

**Biology 3444-001**  
**General Microbiology Fall 2008**

**General information:**

Instructor: Dr. Thomas Chrzanowski

Office: 243 Life Sciences

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Office Hours: Monday and Wednesday 8:00-9:00 am

Textbook: Brock Biology of Microorganisms 12<sup>th</sup> ed., by Madigan et al. 2009

Other reading: You are responsible for reading assigned from sources other than your textbook.

Meeting times: The class meets in LS 118 MWF 9:00 am - 9:50 am

**Student Learning Outcomes:** The objective of this course is to introduce you to the life of the prokaryote. From the perspective of both age and biology, this fabulously diverse group of organisms is unlike any other form of life on the planet. While widely known for their medical importance, these organisms also play important roles in maintaining our environment, supplying food and medicines, and as vehicles by which we may understand the expression of genetic information. The material that we will cover is broad and voluminous; fortunately, it is also interesting.

**Prerequisites:** Biology 1441 (General Biology) or equivalent

**Withdrawal Policy:** You may drop without penalty with a grade of W prior to 31 October.

After 31 October:

If you have taken scheduled examinations and maintained a grade average above 60%, you may drop with a W.

If you maintain a grade average below 60%, you may drop with an F. No one will be permitted to drop after 31 October. If you chose to drop the course, you may no longer attend lectures.

**Attendance Policy:** With the exceptions of exam dates, you are not required to attend lectures; however, you are responsible for all material covered in lecture including changes to the syllabus.

**Drop for non-payment of tuition:** Payment must be received by the term due date of August 18, 2008 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.

**Absence from exams:** You are required to be present for announced examinations. Absences will be excused only with written request by a physician, other responsible professional, or with proof of jury duty. If you miss an exam, you will be given an exam score of zero. Exams missed due to excused absence must be taken within one day of your return to class. No other make-up exams will be given.

**Americans with Disabilities:** The University of Texas at Arlington is committed to both the spirit and letter of federal equal opportunity legislation (Public Law 93-112--The Rehabilitation "Act of 1973 as amended; Americans with Disabilities Act - (ADA)). It is your responsibility to inform me of your disability at the beginning of the semester and to provide authorized documentation through designated administrative channels. If you require and accommodation based on disability, I would like to meet with you in my office the first week of class to discuss your special needs.

**Evaluation:** The lecture section will follow a traditional format of lecture with subsequent evaluation of your mastery of the topic material. While the lecture material will broadly follow the material in the book, there will often be supplemental material. Your performance in this course will be assessed through four examinations. Each exam will contribute 20 % to your final grade. Exam IV will be approximately 50% new material and 50% comprehensive final). The grade you receive for the laboratory section of the course will be 20% of your final grade. Exams will be announced at least one week prior to the exam date. The schedule of exams will depend upon our progress through the

material. The following grading scale will be used to determine your grade for the course; A - 90 to 100%, B - 80 to <90%, C - 70 to <80%, D - 60 to <70%, F - <60%. You may be required to bring to each exam a NO. 2 lead pencil and a SCANTRON 882-ES electronic grading form. You may not have any other personal belongings at your desk during an exam. You will not be allowed to take an exam if you do not comply. The form of examinations may be multiple choice, short essay, long essay, or whatever is best suited to the material and is solely the discretion of the instructor.

**Academic Dishonesty:** 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, Part One, Chapter VI, Section 3, Subsection 3.2. Subdivision 3.22).

**Bomb Threats:** If you are 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 classrooms or sites will be available in the event that your classroom is not available.

**Recording Devices:** The use of electronic devices to record lectures is forbidden without exception.

**Smoking, food and drink:** University regulations prohibit smoking, eating, and drinking in lecture halls.

**Cell Phones:** *Ringers must be turned off during class. If your phone rings during class, pick up your belongings and quietly leave the room. Do not return until the next class.*

**Student Success Programs:** The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They 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

**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

**Changes to the syllabus:** The following serves only as an outline. Our progress in covering material may warrant changes in this outline.

**Communication:** UT-Arlington has adopted MavMail (e-mail) as an official means of communication with students. You are required to check MavMail regularly. Further information regarding your email account can be found at: <http://www.uta.edu/oit/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. 817-272-3381.

## Sequence of Lecture Topics:

### Part I: The foundations (covering text pages 1-97)

Introduction and some history

Cell structure and function

Exam I

### Part II: Foundations (continued) and Diversity of life (covering text pages 101-163; selected sections from pages 329-371, 394-397, 405-407, 414-416, 419-444, 231-256)

Nutrition

Growth

Metabolism

Diversity

Exam II

### Part III: Molecular aspects (covering text pages 167-204, 256-294, 941-966, 669-697)

Molecular biology

Genetics

Genetic engineering

Industrial Microbiology

Control

Exam III

### Part IV: Applied aspects (covering text pages 700-723, 727-758; selected sections from 761-755; selected sections from 817-844, 847-938)

Host-parasite relationships

Immunology

Epidemiology

Diseases

Exam IV and comprehensive