

Course CoordinatorDr. Liliana Clemenza liliana.clemenza@utoronto.caOffice Hours: Monday, 2pm-3pm Online via Teams (drop-in)

Lecturers	Email
L. Clemenza	liliana.clemenza@utoronto.ca
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Delivery Mode:

IMM340 is an in-person course.

In-person Lectures: Thursday, 9am-11am. The lectures will be recorded and posted on Quercus.

Attendance is not mandatory, but a 2% bonus will be awarded for attending eight of 10 lectures for 102 possible Quercus points for the course. Please note that the highest score we can enter as an official grade for the course is 100. Therefore, a student with a perfect score of 100 before the bonus will see their grade of 100 unchanged.

Tutorials:

On Mondays from 3-4pm, there will be in-person tutorials for planning and discussing group video presentations. Each Monday, seven to fourteen groups of seven self-assigned students will discuss a draft of their project and receive feedback from the instructor/TAs. Each group will attend only one tutorial, but tutorial attendance is mandatory for all group members. If a group member does not attend their scheduled tutorial, they will be removed from the group and must submit an individual video assignment on the same topic assigned to their original group. Please see the Course Assessment section below for more important information about tutorials.

Term Tests: Term tests will be delivered **online** during regular class time.**Final Exam: In person**, date TBA.**Arts & Science Calendar Course Overview (20L/7T)**

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, 10th Edition by Murphy, Weaver, Berg; Norton.

Evaluation Scheme & Course Assessments

Assessment	% of Grade	Due Date
Readings & InQuizitive	10%	Ongoing
Group Video Presentations	10%	Two weeks after tutorial meeting
Test 1	20%	September 26, 9:30 am-11am ET
Test 2	20%	October 24, 9:30 am-11am ET
Final Exam (in person)	40%	TBA

1. Readings and InQuizitive (10%)

Janeway's textbook and companion site, InQuizitive, are mandatory resources for this course and can be purchased for CAD 65.00. Purchase instructions can be found [here](#), and student help notes can be found [here](#).

Readings related to the weekly lecture will be assigned every Wednesday evening, along with its associated InQuizitive quiz. In InQuizitive, students must answer a minimum number of questions in each activity before receiving a grade and reach a 100% Target Score. The quiz must be completed by 12pm (noon) on Thursday of the following week (one-week window). Please note that the readings might contain content not covered in the lecture that is testable on InQuizitive.

An activity called "How to use InQuizitive" will be available during the first week of class.

There are no make-ups for missed InQuizitive homework, given the nature of the assessment and since there is a one-week period for completion.

2. Tutorial Group Presentations: (10%)

The group presentations will be a space to incorporate immunology content not covered in the lecture/textbook and EDIIA (Equity, Diversity, Inclusion, Indigeneity, Accessibility) issues in the IMM340 course. EDIIA topics are presented in tutorials 1, 2, 6, and 9, along with case studies or long readings in immunology. They are marked in bold in the list of tutorial topics, which is available under the Tutorial Presentations Module on Quercus. Recognizing that these concepts may be new to some, it is essential to approach this content with an open mind and a willingness to engage.

For those unfamiliar with EDIIA:

- Equity: Ensuring fair treatment for all, recognizing that different people have different needs.
- Diversity: Acknowledging and valuing differences in identities, experiences, and perspectives.
- Inclusion: Creating an environment where everyone feels valued and can fully participate.
- Indigeneity: Recognizing and respecting the unique status and cultural traditions of indigenous peoples.
- Accessibility: Ensuring that all materials and interactions are accessible to everyone, regardless of disability or other factors.

Tutorial Attendance & Collaboration Sessions:

Tutorials are designed to facilitate group discussions, planning, and project development. Here is how they work:

- Designated Space: Each Monday, seven or fourteen groups will attend the tutorial as scheduled (see List of Topics & Groups under the Tutorial Presentations Quercus Module). Given the spacious nature of the tutorial room, each group will comfortably find a spot to discuss their respective projects without disturbances. Each group will attend only their scheduled tutorial.
- Objective: These sessions allow group members to convene, brainstorm, and develop their presentations. It is a dedicated time for project discussions, clarifications, role allocations, and refining details.
- Instructor/TA's Role: During these sessions, the instructor/TA will move around the room, visiting each group. This time is a chance for groups to ask questions, seek feedback, and ensure they are on the right track. By the end of the tutorial, each group should present a minimum draft plan detailing their presentation's direction, content, and design. This plan will be uploaded on the Quercus Group Page as a work in progress.
- Benefits: The tutorial sessions offer a collaborative environment and ensure that all groups have direct access to the instructor's guidance, making the project development process smoother and more effective.

