

COURSE OUTLINE

MICROBIOLOGY 140

Y 91-92

Instructor: Phil Johnson, J222, 539 2827

Required text: 'Microbiology for the Health Sciences'
Gwendolyn R.W. Burton
(J.B. Lippincott Co., 1988)

Course description: To give a basic understanding of the role of microorganisms in human disease. Topics such as how and why microbes cause disease, control and prevention of disease, and factors which influence the spread of disease will be discussed.

Evaluation:

Quizzes (3)	15%
Lab. reports	10%
Term paper	15%
Mid-term exam	20%
Lab. exam	10%
Final exam	30%

COURSE CONTENT

CLASSES :

<u>No. of hours</u>	<u>Topic</u>	<u>chapter</u>
4	Introduction to microbiology. Types and structure of microorganisms.	1,2
3	Microbial physiology.	4
5	Microbial growth and it's control.	4,6
2	Normal body flora of humans.	5
2	Development of infection.	7
3	Epidemiology.	8
2	Nosocomial infections.	9
3	Prevention and control of disease.	8,9
4	Mechanisms of defence against disease.	10,11
4	Some popular human diseases.	13

LABS:

1. Microscopic observation of microorganisms:

Various microbes will be available for you to look at. Take note of their form, size and arrangement.

2. Microbial culture and growth:

You will be culturing bacterial samples from commercial suppliers, the local environment and your own bodies.

3. Chemical control of microbes:

A variety of chemicals and antibiotics will be used to demonstrate their effectiveness (or lack of) against different bacteria.

4. Human disease:

This will be a pictorial exhibition of some of the more common human diseases. Included will be examples of the causative organism and the resulting pathology.
(WARNING - THESE PICTURES HAVE BEEN KNOWN TO CAUSE TUMMY TROUBLE!)

These laboratory sessions will be scheduled to fit in with the appropriate classes.