

# MICROBIOLOGY

## MCB 1000L

### LABORATORY

**Instructor:** Dr. Brannan

**Office:** BSCI #207C

**Phone:** 253-7923

**Textbook:** *Microbiology & Human Disease Laboratory Manual*, by Hamilton-Guenther & Treat.  
4<sup>th</sup> Edition and *A Photographic Atlas* for the 4<sup>th</sup> Edition by Leboffe & Pierce

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**Course Description:** This course is the laboratory course that accompanies the lecture course. The lab is a corequisite with the lecture. It is a "hands-on" course designed to reinforce and supplement the principles taught in the lecture.

**Grading:** The final grade will be derived from the accumulated points from lab reports and lab work. Dividing the instructor's total points into the student's total points will derive a percent grade. .

#### **Grading Scale:**

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = Below 60%

**Attendance:** It is vital for the student to be present in the lab to carry out all of the procedures, since grading in the lab is based upon the student's techniques and the ability to identify the microorganisms involved.

\*There are NO Make-up Labs. Lab reports are worth 10 points. Lab reports that are turned in late will be given a 50% reduction in grade.

**Maintenance:** The student will be expected to keep the lab clean. Slides and instruments should be washed, tables wiped clean and disinfected, and any other equipment should be cleaned.

**Withdrawal date:** March 26<sup>th</sup>, 2012

**NOTE:** The instructor reserves the right to add or delete labs during the course. It is the student responsibility to be aware of any changes that may occur.

<b><u>DATE</u></b>	<b><u>LABORATORY DESCRIPTION</u></b>	<b><u>EXERCISE</u></b>
January 10	Introduction	
January 17	Examination of Prepared Slides	4
	Gross Appearance of Bacterial Growth	1
January 24	Simple Stain & Gram Stain	5
January 31	Acid-Fast & Spore Stain	6
February 7	Dental Caries/Snyder Test	7

February 14	Streak Plate Method of Isolation	3
February 21	MSA, EMB, & MacConkey Agar	8
February 28	Antimicrobial Testing/Kirby-Bauer Test	13
March 6	Hemolysin Production/Blood Agar	10
	TSI	9
March 13	Starch Hydrolysis	9
	Casein Hydrolysis	
March 27	Lethal Effects of Ultraviolet Light on Microbial Growth	18
	Carbohydrate Fermentation	9
April 3	Urease Test	9
	Enterotube	11
April 10	Microbiology of Foods	16
April 17	Finish Microbiology of Foods	
April 24	<b>LAB EXAM</b>	

## **LAB REPORTS**

(10 points each)

Lab reports are due at the beginning of the next lab class. Only partial credit for lab will be given if not turned in and done properly. **Don't write on back of the lab reports.**

**First Page:** Title and Abstract: A short summary or list of the contents of the paper, including pertinent information on the findings and conclusions. This section should be around 3 sentences or about 25 words.

**Other Pages:** Materials and Methods: Refer to the manual or handout. However, include any changes that are necessary.

Results: Raw data, Drawings, charts, graphs, statistical analysis and anything written down while doing the lab itself. Avoid discussion of the meaning or significance of the results.

Discussion: Interpret the data. Include the **theory** underlying the exercise. Relate the data to other pertinent information which are known. Indicate the significance of the results and possible suggestions as to improve the experimental procedures and application.

Conclusion: In your own words sum up the lab exercise

**Last page and a Separate page:** Answers to questions in lab book or given by instructor.