

IMM340H1 Fall 2021

Fundamental Immunology

Course & Instructor Information

Course Coordinator Dr. Liliana Clemenza <u>liliana.clemenza@utoronto.ca</u> <u>Office Hours</u>: Tuesday, 1-2pm via Bb Collaborate (drop-in)

Lecturer	Email
L. Clemenza	liliana.clemenza@utoronto.ca
T. Mallevaey	thierry.mallevaey@utoronto.ca
M. Ratcliffe	michael.ratcliffe@utoronto.ca
J. Singh	jastaran.singh@utoronto.ca

Required:



Stable internet connection



Laptop or computer

Delivery Mode:

This is an online hybrid course. Note that all scheduled meetings and deadlines indicated on this syllabus are in Eastern Time (ET).

Lectures: Thursday, 10am-12pm. Lectures will be delivered **online**, **synchronously** as per the meeting schedule. Recordings will be made available to students for asynchronous attendance.

Tutorials: Mondays, 4-5pm, Location MS2158 MacLeod Auditorium (L. Clemenza). Tutorials will be offered in **dual-delivery mode**: students who wish to attend in person will sign up for limited spots based on available space and physical distancing, the rest of the class will attend online, synchronously. We will ensure a rotation between in-person and online attendees. More details about tutorial sign-up and attendance will be posted on Quercus before classes start.

Term Tests: Term tests will be delivered online as per the course schedule.

Top Hat: All students are required to have a Top Hat subscription to participate in tutorial activities and other assignments. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

You can visit the Top Hat Overview (<u>https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide</u>) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. Should you require assistance with Top Hat at any time, since they require specific user information to troubleshoot issues, please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491.

You can subscribe and purchase the IMM340F 2021 Top Hat course at: <u>https://app.tophat.com/e/094073</u> or at the University of Toronto bookstore (Join Code: 094073).

Arts & Science Calendar Course Overview (20L/9T)

IMM340H 'Fundamental Immunology' introduces the basic principles and key players of the immune system: differences and interplay between innate and adaptive immunity, how immune cells develop and function, how immune cells recognize threats and danger and mount an appropriate and measured response.

Prerequisite: BIO230H1

Required Textbook: Janeway's Immunobiology: 9th Edition by K. Murphy

Evaluation Scheme & Course Assessments

Assessment	% of Grade	Due Date
Top Hat Tutorials	10%	Ongoing
Graded Discussions + Peer Review	10%	Ongoing
Test 1	20%	September 30, 10am-11:30am ET
Test 2	25%	November 4, 10am-12pm ET
Final Assessment	20%	ТВА
Group Video Assignment	15%	December 3, at 11:59pm ET

1. Top Hat Tutorials (10%)

Tutorials will take place weekly on Mondays, 4-5pm ET. 6-8 multiple-choice questions will be presented per tutorial, with each question worth 0.5 mark for participation and 0.5 mark for correctness.

Refer to the "Missed Assessment Policy" section below for information on how to request accommodation for a missed tutorial and what accommodations may be possible.

2. Graded Discussions + Peer Review (10%)

There will be 4 graded discussions based on the following biweekly schedule:

Discussion	Lectures	Release Date	Due Date
1	1-2	Sep 16	Sep 23
2	4-5	Oct 15	Oct 21
3	6-7	Oct 28	Nov 4
4	8-9	Nov 25	Dec 2

Note: Lecture 3 and Lecture 10 are not assessed in the bi-weekly discussions

The discussion topic will be posted on Quercus after class (12pm ET) on the release date as per the schedule above. You will provide answers to the instructor's prompts. The minimum length of text per answer should be 100 words, the maximum length around 500 words. If diagrams are used, title and explanation should be added to them for full participation points. You are expected to reply to two peers' postings. The system requires posting before replies. The quality of peer review discussion will be evaluated based on the rubric below:

Contribution to Discussion	Excellent (3 points)	Good (2 points)	Limited (1 point)	No posting (0 points)
Relevance of post	Posts relevant to discussion topic, makes correct reference to course concepts, prompts further discussion of topic	Posts relevant to discussion topic, makes correct reference to course concepts	Posts are not completely relevant to discussion topic, some mistakes about course concepts	No post
Quality of post	Post is reflective, language is clear and concise	Language is clear, lacks some focus	Postings are too short, some typos	No post
Engagement with others	Encourages group discussion, Respond to peers' postings	Respond to peers' postings	Responds to peers' postings with minimum effort (e.g. I agree)	No post

Refer to the "Missed Assessment Policy" section below for information on how to request accommodation for a missed graded discussion and what accommodations may be possible.

