

SPECIAL TOPICS IN CELL BIOLOGY (BIOD23H3)

COURSE INSTRUCTOR:

- Dr. Christina Guzzo: christina.guzzo@utoronto.ca
- Office: SY264, Office Hours: Thursday 10:30am-12:30pm

TA:

- Catherine Deane: cathy.deane@mail.utoronto.ca

LECTURES:

- Tuesday 9:00am – 11:00am, Room MW 130
- Thursday 9:00am – 10:00am, Room BV 260 (every other week is a mandatory in-class discussion, see class schedule)

TEXTBOOK:

- None
- PowerPoint presentations and journal articles will be supplied for students to download/print and bring to class (via Blackboard).

EXAMS:

- Midterm (2hrs, in-class, February 27th)
- Final Exam (3hrs, during final exam period)

COURSE PREREQUISITES:

- BIOC12H [or IMCB08H plus IMCC03H (for Industrial Microbiology students only)]

GRADING SCHEME:

- Journal Club = 30% (5 articles x 6% each)
- Midterm Exam = 25%
- Final Exam = 45%

JOURNAL CLUB (30%):

- The details of the Journal Club will be outlined in a short PowerPoint presentation given during the first class (Jan 9th). This presentation will be posted on Blackboard and will constitute part of this syllabus.

MIDTERM (25%):

- The midterm will cover lecture topics up to and including February 13th (week 6). The format will be multiple choice, diagram, and short answer.

FINAL (45%):

- The final exam will cover all lecture topics, with an emphasis on weeks 9-13. The format will be multiple choice, diagram, short answer, and long answer.

COURSE LEARNING OBJECTIVES:

- 1) Learn key concepts and terminology that explain virus and host interactions (i.e. virus infection), and host immune responses to infection.
- 2) Synthesize knowledge of how viral processes lead to host disease, both at molecular and organismal level.
- 3) Critically evaluate the role of science in society (i.e. importance of pathogens, vaccines, etc.) and how viruses affect our current lives (e.g. emerging and re-emerging pathogens).
- 4) Develop a meaningful sense of the importance of scientific research in human health and society at large.
- 5) Identify what types of laboratory techniques could be used to address a given question in viral pathogenesis.
- 6) Perform targeted primary literature searches on a given topic of interest.
- 7) Critically analyze existing research articles for scientific writing, scientific merit/integrity, laboratory techniques, data representation, and overall conclusions.
- 8) Synthesize and summarize large amounts of information (i.e. scientific papers) into concise, meaningful points (i.e. journal club assignments)

LECTURE TOPICS (tentative):

1. Virus characteristics and classification
2. Retroviruses and HIV
3. Emerging and re-emerging viruses
 - Influenza, Ebola, Zika, Chikungunya
4. Antivirals & resistance mechanisms
 - host and virus
5. Viral immunology (host responses)
6. Vaccines
7. Laboratory techniques
8. Careers in host-pathogen interactions

CLASS SCHEDULE:

	= 2hr lecture (Tuesdays)
	= 1hr discussion (Thursdays)

DATE	WEEK	CLASS TOPIC
09-Jan	1	Lecture 1
11-Jan		Training Session on Literature Searching (UTSC Librarian)
16-Jan	2	Lecture 2
18-Jan		Journal Club - Article 1 discussion in class
23-Jan	3	Lecture 3
25-Jan		Assignment 1 submission (no class)
30-Jan	4	Lecture 4
01-Feb		Journal Club - Article 2 discussion in class
06-Feb	5	Lecture 5
08-Feb		Assignment 2 submission (no class)
13-Feb	6	Lecture 6 + MIDTERM REVIEW
15-Feb		Journal Club - Article 3 discussion in class
20-Feb 22-Feb	7	READING WEEK
27-Feb	8	MIDTERM (in class)
01-Mar		Assignment 3 submission (no class)
06-Mar	9	Lecture 7
08-Mar		Journal Club - Article 4 discussion in class
13-Mar	10	Lecture 8
15-Mar		Assignment 4 submission (no class)
20-Mar	11	Lecture 9
22-Mar		Journal Club - Article 5 discussion in class
27-Mar	12	Lecture 10
29-Mar		Assignment 5 submission (no class)
03-Apr	13	Lecture 11
05-Apr		EXAM REVIEW

COURSE POLICIES

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 course instructor and/or the *AccessAbility* Services Office as soon as possible. I will work with you and *AccessAbility* Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC *AccessAbility* Services staff (located in SW302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca. The sooner you let the course instructor know your needs the quicker we can assist you in achieving your learning goals in this course.

ACADEMIC INTEGRITY:

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) 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.

Please avoid academic dishonesty, have confidence in your own ability to learn and grow academically by doing your own thinking and writing, and when in need, ask for help!

MISSED MIDTERM POLICIES:

- **Advance conflict:** If you know **in advance** that you cannot write the Midterm exam at the scheduled time because it conflicts with some other **valid activity**, please notify the course instructor as soon as possible so that we can make arrangements for you to write the Midterm at an alternative time. **Any such alternative time must be before the scheduled date of the Midterm Exam (Feb 27, 2018).**
- **Medical illness:** If you miss the Midterm due to medical illness, then you must submit a detailed UTSC Medical Certificate filled out by the physician who saw you on the day of the Midterm. This note must be submitted to the course instructor as soon as possible following the Midterm, whether in person or via email. Other medical notes will not be accepted, and if the UTSC Medical Certificate is not completed to the satisfaction of the course instructor, it may be refused. The UTSC Medical Certificate can be found via the following link:

- http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf
- **Other valid reasons:** If you miss the Midterm for any other valid reason, please consult with the course instructor as soon as possible. The course instructor will determine whether the reason given for the missed Midterm is valid in accordance with university policies. Also, the course instructor may ask for any documentation required to verify the reason given.
- **Invalid reasons:** Students who miss the Midterm for any invalid reason will receive a grade of zero.

****Disclaimer: The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.**