Bio 309 Lab (Spring 2013)

Instructor: Dr. Eric Matson
Office: HS 253
Hours: Tues. 3:30 - 5 pm, Thurs. 3:30 - 5 pm
Email: matsone@uwosh.edu

Point Distribution (to be added to lecture points):

1	Laboratory Practical Final Exam (1)	100
4	Laboratory Reports Underlined Exercises	200
10	Laborty Questions or Assignments (10)	100
	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:

January

Week of 29 - 31

Tues — Exercise 1: Bright Field Microscopy
Exercise 3: Smear Preparation and Simple Staining
Exercise 4: The Gram Stain

Thurs
Exercise 5: The Acid Fast Stain
Additional: Wet Mounts

February

Week of 5 - 7

Tues — Exercise 6: The Negative Stain
Exercise 7: The Capsule Stain

Thurs — Exercise 8: The Endospore Stain

Week of 12 - 14

Tues — Exercise 9: Pure Culture Technique

Thurs — Exercise 9: Pure Culture Technique
Exercise 10 (Modified): Enrichment Culture Technique

Week of 19 - 21

Tues — Exercise 11: Bacterial Growth Measurement

		Thurs	Finish Exercise 11
			Continue work on Exercise 10
	Week of	**26 - 28**	
		Tues	Exercise 12: Detection of Oxidase, Catalase and Nitrate Reductase
			Exercise 13: Hydrogen Sulfide Production and Motility
			Exercise 14: Bacterial Motility
		Thurs	Finish Exercises 12, 13, and 14
			Finish work on Exercise 10
			Exercise 11 Lab Report is Due
March			
	Week of	**5 - 7**	
		Tues	Exercise 15: the IMViC Tests
			Exercise 16: Coagulase Activity
			Exercise 17: Triple Sugar Iron
		Thurs	Finish Exercises 15, 16, and 17
	Week of	**12 - 14**	
		Tues	Exercise 18: The API 20E System
		Thurs	Finish Exercise 18
			Exercise 10 Lab Report is Due
	Week of	**19 - 21**	**NO LAB (Spring Break)**
	Week of	**26 - 28**	
		Tues	Exercise 19: Kirby-Bauer Method
			Exercise 20: Oxygen and the Growth of Microorganisms
		Thurs	Finish Exercises 19 and 20
			<u>Actinomycete isolation and testing</u>
April			
	Week of	**2 - 4**	
		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
		Thurs	Finish Exercises 21, 22, and 23
			Continue work on Actinomycete isolation and testing
	Week of	**9 - 11**	
		Tues	Exercise 24: Enumeration of Microbes from the Environment
			Exercise 25: Evaluation of Antiseptics and Disinfectants
		Thurs	Finish Exercises 24 and 25
			Continue work on Actinomycete isolation and testing

	Week of	**16 - 18**	
		Tues	Exercise 26: Evaluation of Throat and Skin Microbes
			Exercise 27: Examination of Microorganisms on Surfaces
		Thurs	Finish Exercises 26 and 27
			Finish work on Actinomycete isolation and testing
	Week of	**23 - 25**	
		Tues	Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys
			(Streak for isolation and perform Gram stain)
		Thurs	Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys
			Actinomycete Lab Report Due
	Week of	**30 - May 2**	
		Tues	Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys
		Thurs	Exercise 28: Identification of Bacterial Unknown – Dichotomous Keys
			Laboratory Notebook for bacterial unknown is due at end of period (this counts as the final lab report)
May			
	Week of	**7 - 9**	
		Tues	**Lab Practical on May 7th**
		Thurs	**NO LAB**