3. Tests and Final Assessment

Term Tests 1 and 2, as well as the Final Assessment in the course will take place online via Quercus Quizzes. Test dates and coverage/format are highlighted below:

Test 1 (20%): Test 1 will take place on **September 30, 2021** from **10am ET to 11:30am ET**. It will cover Lectures 1-3 of the course and will be multiple-choice format.

Test 2 (25%): Term Test 2 will take place on **November 4, 2021** from **10am ET to 12pm ET**. It will cover Lectures 4-7 of the course and will be multiple-choice format.

Final Assessment (20%): The date of the Final Assessment will be scheduled by the Faculty of Arts & Science. The format of the Final Assessment is multiple choice, and it will cover lectures 8-10 of the course. Questions will be multiple-choice format.

Refer to the "Missed Assessment Policy" section below for information on how to request accommodation for a missed test/final assessment and what accommodations may be possible.

4. Group Video Assignment (15%)

Quercus Submission Deadline: December 3, 202, 11:59pm

Assignment Guidelines:

The purpose of this assignment is to produce educational videos with topics related to the weekly course content (a detailed lecture outline will be posted on Quercus). You can choose any type of format such as your own images/animation/cartoons to explain or further investigate a concept studied in class including illustration of a case-study, description of a novel technique, interviews with experts in the field of your choice, and more. You need to identify your audience (general public or your peers) and adapt your video to it.

The video must be between 4 and 7 minute-long and its content must relate to the course topics covered in lectures 1 to 7. There will be 7 or 8 groups (depending on final enrolment) per lecture, each composed of 6 students. The assignment grade is 15% of your total grades. Of this 15%, 14% goes to the group and 1% goes to peer review: each student is expected to peer review three group videos (0.5%) and submit a within-group review to attest the other members' engagement in the video project (0.5%).

Students are allowed to choose their group. **The deadline for choosing a group is Friday October 1st**. After this date, ungrouped students will be assigned to a group by the instructor. It is recommended to select your group members with consideration of your mutual workloads in other courses. If your course workload is lighter in the first part of the course, it is advisable to join a group assigned to cover lectures 1-3; if your course workload is lighter after test 1, it is advisable to join a group assigned to cover lectures 4-7.

After you join a group, you will need to assign individual roles to all group members (roles can be shared among two or more members):

- Script writer and narrator: Responsible for creating the storyboard and script
- Researchers: Responsible for researching the topic, fact collecting and citations
- Videographer/photographers/audio technicians: Responsible for video recording; ensures good lighting and audio quality, responsible for video and audio editing software
- Illustrators/graphic artist: Responsible for drawing custom artwork
- **Producer and video editor:** Initiates and coordinates meetings and time management, will edit and share revisions with team members

(Adapted from: <u>https://otl.du.edu/knowledgebase/helpful-tips-for-instructors-and-students-with-video-assignments/</u>

Tips on video production can be found on the same link website and here: <u>https://teaching.utoronto.ca/wp-content/uploads/2015/08/Video-Tips.pdf</u>)

Each group will need to submit the video title and outline by Friday, November 12.

The deadline for video submission is Friday December 3 at 11:59pm. All peer reviews must be submitted by Wednesday December 8 at 11:59pm.

As indicated in the "Missed Assessment Policy" section below, there are no extensions nor accommodations for the Group Video Assignment due to the nature of the assessment (i.e. it is a group assignment).

