3	Signaling	225-6, 228-30
Mon, Oct 6	Overview of Bacterial Genetics	292-5, 299-307
Wed, Oct 8	Protein Secretion	135-8
Fri, Oct 10	Motility	56-63, 226-228
Mon, Oct 13	Microbial Evolution and Systematics	348-54
Wed, Oct 15	Microbial Classification and Community Analysis	355-9, 369-75, 579-87
Fri, Oct 17	To be determined	
Mon, Oct 20	Review – bring questions to class	
Wed, Oct 22	Exam 2	
Fri, Oct 24	Proteobacteria (Alpha)	480-4
Mon, Oct 27	Proteobacteria (Beta, Gamma)	484-5, 486-9
Wed, Oct 29	Proteobacteria (Gamma)	486-9
Fri, Oct 31	Proteobacteria (Delta, Epsilon)	489-91
Mon, Nov 3	Firmicutes Part 1	494-7
Wed, Nov 5	Firmicutes Part 2	491-4, 497-8
Fri, Nov 7	Actinobacteria	499-504
Mon, Nov 10	Cyanobacteria	435-40, 443-5
Wed, Nov 12	Other Bacteria	466-8, 504-14
Fri, Nov 14	Archaea	518-41
Mon, Nov 17	Virology Part 1	246-57
Wed, Nov 19	Virology Part 2	257-61, 266-8
Fri, Nov 20	Microbial Eukarya	547-64

Mon, Nov 24	Thanksgiving – no class	
Wed, Nov 26	Thanksgiving – no class	
Fri, Nov 28	Thanksgiving – no class	
Mon, Dec 1	Human Microbe Interactions	706-25
Wed, Dec 3	To be determined	
Fri, Dec 5	Review – bring questions to class	
Dec 8-12	Finals	