

Biology 3444-002 - General Microbiology

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Course Number, Section Number, and Course Title: Biology 3444-002, General Microbiology

Course location and times: LS 118, Tuesdays and Thursdays 12:30AM – 1:50PM

Course Description: Fundamental principals of microbiology. This includes the structure and genetics of microbial cells, their functional activities and diversity in the biosphere.

Student course outcomes: This course is designed to provide you with the basic information about a microbial cell. At the end of the course, you must be able to understand how a microbe grows and divides it. More importantly, I hope you learn and appreciate the diversity of microbial metabolisms, ecological interactions with eukaryotes, and the beneficial role of microbes on Earth.

Course requirements: Prior to this course, we should take Biol 1441 – Cell and Molecular Biology and one year of Chemistry - CHEM 1441 and CHEM 1442.

Textbook and Materials: Brock Biology of Microorganisms. Madigan and Martinko. 12th ed. Prentice Hall Publishers. Have a #2 pencil and a Scantron 882-E electronic grading form for each exam.

Exams: There will be three exams during the course. The first two exams will be covering the material for that portion of the course. The final exam will be a comprehensive one. I will review exams **IN CLASS** after grades have been issued. This is the **ONLY** chance you will have to review the entire exam.

NO EXAMS will be administered after the first student to finish the exam has exit the room.

MavMail Requirement: UTA has adopted MavMail as an official means of communication with students. Please, check your e-mail regularly. If you have any questions regarding your e-mail, go to: <http://www.uta.edu/oit.email/>

Cell Phone Policy: Cell phones must be turned off (or placed on vibrate mode) at all times. If your cell phone rings during class, you will be invited to leave the room.

Drop Policy: See university guidelines.

Website: Grades, final lab grades, and final course grades will be available on <http://webct.uta.edu>

Grades: Your final grade will be composed of the following:
20% from Laboratory Section
20 % from Exam 1
20 % from Exam 2
40 % from Final Exam

No extra credit will be allowed!

Final Grade: The following grade scale will be used to determine your final grade:
A) 100 – 90%
B) 89 – 80%
C) 79 – 70%
D) 69 – 60%
F) below 59%

Make Up Exam Policy: Absences will be excused only with a written proof of your physician or jury duty responsibility. If you miss one exam, you should present a proof for your absence or a grade of 0% will be issued for that exam. You will have **ONLY** two options for make up exams: (1) the final exam grade will be used as a grade for the missing exam or (2) take the make up exam after the final exam. In the later case, an exam will be provided after 5 min of the expiration time of the final exam. Either case, it is **YOUR RESPONSIBILITY** to let me know.

Attendance Policy: Attendance is not taken. It is your responsibility to learn as it is my responsibility to teach you. Be aware that, historically, students who attend lectures consistently get better grades.

Important University Policies:

Final review week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

Drop for non-payment of tuition: Payment must be received by the term due date of August 19, 2009 or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes but only if seats are available.

Bomb Threats: If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats.

Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

After Hours Safety Escort: The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. Call 817-272-3381.

Americans With Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity: It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Student Support Services Available: The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

Tentative Schedule of Lectures*

* This is **ONLY** an outline of lectures. It might change according to our progress. You **MUST** attend lectures to know when changes in schedule will take place.

Date	Subject	Required Readings
Aug 25	Introduction	Chapter 1
Aug 27	Introduction	Chapter 2
Sept 1	Chemistry of the Cell	Chapter 3
Sept 3	Cell structure and function	
Sept 8	Cell structure and function	Chapter 4
Sept 10	Cell structure and function	
Sept 15	Metabolism	Chapter 5
Sept 17	Metabolism	
Sept 22	Metabolism	
Sept 24	Review	
Sept 29	Exam 1	
Oct 1	Growth	Chapter 6
Oct 6	Exam 1 Correction	
Oct 8	Growth	
Oct 13	Control of Growth	Parts of Chapter 27 (see below)
Oct 15	Molecular Biology	Chapter 7
Oct 20	Viruses	Parts of Chapter 10 (see below)
Oct 22	Genetics	Parts of Chapter 11 (see below)
Oct 27	Genetics	Parts of Chapter 12 (see below)
Oct 29	Human-Microbe Interaction	Chapter 28
Nov 3	Review	
Nov 5	Exam 2	
Nov 10	Industrial Microbiology	Chapter 25
Nov 12	Exam 2 Correction	
Nov 17	Waste Water Treatment	Chapter 32
Nov 19	Epidemiology	Chapter 33
Nov 24	Methods in Microbial Ecology	Chapter 22
Nov 26 -Holiday	THANKSGIVING	Study for your Finals!!!
Dec 1	Review	
Dec 10	Final Exam	11:00AM – 1:30PM

Parts of Chapter 27:

Beginning of chapter up to, but not including, the subsection 27.6.

Do NOT read the subsection “Preventing Antimicrobial Drug Resistance” (p. 790-791)

Parts of Chapter 10:

Do NOT read Sections 10.9 and 10.10.

Parts of Chapter 11:

Beginning of chapter through the first three paragraphs of Section 11.11

Section 11.12

Do NOT read Sections 11.13, 11.14, and 11.15.

Section 11.16 – Mobile DNA: Transposable Elements

Parts of Chapter 12:

Beginning of chapter up to, but not including, the subsection 12.9.