

**SYLLABUS FOR BIOLOGY 2420 LECTURE
INTRODUCTION TO MICROBIOLOGY
SPRING SEMESTER 2011**

SECTION 013 **LECTURE T/TH 9:10 AM TO 10:25 AM CYP, RM 1118,**
(SYN.22130) **Lab RM 1133, 10:35 AM TO 11:50 AM**

SECTION 015 **LECTURE T/TH 1:25 PM TO 2:40 PM CYP, RM 1140,**
(SYN. 22132) **Lab RM 1133, 2:50 PM TO 4:05 PM**

INSTRUCTOR: CHARLIE BEAMAN (please call me Charlie) ACC VOICE MAIL: (223-1795, ext 24550)
Website: www.austincc.edu/cbeaman EMAIL cbeaman@austincc.edu
CYP OFFICE: , RM. 1104 (Some of the time it is crowded, so check for me in the lab rm. 113 or the prep room
next door)
HOME PHONE: 892-2046 (please do not call after 9:00PM – I can get quite grumpy)
OFFICE HOURS: CYP T/TH. 8:30 AM to 9:00 AM, 12:30 PM to 1:20 PM
**OTHER TIMES BY APPOINTMENT. The best way to contact me is by email – I make it a point to check it
regularly.** I will post some office hours for the SAC campus for Monday and Wednesday after Feb. 14 when my
Biology 1308 class begins)

TEXTBOOK: MICROBIOLOGY, A SYSTEMS APPROACH, 2nd EDITION COWAN AND TALARO
ISBN: 0072995289

**LAB MANUAL: MICROBIOLOGY LABORATORY THEORY AND APPLICATION, 2008 LEBOFFE
AND PIERCE “Brief Edition” ISBN: 0895827050**

COURSE INFORMATION: BIO 2420 IS AN INTRODUCTORY COURSE INTO MICROBIOLOGY. IT INCLUDES
STUDY OF THE MICROBIAL WORLD INCLUDING THE BASIC CHARACTERISTICS OF FUNGI, ALGAE,
BACTERIA, AND VIRUSES. SPECIAL EMPHASIS IS PLACED ON APPLICATIONS TO HUMANS. THIS COURSE
WILL NOT COUNT TOWARD THE ASSOCIATE OF SCIENCE DEGREE IN BIOLOGY. AS OF THE FALL
SEMESTER, 2004, THERE IS A PREREQUISITE FOR ATTENDING THIS CLASS THAT IS **STRICTLY ENFORCED
- PROOF OF PREREQUISITE REQUIRED BY 2ND CLASS – NO EXCEPTIONS - BIOLOGY 2404/BIOLOGY 2101
OR EQUIVALENTS, OR Biology 2404 – Intro. To A and P)**

**IF YOU DECIDE TO DROP THIS COURSE, YOU ARE RESPONSIBLE FOR COMPLETING
THE DROP PROCEDURE. IF YOU DO NOT OFFICIALLY DROP, YOU WILL RECEIVE A
FAILING GRADE. THE LAST DAY TO DROP IS APRIL 25, 2011. *****IF A STUDENT
MISSES 4 OR MORE LABS FOR ANY REASON THEY MUST DROP THE CLASS OR THEY
WILL RECEIVE A FAILING GRADE. No Exceptions!!!! I will keep an accurate record of Lab
attendance. *******

THE GOAL OF THIS COURSE IS TO PROVIDE THE STUDENT WITH A BASIC KNOWLEDGE OF
MICROORGANISMS AND THEIR SIGNIFICANCE TO HUMAN POPULATIONS.

THE COMMON COURSE OBJECTIVES FOR BIOLOGY 2420 ARE AVAILABLE ON LINE AT

<http://www2.austin.cc.tx.us/~biology/ccobjectives>

GENERAL OBJECTIVES:

LECTURE - AT THE COMPLETION OF THIS COURSE, THE STUDENT WILL

1. KNOW THE BASIC CHARACTERISTICS AND STRUCTURES OF BACTERIA, VIRUSES,
FUNGI, AND HUMAN PARASITES
2. UNDERSTAND THE FUNDAMENTALS OF MICROBIAL FUNCTION AND THE
RELATIONSHIP BETWEEN THE FUNCTIONS AND DISEASE-PRODUCING CAPABILITIES

