

**Instructor:** Craig L. Moyer

**TAs:** Jason Yada *or* Ann Henriksen

**Lab:** WF 10-12 *or* WF 1-3 @ BI 454

**Homepage:** <http://fire.biol.wvu.edu/biology/courses.html> (go to Courses)

**Required Manual:**

(1) Peele, E.R., and C.L. Moyer. 1999. *Microbiology Lab Manual*. Western Washington University, Bellingham, WA. (Available at the Western's Bookstore)

(2) Leboffe, M. J., and B. E. Pierce. 1999. *A Photographic Atlas for the Microbiology Laboratory*, 2<sup>nd</sup> edition. Morton Publishing Co. (Available at the Western's Bookstore)

**Evaluation of Coursework:**

Dilution Problems	30
Unknown #1	20
Unknown #2	40
Lab Notebooks	70
Two Lab Exams @ 50 pts each	100
<u>Final Lab Exam</u>	<u>100</u>
<b>Total Points:</b>	<b>360</b>

## TENTATIVE LABORATORY SCHEDULE

WEEK	LAB DATE	EXERCISES
Week 1	Mar 31 Apr 02	Introduction; Lab Safety Microscopy; Simple Stains; Wet Mounts & Hanging Drop Slides
Week 2	Apr 07 Apr 09	Differential Stains, Part I - Gram Stain Differential Stains, Part II - Spore Stain & Capsule Stain
Week 3	Apr 14 Apr 16	Dilutions; Aseptic Technique; Media Prep Isolation of Pure Cultures; Unknown #1 <b>Due Date: Dilution Problems</b>
Week 4	Apr 21 Apr 23	Bacterial Enumeration <b>Due Date: Unknown #1</b> Bacterial Enumeration, continued
Week 5	Apr 28 Apr 30	Effect of Environmental Factors on Bacterial Growth <b>Lab Exam I</b> Isolation of <i>Streptomyces</i>
Week 6	May 05 May 07	Selective and Differential Media Biochemical Tools for Identification of Gram+ Bacteria
Week 7	May 12 May 14	Biochemical Tools for Identification of Gram- Bacteria Rapid ID Test Strips; Unknown #2
Week 8	May 19 May 21	Bacterial Genetics <b>Lab Exam II</b> UV Radiation; Ames Test
Week 9	May 26 May 28	Disinfectants & Antiseptics; Kirby-Bauer Test Water Analysis; Food Microbiology; Snyder Test <b>Due Date: Unknown #2</b>
Week 10	Jun 02 Jun 04	Complete Water & Food Analyses; Clean-up & Check-out <b>Lab Final</b>