



BIOD17H3 – Seminars in Cellular Microbiology Summer 2021

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Office Hours: **Mondays: 1:30 PM – 2:30 PM**

Office hours will be held online on Quercus.

If the hours need to be changed during the semester, you will be notified by an announcement online.

Please be prepared and consult lecture materials prior to coming to the office. Appointments outside these hours can be arranged by e-mail.

Textbook: **There is no assigned textbook for the course.** The lectures come from a number of sources including primary papers, reviews and textbooks.

Course description

BIOD17 offers an overview of the basic and most significant advances in Cellular Microbiology. This discipline studies the interplays between microbes and host cells, combining knowledge and techniques from cell biology and microbiology. The curricula of BIOD17 includes the study of bacterial and virus pathogenic mechanisms, focusing on those related to invasion and replication in mammalian host cells. **BIOD17 is a seminar-based course.** Students will work in groups to present a research paper and participate in a seminar style discussion. The objective of this course is to guide students in developing the ability to understand and critically analyze scientific literature and become knowledgeable in the field of cellular microbiology.

Announcements and emails

General announcements and any material needed for this course will be posted in Quercus. The best way to reach me outside the office hours is by e-mail. **Please use your UTORONTO e-mail account and include your course code in the subject.** Emails sent from non-university accounts will not be answered. Please do not use the Quercus built-in email system as I will not be checking that regularly. Emailed questions that require detailed answers will be addressed during office hours. I generally do not answer emails on weekends.

Lectures

Lectures will be synchronous / live on Quercus (BbCollaborate) – **Wednesdays from 11 AM – 1 PM**. Lecture material will be covered during the first few weeks of classes. The lectures are aimed to introduce the students to theoretical and methodological concepts on Cellular Microbiology. **Later in the semester, some lecture time slots will be used for student presentations.**

- **Lecture Topics:** Lecture topics will overlap and more than one topic may be covered in one lecture.

Topic 1:	Introduction to reading scientific literature, critical thinking etc.
Topic 2:	Host-microbe interactions
Topic 3:	Commensal microorganisms, Primary and Opportunistic pathogens
Topic 4:	Host defence mechanisms
Topic 5:	Bacterial pathogenesis, virulence, evading host defences
Topic 6:	Viral pathogenesis and infections

Tutorials

Tutorials will be synchronous / live on Quercus (BbCollaborate) – **Thursdays from 3 PM – 5 PM**. **Tutorials will start the week of May 17. Attendance in tutorials is required.** Important material on concept maps, annotated bibliographies, oral presentations and writing will be discussed in these tutorials. **As with the lectures, tutorials in the later half of the course will be used for student presentations.**

- **Tutorial schedule will be posted on Quercus**

Grade Breakdown

Specific details for each assignment will be provided on Quercus and during lectures / tutorials. **Late assignments will be penalized 10% per day. Assignments that are more than 5 days late will not be accepted.**

- Attendance and participation: **10%**
 - Attendance for tutorials and seminars is mandatory and would be 4% of this grade. **You must have a minimum of 80% attendance to get this grade. Class participation grade will be 6% and is not an automatic grade.** You must contribute constructively and meaningfully through good engaging questions / discussion in all group presentations. You must contribute in a significant way to receive a grade above 3.

- Concept map for oral presentation: **3%** Due: June 3 by 10 PM
 - Can be either hand drawn or using free software

- Annotated bibliography for oral presentation: **5%** Due: June 18 by 10 PM

- Assignment based on assigned research article: **10%** Due: July 5 by 10 PM

- Mini-presentation on recent news /media article: **7%** Due: July 19 by 10 PM
 - Construct a mini-PowerPoint presentation (no more than 8 slides) based on a recent news / media article or video that involves a microbial pathogen not covered in class. You will not be presenting this orally. This topic must be different from your Seminar Presentation. Details to be posted on Quercus.

- Seminar / Oral Presentation: **20%**
 - Students will work in groups of 2 and will pick a cellular microbiology topic of their choice (see details on next page).

- Short review: **15%** Due: August 9 by 10 PM
 - Topic of interest in an area of research relating to cellular microbiology (details to be provided on Quercus).

- Take-home Final exam: **30%**
 - During final exam period. The exam will be cumulative in concepts and will include questions based on a specific research article.

Seminar Presentations

Students will form groups of two and each group will be assigned a group number. Each group will pick a cellular microbiology topic of their choice and prepare a seminar presentation based on a research paper from a peer-reviewed journal. This must be an original research article and no more than 3 years old. For the seminar presentation mark, we will evaluate both, the performance of the group and individuals. This presentation will require a general introduction, presentation of data, interpretation of data, conclusions, future directions and relevance to the area of research. The presentation will be ~35 minutes in duration followed by 5–10-minute question period. Some important points:

- All students must give an oral presentation. Use of self-declaration will not excuse students from giving an oral presentation. Failing to present will result in a mark of 0 on the oral presentation (worth 20% of your overall mark).
- Every member of the group must contribute equally to this presentation. In addition, every member must contribute in the answering of questions during post-presentation discussions.
- Presentation will be on topic of your choice as long as it addresses a topic in cellular microbiology and can be from a perspective of significance e.g. clinical, molecular, mechanistic etc.
- **The topic and the paper must be approved by me before you start working on it.**
- Topics related to current pandemic will not be accepted. We will discuss this in class.

Presentation Schedule: Presentations will start July 7 onwards (tentative, to be confirmed via Quercus) and will use both the lecture and tutorial time slots. **Presentation date for each group will be assigned randomly based on group number.**

Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Accessibility

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 me 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. AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please contact 416-287-7560 (tel/TTY) or email ability.uts@utoronto.ca for more information. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Academic integrity/plagiarism

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.

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On tests and exams: Using or possessing unauthorized aids. Looking at someone else's answers during an exam or test. Misrepresenting your identity.

In academic work: Falsifying institutional documents or grades. 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. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources.



Use of Turnitin (plagiarism detection software)

All assignments and the take home final exam will be deposited to Turnitin via Quercus submission.

Normally, students will be required to submit their coursework to Turnitin.com for review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Video recording and sharing

This course, including your participation, will be screen-recorded and audio/video and will be available to students in the course for viewing remotely and after each session.

Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

For questions about the recording and use of audio / video in which you appear, please contact your instructor.
