

Syllabus: *MICROBIOLOGY FOR HEALTHCARE PROFESSIONALS* (BIOL 215 and BIOL 215L) Fall 2016 -- Dr. Pryor

<u>Lectures (LSF 207)</u>: T and TH (11:20am – 12:35pm)

> Labs (LSF 210): W (12:30pm - 3:00pm) W (3:30pm - 6:00pm)

INSTRUCTOR:

Dr. Greg Pryor E-mail: GPRYOR@fmarion.edu Phone: (843) 661-1403 Office: MSB 301D Office hours: Open door policy, or 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, with an emphasis on healthcare.

BOOKS:

Microbiology: A Clinical Approach 2^{nd} *edition*. By Strelkauskas, Edwards, Fahnert, Pryor and Strelkauskas. Garland Science. ISBN 978-0-815-4513-8. Copies of this book are available at the FMU bookstore or online.

There is no required lab manual; the lab procedures are available as free PDFs on the course website.

COURSE WEB SITE:

A course web page is located at: <u>http://people.fmarion.edu/gpryor</u> (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; lecture notes will <u>NOT</u> be available. You are allowed 4 excused absences before being dropped from the course. 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 procedures are provided in the PDFs available for free on my website. Attendance is required for every lab.

GRADING AND EVALUATION:

Your grade in this course will be based on lecture and laboratory grades combined (/550 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 **150 points**) is based on 2 lab practicals (**50 points each**) and a lab report (**50 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% B	65 - 69% D+	

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

Exam 1 (100 pts): Tuesday, **September 13**, during regular class time. Exam 2 (100 pts): Thursday, **October 6**, during regular class time. Exam 3 (100 pts): Tuesday, **November 1**, during regular class time. Exam 4 (100 pts): Friday, **December 9**, from 3 to 5pm.

Lab practical 1 (50 points): **October 12**, during your regular lab period. Location: LSF 210. Lab practical 2 (50 points): **November 30**, during your regular lab period. Location: LSF 210.

Lab report (50 points): November 16, due during your regular lab period.

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

LECTURE TOPICS (In Order of Coverage):

- CH 1 What is Microbiology and Why Does it Matter?
 CH 4 An Introduction to Cell Structure and Host-Pathogen Relationships
 CH 9 The Clinical Significance of Bacterial Anatomy
 CH 10 Bacterial Growth
 CH 18 Control of Microbial Growth With Disinfectants and Antiseptics
 CH 12 The Structure and Infection Cycle of Viruses
 CH 13 Viral Infection
 CH 14 Parasitic and Fungal Infections
 CH 19 Antibiotics and Antimicrobial Drugs
 CH 15 The Innate Immune Response
- CH 16 The Adaptive Immune Response

* CH 21 Infections of the Respiratory System

- * CH 22 Infections of the Digestive System
- * CH 23 Infections of the Genitourinary System
- * CH 24 Infections of the Blood and Lymph
- * CH 25 Infections of the Skin and Eyes
- * CH 26 Infections of the Central Nervous System

* Some content of these chapters will be presented in the discussions of other chapters. All of these chapters may not be covered due to time constraints.

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.