

Syllabus: MICROBIOLOGY FOR HEALTHCARE PROFESSIONALS (BIOL 215 and BIOL 215L) Summer II 2014 -- Dr. Pryor

<u>Lectures</u>: M - TH (10:00 – 11:50 am)

Labs (LSF 210):
M, T, W (1:00 pm – 3:00pm)
* see calendar, last page of syllabus

INSTRUCTOR:

Dr. Greg Pryor

E-mail: GPRYOR@fmarion.edu

Phone: (843) 661-1403 Office: MSB 301A

Office hours: Due to the busy summer schedule, please make an appointment to see me in my office.

OBJECTIVES:

This course is designed to provide an overview of microbiological principles and laboratory techniques. By the end of the semester each student should have a solid understanding of the terms, concepts, and procedures used in microbiology, and be able to apply aspects of microbiology to their everyday life.

TEXTBOOKS:

REQUIRED - *Microbiology Laboratory: Fundamental Skills and Experiments*. By G. Pryor and L. McCumber. Copies of this custom lab manual are available at the FMU bookstore.

COURSE WEB SITE:

A course web page is located at: http://people.fmarion.edu/gpryor (click on the appropriate links). The syllabus, review materials, exam and lab practical grades, and some extras will be posted at this site.

IN THE CLASSROOM:

It is important to attend lectures and take your own notes; whereas lecture outlines are provided in the back of the lab manual, full lecture notes will <u>NOT</u> be available. You are allowed 3 excused absences before being dropped from the course. Arriving late to class (or leaving class early) will be considered an absence. Attendance will be recorded.

*PLEASE keep your cell phone quiet in the classroom! Disruptive behavior will not be tolerated.

IN THE LABORATORY:

The laboratory exercises will include hands-on experimentation. Specific guidelines for laboratory behavior and conduct are provided in the lab manual. Attendance is required for every lab.

GRADING AND EVALUATION:

Your grade in this course will be based on lecture and laboratory grades combined (/525 points).

The lecture grade (out of **400 points**) is based on 4 exams (**100 points each**). All exams will include multiple choice questions based on lectures and readings. The final exam will *NOT* be cumulative!

The lab grade (out of **125 points**) is based on 2 lab practicals (**50 points each**) and a writing assignment (**25 points**). Attendance / participation in lab is important, and points will be deducted if you are late or absent! (-2 points if late, -3 points if absent). The practicals will include questions based on lab experiments, results, and techniques.

The lab report will be based on the isolation and identification of a microbe cultured during the beginning of the semester. Instructions for writing the lab report will be provided in class and on the course web site.

Make up exams are given <u>only</u> for excused absences, if arrangements are made before or within one week after the exam is given. Make up exams will be multiple choice, short answer, and/or essay format. Due to the constraints of setting up lab practicals, <u>no</u> make-up practicals will be provided.

| Overall grading scale: | 90 - 100% | A | 75 - 79% | C+ | 60 - 64% | D |
|------------------------|-----------|----|----------|----|----------|---|
| | 85 - 89% | B+ | 70 - 74% | C | < 60% | F |
| | 80 - 84% | В | 65 - 69% | D+ | | |

SCHEDULE FOR LECTURE EXAMS, LAB PRACTICALS, AND LAB REPORT *:

Exam 1 (100 pts): Monday, **July 14**, during regular class time.

Exam 2 (100 pts): Tuesday, **July 22**, during regular class time.

Exam 3 (100 pts): Wednesday, **July 30**, during regular class time.

Exam 4 (100 pts): Thursday, **August 7**, during regular class time.

Lab practical 1 (50 points): Wednesday, **July 16**, during your regular lab period. Location: LSF 210. Lab practical 2 (50 points): Tuesday, **August 5**, during your regular lab period. Location: LSF 210.

Writing assignment (25 points): Monday, July 28, due during your regular lab period.

^{*} I suggest you mark your calendar, so you don't forget these critical dates!

LECTURE SCHEDULE AND TOPICS *:

Introduction to Microbes
History of Microbiology
Tools of the Microbiology Laboratory
Prokaryotes
Eukaryotes

Viruses and Prions

Microbial Nutrition and Growth

Antimicrobial Treatments

Host Defenses and The Immune System

Infectious Diseases Affecting the Genitourinary System

Infectious Diseases Affecting the Skin and Eyes

Infectious Diseases Affecting the Nervous System

Infectious Diseases Affecting the Cardiovascular and Lymphatic Systems

Infectious Diseases Affecting the Respiratory System Infectious Diseases Affecting the Gastrointestinal Tract

NEED HELP?

If you need help in this course, please see me after class or during my office hours. If you require academic counseling or services involving learning or physical disabilities, call the Office of Counseling and Testing at (843) 673-9707. If you need tutoring, call the Tutoring Center at (843) 661-1675. If you need help writing lab reports, see me and/or call the Writing Center at (843) 661-1528 to make an appointment; they are eager to help out and can make a big difference in your lab report grade!

ACADEMIC HONESTY:

In accord with the FMU Student Handbook guidelines, any evidence of cheating or plagiarism will result in the loss of all points on that exam or assignment and appropriate disciplinary action, and may result in suspension or expulsion from Francis Marion University.

^{*} All of these topics will be covered briefly, but some content may be dropped if time does not allow.

| Monday | Tuesday | Wednesday | Thursday |
|---|-----------------------------|-----------------------------|-----------------------------------|
| JULY 7 No lab | JULY 8 Labs 1 and 2 | JULY 9 Lab 3 | JULY 10 No lab |
| JULY 14 Lab 4 EXAM 1 | JULY 15 Lab 5 | JULY 16 Lab Practical 1 | JULY 17 No lab |
| JULY 21 Lab 6 | JULY 22 No lab EXAM 2 | JULY 23 Lab 7 | JULY 24 No lab |
| JULY 28 Lab 9 Lab Report Due | JULY 29 Lab 10 | JULY 30 No lab EXAM 3 | JULY 31 No lab |
| AUG 4 Lab 11 | AUG 5 Lab Practical 2 | AUG 6 No lab | AUG 7 No lab EXAM 4 (Final) |