BIOL 346 MICROBIOLOGY LAB Spring 2005

Instructor: Craig L. Moyer
Grad TA: Andrea Curtis
Labs: TR Noon-2pm *or* 3-5pm @ BI 454
Website: http://fire.biol.wwu.edu/cmoyer/cmoyer.courses.html

Required Manuals:

(1) Moyer, C. L. and E. R. Peele. 2005. *Microbiology Lab Manual.* Western Washington University, Bellingham, WA. (Available online at class Website)
Note: *You are required to have your copies of the lab(s) before each lab starts!*

(2) Leboffe, M. J. and B. E. Pierce. 2005. *A Photographic Atlas for the Microbiology Laboratory*, 3rd edition. Morton Publishing Co. (Available at the Western's Bookstore)

Evaluation of Coursework:

Dilution Problems	30
Unknown #1	20
Unknown #2	40
Lab Notebook	90
Two Lab Exams @ 50 pts each	100
Final Lab Exam	120
Total Points:	**400**

Please note: Attendance is mandatory for all labs and at most only 1 excused absence will be allowed. In order for any absence to be considered excused, you will have to make prior arrangements with you lab TA *AND* your lab partner to make sure no work is missed. You will also be responsible for several outside of class time trips into the lab to pull culture plates from their respective incubators, to read various microbiological reactions that are time critical. These trips into the lab are especially critical during the latter class exercises.

MICROBIOLOGY "TENTATIVE" LABORATORY SCHEDULE

WEEK	LAB DATE	EXERCISES
Week 1	Mar 29 T	Introduction; Lab Safety; Intro to Microscopy
	Mar 31 R	Microscopy; Simple Stains; Wet Mounts & Hanging Drop Slides
Week 2	Apr 5 T	Differential Stains, Part I - Gram Stain
	Apr 7 R	Differential Stains, Part II - Spore Stain & Capsule Stain
Week 3	Apr 12 T	Dilutions; Aseptic Technique; Media Prep
	Apr 14 R	Isolation of Pure Cultures; Unknown #1 **Due Date: Dilution Problems**
Week 4	Apr 19 T	Bacterial Enumeration **Due Date: Unknown #1**
	Apr 21 R	Bacterial Enumeration, continued
Week 5	Apr 26 T	Effect of Environmental Factors on Bacterial Growth
	Apr 28 R	Isolation of *Streptomyces* **Lab Exam I**
Week 6	May 3 T	Selective and Differential Media
	May 5 R	Biochemical Tools for Identification of Gram+ Bacteria
Week 7	May 10 T	Biochemical Tools for Identification of Gram– Bacteria
	May 12 R	Rapid ID Test Strips; Unknown #2
Week 8	May 17 T	Bacterial Genetics
	May 19 R	UV Radiation **Lab Exam II**
Week 9	May 24 T	Disinfectants & Antiseptics; Kirby-Bauer Test
	May 26 R	Water Analysis; Food Microbiology; Snyder Test **Due Date: Unknown #2**
Week 10	May 31 T	Complete Water & Food Analyses; Clean-up & Check-out
	Jun 2 R	**Lab Final**