

## Bio 309 Lab (Fall 2012)

**Instructor:** Dr. Eric Matson  
Office: HS 253  
Hours: Thurs. 1-2, Fri. 10:30-12:30  
Email: matsone@uwosh.edu

### Point Distribution (to be added to lecture points):

Laboratory Practical Final Exam	100
Laboratory Reports	200
Laboratory Questions and Assignments	<u>100</u>
TOTAL:	400

**Attendance:** No make up labs will be given! Be sure to attend all lab periods  
You must be present in lab to get credit for questions and assignments

**Lab Manual:** A new copy of Biology 309 Laboratory Manual by Gregory T. Kleinheinz

**Preparedness:** Read and prepare ahead for each lab period  
I am there to guide you but not to do the lab for you

### Schedule:

#### September

<b>Week of</b>	<b>5 -7</b>	<b>No Lab</b>
<b>Week of</b>	<b>10 - 14</b>	
	Mon/Tues	Exercise 1: Bright Field Microscopy Exercise 3: Smear Preparation and Simple Staining Exercise 4: Gram Stain
	Wed/Thurs	Exercise 5: Acid Fast Stain Exercise 6: The Negative Stain Exercise 7: The Capsule Stain Exercise 8: The Endospore Stain
<b>Week of</b>	<b>17 - 21</b>	
	Mon/Tues	Exercise 9: Pure Culture Technique
	Wed/Thurs	Exercise 9: Pure Culture Technique Exercise 10 (Modified): Enrichment Culture Technique
<b>Week of</b>	<b>24 - 28</b>	
	Mon/Tues	Exercise 11: Bacterial Growth Measurement
	Wed/Thurs	Finish Exercise 11 Continue work on Exercise 10

## October

### Week of 1 - 5

Mon/Tues Exercise 12: Detection of Oxidase, Catalase and Nitrate Reductase  
Exercise 13: Hydrogen Sulfide Production and Motility  
Exercise 14: Bacterial Motility

Wed/Thurs Finish Exercises 12, 13, and 14  
Continue work on Exercise 10

### Week of 8 - 12

Mon/Tues Exercise 15: the IMViC Tests  
Exercise 16: Coagulase Activity  
Exercise 17: Triple Sugar Iron

Wed/Thurs Finish Exercises 15, 16, and 17  
Continue work on Exercise 10

### Week of 15 - 19

Mon/Tues Exercise 18: The API 20E System

Wed/Thurs Finish Exercise 18  
Continue work on Exercise 10

### Week of 22 - 26

Mon/Tues Exercise 19: Kirby-Bauer Method  
Exercise 20: Oxygen and the Growth of Microorganisms

Wed/Thurs Finish Exercises 19 and 20  
Finish Exercise 10

### Week of 29 - Nov. 2

Mon/Tues Exercise 21: Temperature and Growth of Microorganisms  
Exercise 22: pH and the Growth of Microorganisms  
Exercise 23: UV Irradiation and the Growth of Microorganisms

**Wed/Thurs** Finish Exercises 21, 22, and 23  
Begin work on Actinomycete Isolation Project

## November

### Week of 5 - 9

Mon/Tues Exercise 24: Enumeration of Microbes from the Environment  
Exercise 25: Evaluation of Antiseptics and Disinfectants

Wed/Thurs Finish Exercises 24 and 25  
Continue work on Actinomycete Isolation Project

### Week of 12 - 16

Mon/Tues Exercise 26: Evaluation of Throat and Skin Microbes  
Exercise 27: Examination of Microorganisms on Surfaces

Wed/Thurs Finish Exercises 26 and 27  
Continue work on Actinomycete Isolation Project

**Week of 19 - 23**

Mon/Tues Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys  
(Streak for isolation and perform Gram stain only)

Wed/Thurs **No Lab - Thanksgiving Break**

**Week of 26 - 30**

Mon/Tues Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys

Wed/Thurs Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys

**December**

**Week of 3 - 7**

Mon/Tues Finish Exercise 28  
Finish Actinomycete Isolation Project

Wed/Thurs Review for Lab Practical

**Week of 10 - 14**

Mon/Tues **Lab Practical December 10<sup>th</sup> and 11<sup>th</sup>**