

Syllabus: Biology 3100 & Microbiology & Fall 2011

Instructor: Dr. Archana Bhasin

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Office: 2093 Bailey Science Center

Office hours: Mon., Wed., Fri. 11:00 & 11:50am or by appointment

Class: Mon., Wed., Fri. 10:00-10:50am Bailey Science Center Rm. 2022

Laboratory: Section A (CRN 81622) - Mon. and Wed. 12:00-1:25pm - Bailey Science Center Rm. 2068
Section B (CRN 81623) & Mon. and Wed. 2:00-3:25pm & Bailey Science Center Rm. 2068

Required texts (all available at the bookstore):

1.) **Brock Biology of Microorganisms, Thirteenth Edition**

by Madigan, Martinko, Stahl and Clark
Pearson 2011

2.) **6 Ybgcbb A JwcV]c`c[JWU`5 dd`JWU]cbg, Complete Version, Twelfth Edition**

by Alfred E. Brown
McGraw Hill 2011

3.) **The Coming Plague: Newly Emerging Diseases in a World out of Balance**

by Laurie Garrett
Farrar, Straus and Giroux 1994

Course Description/Objectives: The objective of this course is to give you a foundation in microbiological concepts, as well as the laboratory skills required to answer a variety of microbiological questions (i.e. medical and ecological). This course will focus on concepts and critical thinking skills with emphasis on the scientific method. Supplementary scientific readings (both primary articles and reviews), lab reports and an oral presentation will be assigned in order to improve your critical thinking and communication (oral and written) abilities. In addition, at the end of this course, you should have an appreciation for the ubiquity and diversity of microbes, be able to apply your knowledge of microorganisms to real-life situations, and you should be able to evaluate various types of scientific reports. Specifically, you should be fully knowledgeable on aseptic technique, all lab techniques, the different types of microbes and their cell structures, various metabolic processes, dilution problems, DNA transcription, translation, replication, gene expression, mutation, and the basics of virology and immunology. These objectives fall under the VSU General Education Outcomes #4, 5, 7 as well as the VSU Department of Biology Education Outcomes # 1, 2, 3, 4.

Grading and assignments: Lab participation points will come from lab attendance (see attendance policy below). Exams will include both lecture and lab material with an emphasis on lecture material. The exam format is varied. It will include short answer, drawing, labeling figures, completing tables, word problems, fill in the blank and some multiple choice questions. In addition, **exams II, III and IV will have a comprehensive component**, meaning that these exams will have content that was covered on previous exams. I will do this in order to insure that you learn key concepts that you may have missed previously. I do not post answer keys to my exams so you will have to see me in my office to go over previous exam questions. **You have only one week after you receive your exam to contest any grading errors or point miscalculations** so go through your exam right away. **If you know that you cannot take an exam on the scheduled day, be sure to talk to me before the exam day and not after the exam.** If you have a situation, please

Late assignments:

