

ENVIRONMENTAL MICROBIOLOGY LAB

EHSC 4310L/6310L

Spring 2007

Specific requirements and grading policy

Attendance and participation are expected and will contribute towards your lab grade. Each unexcused absence will result in a 15 pt reduction from your total course points. Excessive tardiness (>10 minutes) will also be counted as an absence. The lab will contribute a maximum of 100 points to your course grade.

Groups. You will be working in groups. Collaboration within your group and with other groups is essential.

1. Lab notebooks (multiple) (20% of lab grade; 20 points total). You are expected to maintain an organized lab notebook detailing the following:

- A. Set up for each lab
- B. Hypotheses
- C. Results
- D. Interpretations.

The goal of any lab notebook is to allow anyone to repeat your work by just using your notes; this standard is expected for your notebooks. The interpretation or discussion will be guided by the questions at the end of each lab reading or as noted in class.

You will be expected to turn in stapled copies from your lab notebooks (originals turned into to TA; you keep the carbon copy pages) EVERY TUESDAY. In some cases you will need to share results with other groups; this information will be compiled by the TA and distributed in class or via WebCT. Within each lab group, notebooks should be maintained individually by *each* student.

Guidelines will be provided for the format of your notebook.

2. Quizzes (4 for credit) (40% of lab grade; 40 points total; 10 points each). Over the course of the semester 5 pop-quizzes will be given. The lowest quiz score will be dropped.

3. Lab reports (2) (40% of lab grade; 40 points total; 20 points each).

Formal written lab reports are required for two (2) lab projects; you may choose which two to report on.

Reports are due Monday, April 30.

EARLY SUBMISSION OF ONE OR BOTH IS ENCOURAGED!

Guidelines will be provided for the format of your reports but will follow the set up of a peer reviewed research paper (including an introduction, methods and materials, results, discussion and cited references); see *Applied and Environmental Microbiology*.

Environmental Microbiology Lab*

Week	Topic	
	Tuesday	Thursday
Jan. 9 & 11	<i>No Lab</i>	
Jan. 16 & 18	Lab safety	Microbes in soil. pt. 1
Jan. 23 & 25	Transport in soils. pt. 1	Transport in soils. pt. 2
Jan. 30 & Feb. 1	<i>No lab</i> (Lecture Exam I)	Microbes in soil. pt. 2
Feb. 6 & 8	Waterborne microbes. pt. 1	Microbes in soil. pt. 3
Feb. 13 & 15	Waterborne microbes. pt. 2	<i>No lab</i>
Feb. 20 & 22	Microbial identification by culture. pt. 1	<i>No lab</i> (Lecture Exam II)
Feb 27 & Mar. 1	Microbial identification by culture. pt. 2	Microbial identification by culture. pt. 3
Mar. 6 & 8	Microbial identification by culture. pt. 4	<i>No lab</i>
Mar. 13 & 15	<i>Spring Break</i>	
Mar. 20 & 22	Microbial identification by genetics. pt. 1	<i>No lab</i> (Lecture Exam III)
Mar. 27 & 29	Microbial identification by genetics. pt. 2	Microbial identification by genetics. pt. 3
Apr. 3 & 5	Microbial identification by genetics. pt. 4	Water quality assessment. pt. 1 Biodegradation. pt. 1
Apr. 10 & 12	WWTP tour	Water quality assessment. pt. 2 Biodegradation. pt. 2
Apr. 17 & 19	Biodegradation. pt. 3	Biodegradation. pt. 4
Apr. 24 & 26	(Lecture Exam IV) Biodegradation. pt. 5	Microbial identification by genetics. pt. 5

Syllabus is tentative – any changes will be discussed in class and posted on WebCT

Lab reports are due by April 30.