## Cellular Biology and Biochemistry

Molec Biol and Biochem 221

Section: D100

Term: 2002 Spring

Instructor: Dr. L. Quarmby

Office: B8240

Discussion Topics: General Course Description: (from calendar):

A study of the molecular processes which underlie cell structure and function, integrating ultrastructural, physiological and biochemical approaches. Modern techniques used in the analysis of organelle and cell function are integral parts of the course.

Lecture Topics:

- 1. Introduction to cells (life is totally cellular).
- 2. Cellular membranes (the boundaries of life).
- 3. Transport across membranes (the ins and outs).
- 4. Cellular energetics (what runs the machine).
- 5. Protein and lipid sorting (organizing the parts).
- 6. Cell motility I (moving things within cells).
- 7. Cell motility II (moving cells).
- 8. Cell signalling I (transmission & reception).
- 9. Cell Signalling II (transduction and response).
- 10. Cell division (making more cells).
- 11. Integrating cells into tissues.
- 12. Unsolved mysteries of cell biology.

## Grading:

## Cellular Biology and Biochemistry

Midterm Exam I

25%

Midterm Exam II

30%

Final exam

45%

Required Texts: Lodish et al., Molecular Cell Biology, 4th Edition, 1999. Freeman and Co. ISBN 0-7167-3136-3.

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: Prerequisite: BISC 101.

Corequisite: CHEM 281 (or 150).

Recommended: CHEM 281 precede MBB 221.

Notes: Course website: http://www.quarmby.ca/mbb221

Copies of the text will be placed on 2 hour reserve in the library.

Students may not receive credit for both MBB 221 and BICH 221.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.