

BIOL 346**MICROBIOLOGY LAB****Winter 2007**

Instructor: Craig L. Moyer
Grad TA: Megan Twomey
Labs: TR Noon-2pm *or* 3-5pm @ 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	Jan 09 T Jan 11 R	Introduction; Lab Safety Intro to Microscopy; Simple Stains; Wet Mounts & Hanging Drop Slides
Week 2	Jan 16 T Jan 18 R	Differential Stains, Part I - Gram Stain Differential Stains, Part II - Spore Stain & Capsule Stain
Week 3	Jan 23 T Jan 25 R	Dilutions; Aseptic Technique; Media Prep Isolation of Pure Cultures; Unknown #1 Due Date: Dilution Problems
Week 4	Jan 30 T Feb 01 R	Bacterial Enumeration Bacterial Enumeration, continued Due Date: Unknown #1 Due Date: 1st Notebook P/U
Week 5	Feb 06 T Feb 08 R	Effect of Environmental Factors on Bacterial Growth Isolation of <i>Streptomyces</i> Lab Exam I
Week 6	Feb 13 T Feb 15 R	Selective and Differential Media Biochemical Tools for Identification of Gram+ Bacteria
Week 7	Feb 20 T Feb 22 R	Biochemical Tools for Identification of Gram– Bacteria Rapid ID Test Strips; Unknown #2
Week 8	Feb 27 T Mar 01 R	Bacterial Genetics UV Radiation Lab Exam II
Week 9	Mar 06 T Mar 08 R	Disinfectants & Antiseptics; Kirby-Bauer Test; Snyder Test Water Analysis; Food Microbiology Due Date: Unknown #2
Week 10	Mar 13 T Mar 15 R	Complete Water & Food Analyses; Clean-up & Check-out Lab Final (Notebooks due)