3. DESCRIBE THE MEANS OF CONTROL OF INFECTION BY (A) PHYSICAL AND CHEMICAL MEANS (B) AND CHEMOTHERAPY
4. UNDERSTAND THE MECHANISMS OF DISEASE AND THE HOST RESPONSE: IMMUNOLOGY
5. BE ABLE TO DESCRIBE THE MEDICAL SIGNIFICANCE OF THE MAJOR DISEASE-PRODUCING MICROORGANISM

SPECIFIC OBJECTIVES WILL BE GIVEN AT THE BEGINNING OF EACH UNIT AND EACH CHAPTER. THESE WILL SERVE AS A STUDY GUIDE AND AS A REVIEW FOR EXAMS.

LABORATORY - THE GENERAL OBJECTIVES FOR THE LABORATORY WILL BE TO INTRODUCE MICROSCOPY AND TO DEVELOP SKILLS IN USE OF THE MICROSCOPE, TO LEARN BASIC TECHNIQUES SUCH AS CULTURE OF BACTERIA, STAINING OF MICROORGANISMS, IDENTIFICATION OF BACTERIA, AS WELL AS A GENERAL SURVEY OF FUNGI, PROTOZOA, AND HELMINTHS.

ATTENDANCE: SINCE YOUR SUCCESS IN THIS COURSE WILL BE DETERMINED BY YOUR ATTENDANCE IN LECTURE AND LABORATORY, ATTENDANCE WILL BE TAKEN FOR EACH. BECAUSE OF THE EXTRA PREPARATION TIME, ONLY TWO LABORATORY PERIODS CAN BE MADE UP. YOUR LABORATORY GRADE IS PARTICULARLY DEPENDENT ON YOUR PARTICIPATION. EXCESSIVE LAB ABSENCES WILL RESULT IN POINTS (**10 points per missed lab**) BEING DEDUCTED FROM YOUR LABORATORY GRADE, AND WILL ALSO BE REFLECTED IN LAB PRACTICAL GRADES AS WELL AS UNKNOWNNS.

******* If a student misses 4 or more labs for any reason they must drop the class or they will receive a failing grade. No Exceptions. I will keep an accurate record of lab attendance. *******

GRADING: LECTUR GRADE

4 EXAMS EACH WORTH 100 POINTS	400 POINTS
4 OUTSIDE ASSIGNMENTS* – 25 POINTS EACH	<u>100 POINTS</u>
	500 POINTS TOTAL

1. EXAMS
 - A. THE LECTURE EXAMS WILL COVER LECTURE AND OCCASIONALLY LABORATORY DISCUSSION (THIS WILL BE ANOUNCED AHEAD OF TIME), READING ASSIGNMENTS IN THE TEXTBOOK, LAB MANUAL, AS WELL AS HANDOUTS. EXAMS WILL BE GIVEN DURING CLASS TIME AND ARE COMPOSED OF 50% TO 75% OBJECTIVE ITEMS (MATCHING AND MULTIPLE CHOICE) AND 25% TO 50% SHORT ANSWER AND ESSAY.
 - B. MAKE UP EXAMS MUST BE ARRANGED WITH THE INSTRUCTOR AND WILL BE GIVEN ONLY IF A STUDENT HAS A VALID REASON FOR MISSING THE SCHEDULED EXAM TIME. MAKE UP EXAMS MAY BE ALL ESSAY TESTS AND WILL BE TAKEN AT THE TESTING CENTER WITHIN A WEEK OF THE ORIGINAL TEST DATE.
 - C. *THE OUTSIDE ASSIGNMENTS ARE DESIGNED TO COVER MATERIAL THAT IS NOT DISCUSSED IN CLASS. THESE ASSIGNMENTS WILL BE GIVEN AT THE TIME THE OBJECTIVES FOR A UNIT ARE HANDED OUT OR POSTED ON THE WEBSITE. **Outside Assignments will not be accepted or graded if received after the scheduled due date.**

