

SUFFOLK COUNTY COMMUNITY COLLEGE

Biology Department

Course Outline

Instructors: Staff Office: Marshall/Kreiling Bldg.
Room: M-101 (formerly M-22)

Tel #: 451-4316 (Secretary)

Course Title: General Microbiology
Catalog Number: BY 44
Semester: Fall 2005

Textbook: Microbiology by G.J. Tortora, B.R. Funke and
C.L. Case; Benjamin Cummings Publishing Co.,
CA, 2004 8th Edition

Laboratory Manual: Microbiology in Practice by Lois Beishir;
Harper & Row Publishing Co.; New York, 1996
6th Edition

Optional: Microbiology: A Photographic Atlas for the Laboratory;
Benjamin Cummings, New York, 2001.

Objectives: By the end of the semester the successful
student will have:

1. acquired knowledge of prokaryotic anatomy and physiology, and its similarities and differences when compared to that of eukaryotic organisms.
2. gained a greater understanding of intermediate metabolism.
3. gained an understanding of the basics of microbial genetics.
4. acquired knowledge pertaining to the relationship of microorganisms to health and disease.

5. acquired an understanding of the basic mechanisms of physical and chemical control.
6. attained a basic familiarity with the main groups of bacteria and other types of microorganisms.
7. gained an understanding of basic laboratory techniques for observation, isolation, and identification.

Student requirements and evaluation:

Lecture examinations	1/3
Laboratory - unknowns and laboratory practicals	1/3
Final examination	1/3

Attendance policy:

- A. Lecture: All students are expected to attend every session of each course for which they are registered. Students are responsible for all that transpires in class whether or not they are in attendance. The College defines excessive absence or lateness as more than the equivalent of one week of class meetings during the semester. Excessive absence or lateness may lead to failure in a course or removal from the class roster.
- B. Laboratory: Students must attend all laboratory sessions. A student who misses a session must contact the laboratory instructor before the next laboratory meeting to make up missed work. Failure to comply with this policy will result in being dropped from this course.

Lecture Schedule

<u>Topic</u>	<u>Chapters</u>
Introduction to Microbiology	1
Taxonomy of Microorganisms	10,11,12, (21-26)
Taxonomy of Microorganisms	"
Taxonomy of Microorganisms	"
Microscope and Bacterial Anatomy	3, 4
Cultivation and Growth of Bacteria	6
Macromolecules and Enzymes	2, 5
Bacterial Metabolism	5
Genetic Variation in Bacteria	8
Viruses	13
Control of Microorganisms	7, 20
Microorganisms and Disease; Resistance and Immunity	14,15,16,17
Final Exam	