

**DEPARTMENT OF BIOLOGICAL SCIENCES
UNIVERSITY OF TORONTO SCARBOROUGH**

**Course Outline - Fall 2020
Principles of Virology [BIOC20 LEC99]
Instructor: Dr. Jeneni Thiagavel**

Course Description

This course introduces viruses as infectious agents. Topics include: virus structure and classification, viral replication strategies, the interactions of viruses with host cells, and how viruses cause disease.

Prerequisites: BIOB10Y3 or BIOB10H3+BIOB11H3

Lectures:

2 Hours per week- Online

Lectures will be pre-recorded and posted under 'Modules' on 'Quercus'. Lecture slides will be uploaded with the recording.

Lectures will be uploaded on Tuesdays

The Teaching & Course Administration Team

Instructor: Dr. Jeneni Thiagavel

Email: jeneni.thiagavel@utoronto.ca

- All e-mails must be sent from your UofT email and must include the course code in the subject line
- Office hours: Thursdays on Blackboard Collaborate on Quercus [Schedule one-on-ones via email]

TAs:

- Laxshaginee Thaya: laxsha.thaya@mail.utoronto.ca
- Jonathan Burnie: jonathan.burnie@mail.utoronto.ca
- All e-mails must be sent from your UofT email and must include the course code in the subject line.

Course Website:

- The main source of information for BIOB10 is Quercus [<https://q.utoronto.ca/>].
- The course syllabus, schedule, and lecture slides can be found here. Also, important information about the course including the dates and locations of exams will be posted here.

Textbook: Fundamentals of Molecular Virology [Author: Nicholas H. Acheson]

Assessments/ Exams

2 Alternative Marking Schemes:

Option 1:

Description	Weight
Midterm Test	45%
Final Exam	55%

Option 2: This option is for those students

- (i) enrolled in BIOC90 **AND**
- (ii) want the 10% to come from BIOC20

Description	Weight
Midterm Test	45%
Final Exam	45%
Integrative Multimedia Documentary Project	10%

Midterm Test

- This test covers lectures 1-12 (inclusive)
- The midterm test will be online [Quercus]
- Date & Time: TBD by the registrar's office

Final Exam

- This exam will test content covered in lectures 1-24 (inclusive).
- The final exam will be online [Quercus]
- Date & Time: TBD by the registrar's office

BIOC90 Integrative Multimedia Documentary Project

Instructor for BIOC90: Dr. Jeneni Thiagavel

This course is one of several that can be used to fulfill the BIOC90 program requirement that all students in Biological Science specialist and major programs need to complete before graduation. If you decide to enroll in BIOC90 this semester, you can do so through Acorn – you will need to enroll before the course add/drop date. Please note that if you are enrolled in more than one of the C-level courses that can be used to fulfill this program, you will need to decide which course you want the 10% grade for BIOC90 applied to (you can only apply this grade to ONE of the participating C-levels).

Please see <https://www.utoronto.ca/biosci/biob90h3-bioc90h3> for a list of participating courses. It is your decision as to when you will complete BIOC90 (you do not need to do so this semester, but you do need to complete this course to graduate if you are enrolled in the most recent versions of our programs). If you end up taking BIOC90 at a time when you are not enrolled in any of the participating classes, you cannot benefit from the assignment grade in any way. If you are not sure if you need to take BIOC90 to complete your program, please consult degree explorer – it will show up there as a program requirement if it is something you need to complete. Note: even if it is not one of your program requirements, you can still choose to complete this course if you wish to do so.

Under the 'BIOC90 Module' on our Quercus Page, the C90 Course Instructor [Dr. Thiagavel] will post all the information you will need to help you decide whether you want to take BIOC90 this term. Here, you will be able to find (i) the C90 course syllabus, as well as (ii) an information session held by the course instructor covering the details of the project.

Missed Midterm Test or Final Exam:

Missed Midterm Test:

- You will need to provide the course instructor with a UTSC medical certificate within 48 hours of a missed exam, if you wish to be considered for a potential make up exam.
- A single makeup midterm exam may be offered to students who provide significant evidence of extreme circumstances/ illness. The structure of the midterm will differ from the normal midterm, as determined by the instructor.

Missed Final Exam:

You will need to declare your absence on ACORN and submit a petition via the registrar's office and provide them with documentation. The course instructor/ coordinator is not responsible for scheduling missed final exams.

Note that it is not sufficient to simply visit a doctor's office; the documentation must show that you were incapable of writing the test or completing the assignment on [date] for medical reasons. The medical certificate must include the statement "[Name of student] was unable to write the test on [date] for medical reasons". Documentation must show the physician was consulted within one day of the test/exam. A statement merely confirming the report of an illness made by a student is not acceptable.

Please note that the self-declaration of student illness reports cannot be used for any missed assessments in this course.

Academic Integrity

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes. All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters and could have serious consequences for students including suspension or expulsion from the university

Accessibility Needs

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach the AccessAbility Services Office who is available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations

Phone: 416-287-7560; Email ability@utsc.utoronto.ca

Course Schedule

BIOC20		
Lecture	Chapter	Topic
1		Introduction to Course & Review of Gene Expression
2	1	Introduction to Virology
3	1	The Virus Replication Cycle
4		Virus Classification
5	2	Virus Structure & Assembly
6	4	Virus Entry I
7	4	Virus Entry II
8	11	Positive-Strand RNA Viruses
9	11	Positive-Strand RNA Viruses
10	14	
11	14	Positive-Strand RNA Viruses
12		
Reading Week		
13	18	Negative-Strand RNA Viruses
14	18	
15	18	Negative-Strand RNA Viruses
16	19	Double-Stranded RNA Viruses
17	19	Double-Stranded RNA Viruses
18	23	DNA Viruses
19	23	DNA Viruses
20		
21	23	DNA Viruses
22	28	Viruses that use a Reverse Transcriptase
23	28	Viruses that use a Reverse Transcriptase
24		