

IMM341H1 Fall 2021 Fundamental Immunology

Course & Instructor Information

Course Coordinator

Dr. Liliana Clemenza liliana.clemenza@utoronto.ca

Office Hours: 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: Fridays, 1-2pm. Tutorials will be in-person and attendance is mandatory. New material will be discussed and assessed.

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

Arts & Science Calendar Course Overview (20L/10T)

IMM341H '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	Due Date
	Grade	

Peer Scholar Assignment	30%	Ongoing	
Test 1	20% September 30, 10am-11:30a		
Test 2	30%	November 4, 10am-12pm ET	
Final Assessment	20%	TBA	

1. Peer Scholar Assignment (10 submissions, each worth 3% - total 30%)

Peer Scholar is an application that allows the creation of activities involving three phases: submission, peer review, reflection, and (if desired) re-submission. The purpose of these Peer Scholar assignments is to engage in scientific discourse and peer review regarding weekly lecture topics in the course. **Each week**, you will submit a 2-page long assignment on the topic of your Friday tutorial. You will receive feedback from three anonymous peers, reflect on the feedback you receive and re-submit a final paper based on your reflections and comments from your peers. You will also provide constructive feedback to the compositions of three of your peers. Your composition will count for 50% of the grade for the assignment will go to your composition, the remaining 50% will go to your feedback activity.

Due dates of each phase of peer scholar activities will typically be as follows: activity opens after the Friday tutorial (2pm); submission due by Monday at 11:59pm; peer-review due by Wednesday at 11:59pm; re-submission due by Thursday at 11:59pm.

An introduction to peer scholar can be found here:

https://support.peerscholar.com/hc/en-us/articles/360036212593-Student-Introduction-Video

Useful tips for providing feedback to peers' writing can be found at: https://writingcenter.unc.edu/tips-and-tools/writing-groups/responding-to-other-peoples-writing/

Submissions will be evaluated by the instructor based on the following **composition rubric**. Peers will use the same rubric to provide their feedback.

CRITERIA	EXEMPLARY (4 POINTS)	PROFICIENT (3 POINTS)	EMERGING (2 POINTS)	BEGINNER (1 POINT)
INTRODUCTION	Background is highly developed; well- focused on purpose of assignment; provides extensive and clear context of main ideas	Background is largely developed; good focus on purpose of assignment; context of main ideas mostly clear and sufficient	Background is moderately developed; focus on purpose inconsistent; context of main ideas is brief and somewhat vague	Background is not well-developed; lacks focus on purpose; context of discussion and main ideas are vague or underdeveloped
DEVELOPMENT OF MAIN CONTENT	Excellent analysis; offers multiple insights; outstanding use of relevant evidence to support assertions	Good analysis; offers some insights; good use of relevant evidence to support assertions	Moderate analysis; offers few insights; use of relevant evidence to support assertions is marginal	Lacks analysis and offers few insights; evidence to support assertions often not explored or irrelevant
ORGANIZATION AND FLOW	Consistently strong topic sentences followed by relevant and deep discussion; consistently engaging narrative	Generally strong topic sentences followed mostly by relevant and deep discussion; narrative is clear and mostly	Sufficient topic sentences; supports are relevant but underdeveloped; narrative lacks focus at times	Inconsistent or weak topic sentences; supports often relevant, tangential, or vague; narrative is not clear and

		focused		lacks focus
GRAMMAR AND SPELLING	Masterful use of grammar; no spelling errors	Generally good; some minor errors in grammar and/or spelling	Several grammatical and/or spelling errors	Many grammatical and spelling errors

Rubric adapted from:

https://ctfd.sfsu.edu/sites/default/files/Rubric%20for%20Formative%20Peer%20Review%20of%20Students%27%20Work.pdf

The quality of your feedback will be evaluated based on the following **peer review rubric**:

Comments are helpful, full sentences, fully-explored ideas (3 points)	Comments are somewhat helpful, short sentences but relevant (2 points)	Comments are a bit vague, too short, condescending or irrelevant (1 point)	Comments are not helpful or rude (0 points)
Comments are present	Most of the assignment	3-4 comments present (1	One or two short
throughout the	has comments (2	point)	comments present (0
assignment (3 points)	points)		points)

Refer to the "Missed Assessment Policy" section below for information on how to request accommodation for a missed peer scholar assignment 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 a mix of multiple-choice and short-answer questions.

Test 2 (30%): 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 a mix of multiple-choice and short-answer questions.

Final Assessment (20%): The date of the Final Assessment will be scheduled by the Faculty of Arts & Science. It will cover lectures 8-10 of the course. The format of the Final Assessment is a mix of multiple choice and short-answer questions.

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.

Missed Assessment Policy

- This course follows the University of Toronto's Policies on missed tests and assignments, and requires students to complete an ACORN 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.
- Peer Scholar Assignment There are no make-ups for missed Peer Scholar assignments, given the nature of the assessment and stepwise schedule. If accommodation is requested for a missed Peer Scholar Assignment as above and is granted by the course coordinator, the weighting for that assignment will be shifted to your term tests; otherwise, 0% will be recorded for your missed Peer Scholar Assignments. Since these Peer Scholar Assignments are important to the course learning outcomes, at most one assignment can be accommodated in this way. 0% will be recorded for any additional missed Peer Scholar Assignments.
- 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.

Course Schedule

Tutorial Date	Lecture	Lecturer
Sept 10	Course business, Overview of the Immune System	L. Clemenza
Sept 17	Innate immunity	L. Clemenza
Sept 24	The inflammatory response and the Complement System	L. Clemenza
N/A	Test 1	
online	Antibody structure and diversity	M. Ratcliffe
Oct 15	B cell development	M. Ratcliffe
Oct 22	The MHC complex & antigen presentation	T.Mallevaey
Oct 29	T cell development	T.Mallevaey
N/A	Test 2	·
Nov 19	T cell activation, differentiation and functions	J. Singh
Nov 26	Lymphocyte signaling	T.Mallevaey
Dec 3	B cell differentiation and functions of Ig classes	L. Clemenza
	Final Assessment	
	Sept 10 Sept 17 Sept 24 N/A online Oct 15 Oct 22 Oct 29 N/A Nov 19 Nov 26	Sept 10 Course business, Overview of the Immune System Sept 17 Innate immunity Sept 24 The inflammatory response and the Complement System N/A Test 1 online Antibody structure and diversity Oct 15 B cell development Oct 22 The MHC complex & antigen presentation Oct 29 T cell development N/A Test 2 Nov 19 T cell activation, differentiation and functions Nov 26 Lymphocyte signaling Dec 3 B cell differentiation and functions of Ig classes Final Assessment

November 8 - November 12: 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.