

BIOL 346**MICROBIOLOGY LAB****Fall 2007**

Instructor: Craig L. Moyer
Grad TA: Megan Twomey
Labs: WF 2-4 pm in BI 454
Website: <http://fire.biol.wvu.edu/cmoyer/cmoyer.courses.html>

Required Manuals:

(1) Moyer, C. L. 2007. *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. ISBN: 0-89582-656-9. Available at online: <http://www.morton-pub.com/productdetails.cfm?PC=51>

Evaluation of Coursework:

Lab Citizenship	20
Dilution Problems	30
Unknown #1	20
Unknown #2	40
Lab Notebook	90
Two Lab Exams @ 50 pts each	100
<u>Final Lab Exam</u>	<u>100</u>
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	Sept 26 W Sept 28 F	Introduction; Lab Safety Intro to Microscopy; Simple Stains; Wet Mounts & Hanging Drop Slides
Week 2	Oct 03 W Oct 05 F	Differential Stains, Part I - Gram Stain Differential Stains, Part II - Spore Stain & Capsule Stain
Week 3	Oct 10 W Oct 12 F	Dilutions; Aseptic Technique; Media Prep Isolation of Pure Cultures; Unknown #1 Due Date: Dilution Problems
Week 4	Oct 17 W Oct 19 F	Bacterial Enumeration Bacterial Enumeration, continued Due Date: Unknown #1 Due Date: 1st Notebook P/U
Week 5	Oct 24 W Oct 26 F	Effect of Environmental Factors on Bacterial Growth Isolation of <i>Streptomyces</i> Lab Exam I
Week 6	Oct 31 W Nov 02 F	Selective and Differential Media Biochemical Tools for Identification of Gram+ Bacteria
Week 7	Nov 07 W Nov 09 F	Biochemical Tools for Identification of Gram– Bacteria Rapid ID Test Strips; Unknown #2
Week 8	Nov 14 W Nov 16 F	Bacterial Genetics UV Radiation Lab Exam II
Week 9	Nov 28 W Nov 30 F	Disinfectants & Antiseptics; Kirby-Bauer Test; Snyder Test Water Analysis; Food Microbiology Due Date: Unknown #2
Week 10	Dec 05 W Dec 07 F	Complete Water & Food Analyses; Clean-up & Check-out Lab Final (Notebooks due)