2. **OPTIONAL COMPREHENSIVE FINAL EXAM – ON THE LAST DAY OF CLASS (MAY 12) AN OPTIONAL COMPREHENSIVE FINAL WILL BE OFFERED. IF TAKEN, THE GRADE WILL SUBSTITUTE FOR THE LOWEST GRADE EXAM TAKEN BY A STUDENT. IF YOU WANT TO TAKE THE COMPREHENSIVE FINAL, YOU MUST NOTIFY THE INSTRUCTOR IN ADVANCE OF THE LAST CLASS PERIOD. PLEASE NOTE THAT THIS TEST CAN ONLY SUBSTITUTE FOR A TEST THAT HAS BEEN ATTEMPTED AND CANNOT BE USED TO SUBSTITUTE FOR A MAKE UP TEST. THE COMPREHENSIVE FINAL EXAM WILL BE SIMILAR IN FORMAT TO THE REGULAR UNIT EXAMS AND ANY INFORMATION COVERED IN CLASS AND ON THE UNIT TESTS MAY BE ON THE FINAL. (NO OPTIONAL COMPREHENSIVE FINAL FOR 11 WEEK SUMMER SESSIONS)**

A LABORATORY SCHEDULE WILL BE DISTRIBUTED IN LAB THAT GIVES THE EXERCISES FOR EACH LAB PERIOD AS WELL AS THE DATES FOR THE LABORATORY PRACTICAL. YOU NEED TO READ THESE EXERCISES CAREFULLY BEFORE LAB. I WILL NOT TAKE TIME TO GO OVER EVERY DETAIL AND EXPECT YOU TO COME PREPARED FOR A COLLEGE – LEVEL LAB PERIOD. BEFORE EACH LAB PRACTICAL, A REVIEW WILL BE PROVIDED. EXAMPLES OF POSSIBLE TEST ITEMS PLUS A REVIEW OF THE FORMAT FOR THESE TESTS WILL BE GIVEN PRIOR TO THE FIRST PRACTICAL. Some tweaking of the lab and lecture schedule may be necessary to avoid lab and lecture test conflicts – we will decide and the changes will be posted on Blackboard.

SAFETY: THE MICROBIOLOGY LABORATORY HAS SPECIFIC SAFETY REQUIREMENTS. THESE ARE EXPLAINED IN DETAIL IN THE LABORATORY RULES HAND OUT, ATTACHED TO THE LAB SCHEDULE. TO INSURE THAT EACH STUDENT LEARNS THESE RULES AND PRACTICES SAFE LABORATORY TECHNIQUES, SAFETY QUIZ QUESTIONS WILL BE INCLUDED ON THE LAB TESTS AND LECTURE EXAMS. ANY OR ALL OF THE LABORATORY PRACTICALS WILL INCLUDE ITEMS RELATED TO SAFE LAB PRACTICES. SLOPPY TECHNIQUES OR VIOLATION OF RULES PUT THE ENTIRE CLASS AT RISK AND ARE GROUNDS FOR DISMISSAL FROM THE CLASS.

DETERMINING YOUR GRADE:

LECTURE – ADD THE POINTS FROM 4 TESTS AND THE OUTSIDE ASSIGNMENTS (MAXIMUM 500 POINTS)

- 4 EXAMS WORTH 100 PTS. EACH (400 points)**
- 4 OUTSIDE ASSIGNMENTS WORTH 25 POINTS EACH (100 points)**

LAB - ADD THE POINTS FOR THE PRACTICALS AND UNKNOWN (MAXIMUM 250 POINTS)

4 LAB PRACTICALS (50 POINTS EACH)	200 POINTS
UNKNOWN 1	10 POINTS
UNKNOWN 2	10 POINTS
UNKNOWN 3	10 POINTS
UNKNOWN 4	20 POINTS
	250 POINTS TOTAL

ADD THE LECTURE POINTS AND THE LAB POINTS TO GET TOTAL POINTS

675 TO 750	90% TO 100%	= A
600 TO 674	80% TO 89%	= B
525 TO 599	70% TO 79%	= C
450 TO 524	60% TO 69%	= D
BELOW 450		= F

Curves/Extra Credit: The grades are NOT curved and there is absolutely no extra credit given **under any circumstances** – please **do not ask**. Keep track of your grade on Blackboard.

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BLACKBOARD

Students should check their ACC assigned email (gmail) regularly. All announcements, schedule changes, test date reminders, and test reviews (lab and lecture) will be posted there. Students will also be able to track their grades as all grades will be posted on blackboard.

If you have a question at any time during the semester, please feel free to call me at home, or email me at my ACC email, or visit me before or after class. I will try to be in my office as posted, however, at times I need to make copies or the adjunct office is just too crowded with other faculty or students, so check in the lab or the prep room next door to the lab.