The main objective of the Virology course is to develop the understanding of the basic molecular and cellular concepts and principles related to viral infections, and its medical application to treatment and prevention.

**Pre-requisites:** SC/BIOL 2020 4.0; SC/BIOL 2021 4.0.

**Course Schedule and Location**
Tuesdays and Thursdays between 5:30 to 7:00pm at SLH A

**Course Director**
Dr. Motti Anafi
Room 319, Farquharson
E-Mail: moanafi@yorku.ca
Office hours: E-mail to set an appointment

**Grading:**

**Mid-Term Exam 1** 25%
Date: April 7, 2009 @ 5:30pm
Location: TBA

**Mid-Term Exam 2** 25%
Date: May 5, 2009 @ 5:30pm
Location: TBA

**Final Exam** 50%
Date and place: will be published by the registrar office

Please note that this information is subjected to in-class update.

**Required Reading (Review article)**

The article is placed on electronic reserve
Please note that this information is subjected to in-class update.

Recommended Readings:

ISBN: 9781405147156
Blackwell Publishing (part of Wiley)

2) Medical Microbiology. 4th edition Baron, Samuel, editor.
3) Retroviruses. Coffin, John M.; Hughes, Stephen H.; Varmus, Harold E.
4) Vaccines. 3rd edition, Plotkin, Stanley A.; Orenstein, Walter A., editors: Chapter 6, Smallpox and Vaccinia
5) Immunobiology. 5th edition Janeway, Charles A.; Travers, Paul; Walport, Mark; Shlomchik, Mark.


Course Outline
Part 1: Introduction

Tips on studying for the course

The origins of virology

Emerging infectious diseases

Part 2: Structure/Function of Viruses

An overview of viruses

DNA virus replication strategies

RNA virus replication strategies

Structure of viruses

Lytic replication cycle

Part 3: Antiviral defense mechanisms

Basic concepts in immunology

Interferon

Vaccination against viruses

Part 4: Viral Diseases

Sexually transmitted infections (HIV)

Infections of the respiratory system (Influenza, SARS)

Oncogenic viruses

Retroviruses and the discovery of oncogenes

Hepatitis B

Human Papilloma virus

Epstein Barr Virus

Infections of the circulatory system

Hanta virus

Tips on studying for this course:

• For the exams, you must know and understand the material presented in the lectures and in the required reading mentioned above.

• You are NOT expected to know material from the textbooks which has not been covered in the lectures.
The textbooks can help students consolidate and expand their understanding of the material. However, some parts of the textbooks will not be covered in class, and other material that will be covered in class will not be discussed in the above textbooks. Hence, it is important to attend the lectures, and, in addition, to read the sections in the textbook related to each topic as it is covered in the course.

- Use the texts as auxiliaries to the lecture material, not the other way around.
- Students who miss a lecture are expected to borrow the relevant notes from a classmate and to study the corresponding chapter in the textbook and from the required readings. It is your responsibility to attend class as lecture notes will not be provided.
- The material presented in the lectures and other components of the course such as tests and exam have been developed from large variety of resources, including web sites, textbook supplements and the material mentioned above.

Tests and Exams:

Attendance for all exams is mandatory. Exams missed on the ground of medical circumstances must be supported by an Attending Physician’s Statement, which can be downloaded from: http://www.registrar.yorku.ca/pdf/petitions/attending_physician_statement.pdf, or a statement by a psychologist or counsellor. Students are NOT expected to disclose the nature of the illness. The document must specify:

1) date of consultation.
2) contact information (e.g. phone number of the hospital; legible name of the health provider) that would allow verification of the document.
3) a statement that the student would not have been able to attend class (or carry out activities) during the relevant period of time.

The documentation must be dated on the same day as the exam or earlier, or it will not be accepted. The Course Director must be notified by email within 24 hours in the case of a missed test or exam. Appropriate documentation must be submitted to the Course Director within one week after the test or exam. No opportunities to make up missed mid-term exams will be offered. However, after acceptable justification for a missed exam has been received, the percentage value of the missed mid-term will be added to the final exam. If the final exam is missed, the student must petition the Registrar for permission to write the final exam.

Accommodations:
Students who feel that there are extenuating circumstances that may interfere with the successful completion of their exams or other course requirements are encouraged to discuss their concerns with the Course Director as soon as possible.

Students with physical, learning or psychiatric disabilities who require reasonable accommodations in teaching style or evaluation methods should discuss the matter with the Course Director early in the term so that appropriate arrangements can be made.

Cheating and Plagiarism:

Cheating and plagiarism are major academic offences and carry serious penalties, ranging from a failing grade on the work in question to expulsion from the university. For more details about cheating, see York University’s academic dishonesty policy at the following link: http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm

Sending e-mail to the Course Directors

Your e-mail will be read and answered as soon as possible. However, we will open only e-mails that fulfill the following requirements:

- Your e-mail must be sent from your yorku.ca email account (not from hotmail, gmail etc.) – emails from non-yorku.ca accounts will likely languish in a spam folder that is checked only intermittently.
- Be sure to include your full name and student number in your email text.
- Your e-mail must include “BIOL/4010” in the subject line
- Your e-mail must NOT include an attachment.

Important Dates:

- Last day to ENROL without requiring the permission of the Course Director is March 18.
- Last day to ENROL even with the permission of the Course Director is March 24.
- Last day to DROP the course without a grade being submitted is April 22.