Instructors:
Coordinator: Dr. S. Hill, 527-4322, Ext. 46045 hillstev@hhsc.ca
Dr. J. Macri, 527-4322, Ext. 46046 macri@hhsc.ca

Questions concerning course material or evaluation of term tests should be taken up with the appropriate instructor.

Questions concerning the administration of the course in general, exemptions from tests and examinations must be taken up with the course coordinator.

Lectures.
Lectures will be held in TSH 120
Monday, Wednesday, Thursday, 1730-1830

Duration.
January 5 - April 6, 2009.

Mid-Term Break - February 16 - 20, 2009.

This course will deal with: a) the physiological and pathological chemistry of different organ systems and b) biochemical tests used in the diagnosis and monitoring of disease. The course has been divided into three sessions, with a test at the end each of the first two sessions.

Session 1: - Dr. S. Hill.
18 Lectures, beginning Monday January 5th. In-class test Thursday February 12th.

The following topics will be covered:

? Concept of reference values, sensitivity, specificity and predictive value of laboratory tests.
? Distribution of body fluids in normal and abnormal states.
? Role of kidney in fluid and electrolyte balance.
? Laboratory tests for assessing kidney function.
? Acid-base balance.
? Overview of liver biochemistry and pathology
? Biochemical evaluation of liver function

Session 2: - Dr. J Macri.
16 Lectures, beginning Monday February 23. In-class test Monday March 30th.

This session will deal with

? Endocrinology, - purpose of the endocrine system; endocrine glands and endocrine cells; their location in the human body; what they produce; maintenance of homeostasis; clinical manifestations of endocrine disorders (hyper- and hypo-function); use of laboratory tests to diagnose endocrine disorders. We will deal with endocrinology of the pancreas, thyroid, parathyroid, adrenal and pituitary glands.
Lipid and cardiovascular metabolism and disease – overview of lipoprotein metabolism, development of coronary artery disease, myocardial infarction, biochemical evaluation of cardiac risk and injury. We will try to integrate diabetes and cardiovascular disease.

Session 3 - Special topics and Case Presentations
We will use the last 2 or 3 lectures for some special topics, case presentations and review.

Evaluation

In the final lecture periods of sessions 1 and 2, there will be an in-class test consisting of multiple choice and/or short essay questions. Each test will relate only to the lecture content of the session. Each test will count for 25% of the final mark.

A final examination (registrar scheduled) will address the content of the entire course and will count for 50% of the total mark. This will be a multiple choice test.

The course weighting cannot be changed.

No make-up tests will be offered. If you miss a test (and have an exemption from the Department of Biochemistry, or your home department) the marks will be distributed as follows: remaining test 35%, final exam 65%. If you miss a test and do not have the proper documentation, you will receive a ZERO for that test. Once you have written a test or exam, the mark will stand.

Please note: Many students ask for test exemptions because of interviews for professional schools. If you are out of town for your interview on the day of the test, this is an appropriate reason for an exemption. It is not appropriate, however, to ask for an exemption because you are busy preparing for interviews or other tests.

Course Email Box
We will maintain a course mailbox where announcements and lecture outlines can be posted and questions will be answered. If you email us a question, we will copy the answer to the mailbox so all can read it.
It can be found under Courses/Biochem Programme on the Learnlink.

Course Text

Clinical Chemistry 6th Ed’n, 2008
Marshall WJ
Publisher - Mosby
The 5th edition is available on the used book market.

The lectures will loosely follow the text. Please remember that other references will be provided as well and that the lectures may not follow the text exactly.

Course Notes

Lecture outlines will be available from the Biochemistry 3H03 learnlink mailbox shortly before or immediately after each lecture. These lecture outlines are intended as an aid to help us in our lectures and you in your studying. They are NOT intended to provide complete coverage of the material.