

BIO 208 MICROBIOLOGY - Syllabus and Course Policies

A. General Information

This is a one-semester survey of microbiology required for majors in Biology, Biochemistry, Dietetics, Environmental Science, and Public Health and for pre-professional preparation for Medicine, Osteopathy, Physicians' Assistant, and Veterinary Medicine.

B. Course Logistics

Meeting Times and Locations: Lectures meet Mon. and Wed. from 9:00-9:50 in Brooks 176. Labs are scheduled for 2 one hour and fifteen minute periods per week in Brooks 130. Each lab section is limited to 18 students and the course is typically filled to capacity; as a result it is not possible to attend lab sections other than the one for which you have enrolled unless someone drops and you are able to change sections via the registrar's office.

Instructor: Dr. Gregory Colores

email: color1gm@cmich.edu (**note: this is the best way to reach me**)

Office hours: Mon. 3 – 5 and Thurs. 2 – 4 in Brooks 185.

Phone: 774-3412

C. Materials Needed

1. Textbook: Tortora, G.J., B.R. Funke, and C.L. Case. 2007. Microbiology: An Introduction. Ninth ed. Pearson Education, Inc. ISBN: 0-8053-7613-5. Alternatively, the Eighth ed. (black cover) is perfectly acceptable too.
2. **Laboratory Manual:** Course Pack.
3. **Microscope slides with cover slips.**
4. **Colored pencils.**
5. **Sharpie marker** (black or blue ink)

D. Reading Assignments

Reading assignments in the text are listed with the topic outline. Readings and lecture will complement each other. I cannot cover every detail in lecture and will expect you to supplement lectures with certain information from the text. **Don't fall behind.** Try to read the assignment **before** each class, or at the very latest on the same day as class. Work with the "Learning Objectives" to focus your attention on the key concepts in each passage and chapter end "Study Questions" to test your reading comprehension. Answers to chapter end study questions are available at www.microbiologyplace.com.

E. Tests and Grades

Three lecture tests will be given. The final exam will cover the final unit of material in the course as well as a cumulative review of important themes from the entire course. The 3 lecture tests will be given during scheduled class times. **Be on time!** Since there is a class immediately following you will only have the allotted class time to complete the exam.

Makeup tests are available only to students who have a legitimate excuse for missing an exam, such as personal illness or injuries requiring a doctor's visit, sanctioned athletic events out of town, or death in the immediate family. If you know in advance that you must miss a test, see me first and **bring documentation** to support your anticipated absence. If you miss an exam unexpectedly because of last-minute illness or accident, contact me and your TA ASAP. **MAKE-UP TESTS WILL BE GIVEN ONLY FOR EXCUSED ABSENCES AND ONLY ON FRIDAY MAY 8 AND AT NO OTHER TIME IN THE SEMESTER FOR ANY REASON.**

Final Exam Policy

This is the University policy on scheduling of final exams: "Students scheduled for more than two examinations on the same day may arrange to have the examination in excess of two [that means the 3rd one] rescheduled for another time during the examination week. This situation should be resolved by the instructor and student agreeing on a make-up time. The agreement should be reached as soon as possible after the situation is noticed." Since your final is scheduled for Monday morning this should not be an issue for anyone.

Grading

Three in class exams	450 pts
Final comprehensive exam	200 pts
Laboratory quizzes	100 pts
Laboratory reports	250 pts
Total possible	1000 pts

Grading Scale (Number of points required to obtain)

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
930+	900- 929	870- 899	840- 869	800- 839	770- 799	740- 769	700- 739	670- 699	640- 669	600- 639	0-599

Extra credit

There will be a number of extra credit opportunities announced in both lecture and lab. You can get up to a maximum of 30 points.

In class assignments

There will also be unannounced extra credit opportunities in lecture. You can get up to a maximum of 25 points and these points can be used to replace your lowest laboratory quiz score (you can't replace a 0 though).

F. Laboratory

You must have a passing grade in lab in order to pass the course. The separate lab schedule lists exercises to be done. **You should come to lab having read the lab exercise beforehand!** You are expected to attend the laboratory section for which you have registered. **You must contact your lab instructor prior to an absence** if you cannot attend a specific lab. You must bring official documentation if you are missing a lab due to illness or other emergency to facilitate our record keeping and aid in our evaluation. Please do not miss a laboratory unless there is a valid emergency. The laboratory requires intensive preparation and it may not be possible for us to set up a missed laboratory for you at a later time. The laboratory instructors may use their own discretion in allowing make-ups. Any missed lab must be "made up" within 1 week of absence. **Failure to follow these guidelines will result in a reduction or forfeiture of points for the missed laboratory exercises.** Your grade for the lab will be determined from a combination of quizzes and homework/laboratory assignments. In addition, laboratory material will comprise approximately 30 - 40% of each lecture test. More detail regarding laboratory grading will be given by your TA.

