S. Sciences
Registrar

COURSE OUTLINE

F90

CELLULAR BIOLOGY - Bi 301

Instructor: Phil. Johnson
J 222, Science Building

Course description:

The course examines cells in terms of the molecular structure of its components and how the properties of these 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 (4).....30%
Mid-term exam.....30%
Final exam.....40%

COURSE CONTENTS

Approx no. of hours	
1.5	Introduction to the history and subject of cell biology.
2	Preparation of specimens for studying 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 and microbodies.
3	Cytoskeleton.
3	Muscle structure and contraction.
6	Nucleus, nucleolus and chromosomes.
3	Growth and the cell cycle.