Rubric for Group Video Assignment:

Criteria	Unsatisfactory (up to 40%)	Satisfactory (50- 60%)	Good (70-80%)	Excellent (90-100%)
Organization	The structure is incoherent. It does	Good effort but the structure is not	Good structure but the viewer loses	Very good structure, maintains focus

	not catch the attention of the viewer. The opening statement and ending are do not capture the main points of the video. Very little effort made overall	completely coherent. It does not catch the attention of the viewer at all times. The opening statement and ending do not effectively capture the main points of the video	focus at times. Good opening statement summarizing main points and good ending	throughout. Excellent opening statement summarizing main points, impressive ending. High quality overall
Appropriate for Audience (not too complex, not too simplistic)	Content and presentation not appropriate for intended audience	Content and presentation often not appropriate for intended audience	Content and presentation almost always appropriate for intended audience	Content and presentation always appropriate for intended audience
Content	Content does not reflect the chosen topic and has several inaccuracies. No/little evidence of any research beyond lectures	Content represents the chosen topic but has some inaccuracies. Some evidence of research beyond lectures	Content illustrates well the chosen topic and is mostly accurate. Substantial evidence of research beyond lectures	Content illustrates well the chosen topic and is accurate throughout. A critical understanding of the topic is demonstrated, including original point of view
Script/Narrative	Script was not submitted/narrative is not clear, references were not cited consistently	Script was submitted but narrative is not coherent, references were not always cited consistently	Script is clear and organized. References are cited in a consistent manner	Excellent script and fascinating narrative. References are cited in a consistent manner
Creativity and editing	Lacks originality, poor quality and selection of images	Lacks originality but the quality and use of non-original images is acceptable	Good ideas throughout, some original images created for the video. Good use of non-original images. Good quality altogether	Contains innovative ideas, several original images created for the video and great presentation of non- original images. Excellent quality altogether
Use of digital media	Video does not flow and is not captivating, Presentation is hard to follow, music (if used) is distracting, Lights not well used, audio is poor	Video has a decent flow and presentation is not hard to follow but is not exciting, music (if used) is distracting. Acceptable use of lights, audio is good	Video has a good flow and presentation is captivating, music (if used) complements well the images. Good use of lights, audio is good	Video presentation flows nicely. Presentation is articulate and enthusiastic. Use of music and images enhances the video quality. Excellent use of lights and perfect audio
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Missed Assessment Policy

- This course follows the University of Toronto's Policies on missed tests and assignments, and requires students to complete an <u>Absence Declaration on ACORN</u> for illness-related circumstances.
- Other reasons for missing course assessments will require <u>prior</u> approval by the course coordinator. If approval is not granted <u>in advance</u> for non-medical reasons, then 0% will be recorded for the missed assessment.
- Note: If you submit an assessment, it will be assumed that you deemed yourself fit enough to do so and your grade will stand as calculated. No accommodations will be made based on claims of medical, physical or emotional distress *after* the fact.
- **Top Hat Tutorials** There are <u>no make-ups</u> for missed Top Hat Tutorials. If accommodation is requested for a missed tutorial as above and is granted by the course coordinator, the weighting for that tutorial will be shifted to your term tests; otherwise, 0% will be recorded for your missed tutorial. Since these tutorials are important to the course learning outcomes, <u>at most one</u> tutorial can be accommodated in this way. 0% will be recorded for any additional missed tutorials.
- **Graded Discussions** There are <u>no make-ups</u> for missed Graded Discussions, given the nature of the assessment and since there is a 1-week period to complete it.
- *Missed Tests/Final Assessment* Missed tests/final assessments will be accommodated at the course coordinator's discretion. *Make-up tests/final assessments will be composed of a mix of short-answer and multiple choice questions.*
- Group Video Assignment There are no accommodations for individuals/groups for the Group Video Assignment under any circumstances due to the nature of this assessment. Late videos will not be accepted and there are no accommodations available for individuals' missed contributions to their group's video.

Course Schedule

Date Date	
Sept 9 Sept 13 Course business, Overview of the Immune System	L. Clemenza
Sept 16 Sept 20 Innate immunity	L. Clemenza
Sept 23 Sept 27 The inflammatory response and the Complement System	L. Clemenza
Sept 30 N/A Test 1	
Oct 7 N/A Antibody structure and diversity	M. Ratcliffe
Oct 14 Oct 18 B cell development	M. Ratcliffe
Oct 21 Oct 25 The MHC complex & antigen presentation	T.Mallevaey
Oct 28 Nov 1 T cell development	T.Mallevaey
Nov 4 N/A Test 2	
Nov 18 Nov 22 T cell activation, differentiation and functions	J. Singh
Nov 25 Nov 29 Lymphocyte signaling	T.Mallevaey
Dec 2 Dec 6 B cell differentiation and functions of Ig classes	L. Clemenza
TBA Final Assessment	

November 9 – November 13: reading week

Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or http://studentlife.utoronto.ca/accessibility.