
COURSE DIRECTOR: K. A. White – B304 Farquharson (3rd floor), x40890, kawhite@yorku.ca

LECTURES: CSE - B, Tues & Thurs 5:30 – 7:00 pm

Three (3) copies are on reserve in the Steacie Library: QR 389 A24 2007

COURSE DESCRIPTION: This course focuses on cellular, molecular, and structural aspects of Virology. The goal is to understand how viruses hijack host cells and redirect cellular energy to perform virus-related tasks - such as replication of viral genomes and synthesis of viral proteins. The course material investigates the highly-regulated host- and virus-specific steps that lead to successful infections. Molecular processes and concepts will be emphasized using prototypical viruses selected from different virus families.

The majority of material will be derived from the course text “Fundamentals of Molecular Virology” and the proposed chapters to be covered are listed on the back of this page. The figures and tables that will be discussed in class are also listed. In some cases, additional supplementary material will be posted on the course website (see below) for downloading and printing. Remember to bring these printed supplementary materials to class.

COURSE WEBSITE: WebCT – Postings and other information (e.g. old tests and test grades, etc.) can be accessed under the “Lectures” heading
You must activate a WebCT account to access course material
Student guide to WebCT available at:
http://www.yorku.ca/fsc/webct/student/quickstart.htm

COURSE EVALUATION: Two (2) midterm tests (25% each, non-cumulative)
One (1) final exam (50%, cumulative)

NOTE: No make-up tests for midterms – weight will be transferred to final exam (i.e. final will be worth 75%). Tests and exam will include both multiple choice (~40% of evaluation) and written answer (~60% of evaluation) questions. The final exam will contain approximately 50% new and 50% old material.

IMPORTANT COURSE INFORMATION FOR STUDENTS: i.e. Academic Honesty/ Integrity, Ethics Review Process, Access/Disability, Student Conduct, Religious Observance Accommodation.
Information on these and other important policies are posted at:
http://www.yorku.ca/secretariat/policies/

****THERE IS MORE INFORMATION ON THE BACK OF THIS SHEET****
**Introduction:**

1. Introduction to Virology (Figures: 1.1, 1.3–1.7; Tables: 1.1, 1.2)
2. Virus Structure (Figures: 2.1, 2.2, 2.4, 2.7, 2.9, [1.1, 8.3]; Posting: #1)
3. Virus Classification (Figure: 3.1; Tables: 3.1–3.7)
4. Virus Entry (Figures: 4.1, 4.2, 4.4, 4.5, [1.1, 2.3, 16.3]; Table: 4.1; Posting: #2)

**Bacteriophages:**

5. ssRNA bacteriophages (Figures: 5.1, 5.2, 5.4–5.8; Table: 5.1; Posting: #3)
8. Bacteriophage Lambda (Figures: 8.1–8.7, 8.9)

**Small DNA Viruses:**

11. Papillomaviruses (Figures: 11.1–11.6; Tables: 11.1, 11.2; Posting: #4)

**Larger DNA Viruses:**


**Positive-strand RNA viruses:** (Figure: 16.5; Posting: #5)

17. Flaviviruses (Figures: 17.3–17.6; Tables: 17.1, 17.2)
18. Togaviruses (Figures: 18.1–18.5; Tables: 18.1–18.3)
19. Coronaviruses (Figures: 19.1–19.6; Table: 19.1)

**Negative-strand RNA viruses:**

23. Orthomyxoviruses (Figures: 23.1–23.8, [4.5]; Table: 23.1)

**Retroviruses:**

25. Retroviruses (Figures: 25.1–25.9; Table: 25.1)
26. HIV-I (Figures: 26.1–26.7; Table: 26.3)

**Antiviral agents:**

32. Antiviral Chemotherapy (Figures: 32.1–32.10, [2.9])

**SUCCESS** = (1) Read the chapter to be covered before class
(2) Attend class and pay attention
(3) Review class notes while they are still fresh in your mind