

Microbiology 303 Spring 2015

Course Syllabus

Instructor

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Lectures

Monday, Wednesday, and Friday 8:50 am – 9:40 am in Room 1125 Biochemistry

Office Hours

By appointment, please email me to set up a time.

Course Materials

There is no required textbook. The course materials will consist of PDF files of the lecture PowerPoint presentations, which will be provided for download at the Learn@UW web site. These materials are the property of the University of Wisconsin and are for your personal use only. You are not allowed to repost/upload them in any form to any web site. Doing so will be considered academic misconduct. We will provide study guides one week before the exams. The exams will largely cover material in the study guides BUT anything presented in lecture is fair game.

Recommended Textbook

http://www.microbiologytext.com/5th_ed/ by Tim Paustian, I will be assigning background reading from this text. This is a full textbook and was written to replace current textbooks that I feel cost way too much. You can purchase a subscription to the textbook for \$30. Any material you are assessed on will be from lecture material only, but reading the textbook can provide valuable background reading.

Exams and activities

Exams. There are four exams, each will have 45 multiple-choice questions and be worth 90 points. Depending upon the amount of material we cover before the exam and degree of difficulty, this may change slightly. Please remember to bring a pencil. Exams will only cover material presented in lecture and in the PowerPoint presentations. Exams 1, 2 and 3 will be held during regular class periods. Exam 4 will be held during the final exam period, but will not be comprehensive. The date for this exam is Thursday, May 14th, 2015, from 10:05 am to 12:05 am, location TBA.

The fourth exam is scheduled during the regularly assigned final exam period. As per the official university policy, reproduced below, there is NO alternative final exam time offered.

“The time of a two-hour block for a class and/or the due date for the take-home examination may be changed only with the prior approval of the dean. Where a student has more than two summary blocks scheduled within a period of 24 hours, the instructor may, within guidelines adopted by the college or school faculty, reschedule a final exam to avoid hardship. Rescheduled summary blocks shall be of the same general nature and quality as the activities of the regular two-hour summary block.”

If you have an exam conflict or need any accommodations, please let us know as soon as possible. Exams cannot be rescheduled for any individual, except to comply with recommendations made by the McBurney Center, or in the case of a true Medical Emergency, accompanied by a doctor's note. If for any reason you are unable to take an exam, you must contact us by no later than 1:00 pm on the SAME DAY as the exam for an alternative exam. These alternatives will only be scheduled in the case of medical emergency.

Quizzes. There will be six quizzes, each worth 10 points, for a total of 60 points. Some of these may be IN CLASS and some will be online through Learn@UW. We will provide plenty of advance notice about the quiz dates and due dates.

Clicker questions. We will use the iClicker classroom response system in most class sessions. Each session's clicker questions will be worth 1 point per date, regardless of the number of clicker questions for that session. The clicker questions will be worth 30 points in total, but since there are 45 lecture in total, attendance at each lecture is not mandatory for getting full credit for the clicker points. You do need to show up for most lectures. There will be no make up points for students who miss 15 lectures

Active learning worksheets. There will be several active learning worksheets that will be turned in for credit. In total these worksheets will be worth 30 points.

Grading

There are a total of 480 points possible, 360 points from the 4 exams, 60 points from the quizzes, 30 points from the clicker questions and 30 points for the active learning exercises.

Estimated ranges for grades are as follows:

92 - 100%	A
88 - 92%	AB
82 - 88%	B
78 - 82%	BC
70 - 78%	C
60 - 70%	D
below 60%	F

All grades are final and are not subject to review or revision, except in the case of grading error. If you are unsatisfied with your exam grade, you must contact us within 24 hours of the grades being posted.

Once the final exam grades have been calculated and posted to the registrar, there will be no changes made. Grades will not be changed due to appeal from students. There are no exceptions to this. Remember you earn your grade, I do not give it to you.

Learn@UW

The course Learn@UW web site will be used to post course materials and exam grades and for online quizzes. Please also check there for notices and updates.

Discussion board. Please use the Learn@UW discussion board to ask questions about the course policies and about course content. This will allow all students to see the questions and answers.

Optional Discussion

There is no formal discussion section associated with Microbiology 303. There will be a weekly discussion section/open office hours, staffed by the course coaches (more about them in class), time and location TBA. The format of this session will be question-and-answer style and no material will be prepared for presentation. Therefore, the discussion will depend on student participation and questions. Additional office hours can be arranged can be arranged with coaches by Email.

Lecture schedule

Week	Date	Day	#	Topic	Readings
1		M	-	-	
	Jan. 21	W	1	Introduction	
	Jan. 23	F	2	Phylogenetics and Microbial Diversity	
2	Jan. 26	M	3	Cell structure	Ch 2 and 3
	Jan. 28	W	4	Cell structure	Ch 2 and 3
	Jan. 30	F	5	Cell structure (online quiz)	Ch 2 and 3
3	Feb. 2	M	6	Viruses	Sec 13.1 to 13.4
	Feb. 4	W	7	Growth and nutrition	Ch. 5
	Feb. 6	F	8	Growth and nutrition	Ch 6
4	Feb. 9	M	9	Limits to growth (online quiz)	
	Feb. 11	W	10	Microbial genetics	Ch 4
	Feb 13	F	11	Microbial genetics	Ch 4
5	Feb. 16	M		EXAM lectures 1 to 11	
	Feb. 18	W	12	Gene regulation	Ch 11
	Feb. 20	F	13	Gene regulation	Ch 11
6	Feb. 23	M	14	Gene regulation	Ch 11
	Feb. 25	W	15	Genetics and Genomics	Ch 12
	Feb. 27	F	16	Genetics and Genomics (online quiz)	Ch 12
7	Mar. 2	M	17	Genetics and Genomics	Ch 12
	Mar. 4	W	18	Applied Genomics	
	Mar. 6	F	19	Applied Genomics	
8	Mar. 9	M	20	Control of growth	Ch 7, Sec 17.5, 17.6
	Mar. 11	W		EXAM lectures 12 to 19	
	Mar. 13	F	21	Control of growth	Ch 7, Sec 17.5, 17.6
9	Mar. 16	M	22	Fundamental Energy Concepts (online quiz)	Ch 8
	Mar. 18	W	23	Fermentation	Ch 8
	Mar. 20	F	24	Respiration	
10	Mar. 23	M	25	Photosynthesis	Ch 9
	Mar. 25	W	26	Microbial Diversity	
	Mar. 27	F	27	Microbial Diversity	
Spring Break					
11	Apr. 6	M	28	Nutrient Cycles (online quiz)	Ch 26
	Apr. 8	W	29	Nutrient Cycles	Ch 26
	Apr. 10	F	30	Microbial growth revisited	
12	Apr. 13	M		EXAM Lectures 21 to 30	
	Apr. 15	W	31	Microbial interactions	Ch 14

	Apr. 17	F	32	Microbial interactions	Ch 14
13	Apr. 20	M	33	Microbial interactions	Ch 14
	Apr. 22	W	34	Host response (online quiz)	Ch 15
	Apr. 24	F	35	Host response	Ch 16
14	Apr. 27	M	36	Normal microbiota	Ch 14
	Apr. 29	W	37	Introduction to Pathogenesis	Sec 18.1
	May 1	F	38	Microbial pathogens	Sec 19.3, 20.2
15	May 4	M	39	Microbial pathogens	Sec 19.2, 21.4, 18.7
	May 6	W	40	Microbial pathogens	Sec 18.5, 18.11, 20.5
	May 8	F	41	Catch up and review	

Fourth exam lectures 31 to 40 at regular final exam time