G. University Policies

Students requiring accommodations

CMU provides students with disabilities reasonable accommodation to participate in educational programs, activities or services. Students with disabilities requiring accommodation to participate in class activities or meet course requirements should first register with the office of Student Disability Services (Park Library 120, telephone #989-774-3018, TDD #2568), and then contact me as soon as possible.

Policy on academic integrity

In May 2001, the Central Michigan University Academic Senate approved the *Policy on Academic Integrity*, which applies to all university students. Copies are available on the CMU website at <http://academicsenate.cmich.edu/noncurric.htm>, and in the Academic Senate Office in room 108 of Bovee University Center. All academic work is expected to be in compliance with this policy.

Classroom civility

Each CMU student is encouraged to help create an environment during class that promotes learning, dignity, and mutual respect for everyone. Students who speak at inappropriate times, sleep in class, display inattention, take frequent breaks, interrupt the class by coming to class late, engage in loud or distracting behaviors, use **cell phones** or pagers in class, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others could be asked to leave the class and subjected to disciplinary action under *the Code of Student Rights, Responsibilities and Disciplinary Procedures*.

Detailed Information on this course is available on the course web page at:

<http://www.cst.cmich.edu/users/colorlgm/Courses/mainpage.htm>

BIO 208 MICROBIOLOGY - Tentative Lecture Schedule

Date	Lecture Topic	Reading in Text
M 1/12	Unit 1. The Microbial World and You CH 1: What Are Microbes? What is Microbiology?	pp. 1-6, 17-21
W 1/14	CH 1: How Did Microbiology Become a Science?	pp. 6-17; 425-427
M 1/19	Martin Luther King Jr. Holiday – No Classes	
W 1/21	Classification of Microbes / CH 3: How Do We See Microbes?	pp. 276-284; 54-66
M 1/26	Continued CH 4: Anatomy of Prokaryotic Cells	pp. 77-98
W 1/28	Continued	
M 2/2	CH 4: Origin of Eukaryotic Cells / <i>End Material For Test 1</i>	Table 4.2; pp. 99-100
W 2/4	TEST 1 - UNIT 1	
M 2/9	Unit 2. How Do Microbes Grow? CH 6: Characteristics of Microbial Growth	pp. 144-148; 174-183
W 2/11	CH 6: Effects of the Physical Environment on Microbial Growth	pp.159-167
M 2/16	CH 7: Control of Microbial Growth	CH 7
W 2/18	CH 5: General characteristics of metabolism, enzymes, redox	pp. 114-125
M 2/23	CH 5: How to Get Carbon and Energy from Organic Chemicals; Carbohydrate catabolism	pp. 125-128
W 2/25	CH 5: Fermentation / Aerobic Respiration	pp. 129-152
M 3/2	CH 5: Anaerobic Respiration / Autotrophy / Anabolism <i>End Material for Test 2</i>	
W 3/4	TEST 2 - UNIT 2	
3/9-3/13	<i>Spring Break</i>	
M 3/16	Unit 3. Microbial Genetics and Viruses CH 8: Nucleic Acids / How Prokaryotes Replicate DNA	pp. 47-49; 211-217
W 3/18	CH 8: Converting DNA into RNA and Proteins	pp. 223-227
M 3/23	CH 8: Gene Regulation in Prokaryotes/ Genetic Transfer	pp. 227-247
W 3/25	CH 13: Viruses - General Characteristics and Bacteriophages	pp. 386-394
M 3/30	CH 13: Viruses - Animal Viruses	pp. 396-402
W 4/1	Animal viruses continued / <i>End Material for Test 3</i>	
M 4/6	TEST 3 - UNIT 3	
W 4/8	Unit 4. Survey - Role of Microbes in Health and Disease CH 27: Environmental Microbiology	CH 27
M 4/13	CH 27: Environmental Microbiology: Continued	
W 4/15	Disease and Epidemiology	CH 14
M 4/20	CH 21: Microbial diseases of the skin CH 22: Microbial diseases of the nervous system	pp. 613-622; 642-647
W 4/22	CH 23: Microbial diseases of the cardiovascular and lymphatic systems	pp. 671-674; 685-687
M 4/27	CH 25: Microbial diseases of the digestive system; food poisoning.	pp. 745-746; 750-754
W 4/29	Bioterrorism	pp. 679-681
M 5/4	Final Exam - Comprehensive 8:00-9:50 am Brooks 176	