

BIOL 2420, Microbiology
Course Syllabus Summer 11 2011

Instructor: Clovis Stacey **Office:** WH 130 **Phone:** 335-6543

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Textbook: Microbiology: An Introduction, 10th ed., by Tortora, Funke, & Case.

Start/End Date: July 11 – August 11, 2011

Modality: Face-to-face

Credits: 4 sch

Course Description: Students learn specific information and concepts in the classification, structure, cultivation and ecology of microorganisms. Students learn mathematical calculations of growth parameters and the effectiveness of chemotherapeutic agents. Students learn terminology, specific information and concepts of the relationships between microorganisms and human life. Cause and effect relationships between microbial growth and human disease, interpretation of symptomatic and laboratory information in diagnosis of disease, prevention of disease and treatment of disease are stressed. Lab fee required.

Pre-Requisites: A minimum grade of “C” in BIOL 1406 and BIOL 1407, or BIOL 2401 and BIOL 2402, or CHEM 1311 and BIOL 1406 or BIOL 2401.

Scans: 1, 3, 6, 9

Course goals: This course deals with microorganisms and how they cause disease. During this course, you will:

1. Learn the how microorganisms live and reproduce.
2. Learn the basic principles and techniques of genetic engineering.
3. Learn the principles and terminology of disease.
4. Learn how microorganisms cause disease.
5. Learn the basics and applications of immunology.
6. Learn the causes and treatments of communicable diseases of today.

Grading:	4 lecture exams	400
	Comprehensive Final	150 (Lec accounts for 70%)
	4 lab practicals	400 (lab accounts for 30%)
	Lab “unknown” grade	To be discussed

Lecture	Lab
Exam I _____	Quiz 1 _____
Exam II _____	Quiz 2 _____
Ex. III _____	Quiz 3 _____
Ex. IV _____	Quiz 4 _____
Final _____	Unknown _____
Grading Scale	

Total points 100 – 89.5 -- A
89.4 – 79.5 -- B
79.4 – 69.5 -- C
69.4 – 59.5 -- D
Below 59.5 -- F

EXAMS: **Students will need a scan-tron form #882-E and a #2 pencil for each exam.** Lecture exams are typically multiple choice questions/and short essay. I do not give makeup exams for missed exams.

STUDENT ATTENDANCE

Attendance is an extremely important part of your success in this class. You will receive an attendance and participation grade of 3 points, at the end of the semester, if you have missed no more than 2 classes and fully participated in class.

STUDENT ASSISTANCE

You are invited to utilize the *Synapse*, WH 117. You will need your student I.D. to use the lab. Also, I am available for assistance.

STUDENT BEHAVIOR:

A. WIRELESS COMMUNICATION DEVICES: Cell phones and other electronic communication devices are distracting in a classroom setting. **Therefore, cell phones and other electronic equipment must be turned off while you are in class. If your cell phone goes off during an examination, I will immediately take up your exam and you will receive a zero on that exam. No exceptions!**

B. Lecture and Lab Demeanor:

The classroom is intended to be interactive with discussion between the instructor and students. Orderly questions and respectful discussions will contribute to a quality learning experience for all involved. Disruptions and disrespectful behavior will not be tolerated and may result in the student or students causing such problems to be dismissed from class or reprimanded. A class dismissal or reprimand may, at the instructor's sole discretion, result in a 100 point deduction from the final grade determination. A second class dismissal or reprimand may, at the instructor's sole discretion, result in termination from the class and a Grade of F.

C. Academic honesty:

Cheating and plagiarism **will not be tolerated.** If the Instructor feels that a student is either cheating or plagiarizing at any time, the student will immediately receive a grade of "zero" for that assignment/quiz. A second incident **will** result in the student being dismissed from the course with a grade of "F".

Special Needs: Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to

discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Learning Resource Center (Library): The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian" service provide additional help.

Student E-Mail: Please access your Odessa College student email by following the link to either set up or update your account: <https://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

STUDENT GRIEVANCES

Odessa College policy requires that student grievances first be discussed with the instructor. Unresolved issues may then be discussed with the instructor's immediate supervisor.

STUDENT WITHDRAWALS

Refer to the current Odessa College Bulletin for the policy regarding student withdrawal from a class.

Tentative Lecture Schedule

Date	Chapter
<u>July</u>	
11	Ch. 1, Intro & The Microbial World and You;
12	Ch. 2, Chemical Principles
13	Ch. 2, Continued
14	Ch. 4, Functional Anatomy of Prokaryotic cells and Eukaryotic Cells
18	Ch. 5, Microbial Metabolism
19	EXAM I (1-5); Ch. 6, Microbial Growth
20	Ch. 6 cont.; Ch. 8, Microbial Genetics
21	Ch. 8 cont.; Ch. 9, Biotechnology and Recombinant DNA
25	Ch. 9; Ch. 10 Classification of Bacteria
26	EXAM II (6,8-10) Ch. 13, Viruses, Viroids, and Prions
27	Ch. 13 cont.
28	Ch. 14, Principles of Disease and Epidemiology
<u>August</u>	
01	Ch. 15, Microbial Mechanisms of Pathogenicity
02	EXAM III (13-15)
03	Ch. 16, Innate Immunity: Nonspecific Defenses of the Host
04	Ch. 17, Adaptive Immunity: Specific Defenses of the Host
08	Ch. 19, Disorders Associated with the Immune System
09	Ch. 26, Microbial Diseases of the Urinary and Reproductive Systems

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11

EXAM IV (16-19, & 26)
FINAL EXAM 9:30 am – 12:00 pm