

Semester & Year: Fall 2005
Course Number & Section: **BSC 380L**
Course Name: **General Microbiology Laboratory**
Class Meeting Place: 138 WSB

Instructor: Cynthia Littlejohn
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Office: 135 WSB
Office hours: MWF 9:00 – 11:30
MW 12:30 – 2:00

I. Student Outcomes

1. The student will have a basic understanding of the following biological concepts:
 - Basic microbiological laboratory techniques
 - Lab safety
 - Microscopy and cytology
2. The student will have a basic understanding of:
 - Microbial metabolism
 - Microbial genetics
 - Methods and control of microbial growth
 - Microbial taxonomy including pathogenic microorganisms
 - Immunology and epidemiology

II. Text/Materials:

The text for the course is Microbial Applications: Laboratory Manual in General Microbiology. H.J. Benson, 8th edition. This text is required. You must have your own personal copy. The following items must be purchased for the laboratory (all items are available at the Hub bookstore):

- Lab coat or apron
- Glass microscope slides
- Glass cover slips
- Bibulous paper
- Microscope lens cleaning paper
- Two inoculating loops
- Matches
- Black sharpie pen
- Labeling tape (1/2" masking tape)

III. Grades: The course grade consists of scores on two scheduled exams, weekly quizzes/assignments and two formal lab reports. Grades will be computed based on the following scale: 90-100 % -A; 80-89 % -B; 70-79 % -C; 60-69 % -D; 0- 59 % -F

IV. Attendance: Students are expected to attend all laboratory periods. **There will be no make up labs. If a student misses an exam or assignment; a verified excuse must be obtained from the Assistant to Vice President of Student Affairs in Union 219.** This excuse must be submitted to the instructor within one week of the date of the absence. Make-up work may be assigned at the instructor's discretion. **Be on time.** Do not disrespect your fellow students and the instructor by coming in late and causing a disruption. **No cell phones or pagers are allowed in class** because of the noise distraction. It is recommended you read the appropriate topic before coming to class.

V. Last day to drop: The last day to drop the course without academic penalty is **Friday, October 14th**. The university's policy of withdraw is strictly enforced. If a student drops a course after the deadline a grade of WP or WF is assigned. This grade will be shown on the transcript and affect the GPA. Extenuating circumstances for dropping a course after the deadline DO NOT include failing the course or finding out it is not required.

VI. Students with disabilities: If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodations, he/she should contact the Office for Disability Accommodations for information on appropriate policies and procedures. Box 8586; Tel. (601) 266-5024; TTY (601)266-6837; Fax (601)266-6035.

VII. Immuocompromised students are at a higher risk of contracting an infectious disease. The consequences can be serious or even fatal. Causes of immune system impairment include, but are not limited to, chemotherapy, immunosuppressive drugs, diabetes, autoimmune diseases, pregnancy, and AIDS. If you think you might be immunocompromised, contact your physician regarding the risk associated with working with pathogenic microorganisms and whether you should or should not enroll in a microbiology laboratory.

VIII. Cheating and Plagiarism: Students are encouraged to study and work in groups, but cheating and/or plagiarism of another student's work or any other source are expressly forbidden (see the code of student conduct in your student handbook). The minimum academic penalty is a grade of zero on the assignment or the examination in question.

The general planned format of the class is as follows:

Week	Topic	Exercise #
September 12	Lab Safety	Handout
	Microscopy	1
	Aseptic technique	8
	Bacteria	9
	Fungi	10
September 19	Smear preparation	12
	Simple and negative staining	11 & 13
	Capsular staining	14
September 26	Gram and spore staining	15 & 16
	Acid fast staining	17
	Slide culture: molds	26
October 3	Oxidation and fermentation testing	48, 49, 50
	Cultivation of anaerobes	22
October 10	Hydrolytic reactions	48, 49, 50
	Microbiology of fermentation	72, 73
October 14th	Last Day to Drop	

October 17	EXAM 1	
	Soil and food bacterial counts	26, 56, 69
October 24	Bacterial Transformation	Handout
November 7	Lab Report #1 due (population counts)	
	Evaluation of alcohol	41
	Evaluation of antiseptics	42
	Kirby-Bauer method	43
November 14	Epidemiology	77
	Blood Typing	Handout
November 21	Thanksgiving Holidays No Labs	
November 28	EXAM 2	
	Distribution of unknown cultures	
December 5	Identification of unknown	51
December 16	Lab report #2 due (identification of unknown)	
	No later than 3:00 pm	