

Registrar

COURSE OUTLINE

F. 91-92

Bi 301 - CELLULAR BIOLOGY

Instructor:

Phil Johnson
J222, 539 2827

Classes:

Mon, Wed, Fri, 11.00 - 12.00

Textbook:

'Cell Structure and Function' (1991)
Loewy et al
Saunders College Pub.

Description:

This course examines cells in terms of the molecular structure of components, and how the properties of these components determine and affect function. Emphasis is placed on animal cells, although comparisons with procaryotic and plant cells will be made.

Also included will be information on some of the experimental techniques used in the study of cell and molecular biology.

Evaluation:

Quizzes (6)	30%
Mid-term exam	30%
Final exam	40%

Bi 301 - COURSE CONTENTS

<u>Number of hours</u>	<u>Topic</u>
1.5	Introduction to the history and subject of cellular biology.
2	Preparation of specimens for the study of cell structure.
3	Biological membranes.
2	Extracellular matrix and cell junctions.
1	Thermodynamics.
1.5	Enzymes.
3	Mitochondria and respiration.
3	Chloroplasts and photosynthesis.
4	Cytoplasmic membrane systems: endoplasmic reticulum, golgi complex, lysosomes, microbodies.
3	Cytoskeleton.
3	Muscle structure and contraction.
6	Nucleus, nucleolus and chromosomes.
3	Growth and the cell cycle.