Group Formation:

- Assigning: Once the instructor populates Quercus with groups and topics, you can select a group number (and its associated topic).
- Size: Groups must consist of up to 7 students (might be increased to 8, depending on final enrolment).
- Diversity: Forming groups with a mix of skills is beneficial for a richer collaborative experience.
- Roles: Assign specific roles. Remember, each member can assume multiple roles, and roles can overlap among members:
 - Researcher: Everyone participates in this role
 - Writer: Drafts the presentation's primary content or a complete script, if preferred.
 - Presenter: Delivers the presentation. If possible/desired, all members should be involved as presenters.
 - Editor: Refines clarity, coherence, and grammar.
 - Coordinator: Manages meetings and acts as the group's representative.
 - Visual Designer: Designs slides or visual aids.

Guidance for Group Choice:

This assignment offers students flexibility regarding their learning styles, interests, and scheduling availability.

When selecting a group, consider:

1. Interest in the topic.
2. Personal schedule.
3. Interest in clinical (case studies) vs. basic research (longer readings).
4. Interest in acquiring digital skills.
5. Commitment to EDIA themes.

Types of Presentations:

1. Case Study Presentations:
 - Source: Based on short case studies from Geha, Notarangelo's "Case Studies in Immunology, 7th edition, 2016". These case studies can be accessed as part of the Janeway's package. Additional research on the selected case study is not strictly required but is welcomed.
2. Longer Reading Presentations:
 - Source: In-depth readings, including immunology review articles or landmark primary papers, DEAAI themes. These PDF files will be posted on Quercus.

Format: Submit a 10-minute video or voice-over PowerPoint presentation.

Submission: It is due by 11:59 p.m. on Sunday, two weeks after the groups' tutorial week. (For example, groups meeting on Monday, Sept. 16, have a submission deadline on Sunday, Sept. 29.)

Note: A Quercus Graded Discussion will be created, where you can copy a link to your presentation and broadcast your work to your peers. We will select one of the video presentations posted on this Quercus Discussion to be also posted on the department website.

The list of case studies and long readings will be posted on Quercus under the Tutorial Presentations Module.

Presentation Crafting Tips:

- Slide Design: Prioritize visuals over text. Use graphs, images, or charts.
- Script: Either script your narration or create bullet points to maintain focus.

Software Recommendations:

- PowerPoint: Use the "Record Slide Show" feature for voice narrations.
- Online Tools: Platforms like Quercus, Zoom, and MyMedia offer screen and voice recording.
- Advanced Editing: Adobe Premiere Pro, iMovie, or Filmora

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

Use of generative AI tools: Students may use artificial intelligence tools to create an outline for an assignment, but the final submitted assignment must be original work produced by the individual student alone. This use must be documented in an appendix for each assignment. The documentation should include what tool(s) were used, how they were used, and how the ideas generated by the AI were incorporated into the submitted work.

Please note that any uses of generative AI beyond those listed above are not permitted and will be considered unauthorized aid, which is an academic offence. Submissions will be assessed at the discretion of the course coordinator, and students will be asked to show evidence of their work if a case of Academic Integrity and the inappropriate use of Generative AI tools is suspected.

TAs will oversee the video submissions grading using the following rubric:

Criteria	Inadequate (5%)	Average (15%)	Good (20%)	Outstanding (25%)
Presentation Structure/Audience	The structure is incoherent. It does not catch the attention of the viewer. The opening statement and	Good effort but the structure is not completely coherent. It does not catch the attention of the viewer at all times. The	Good structure but the viewer loses focus at times. Good opening statement summarizing main	Very good structure, maintains focus throughout. Excellent opening statement summarizing main

	ending are do not capture the main points of the video. Very little effort made overall Content and presentation not appropriate for intended audience	opening statement and ending do not effectively capture the main points of the video. Content and presentation often not appropriate for intended audience.	points and good ending. Content and presentation almost always appropriate for intended audience.	points, impressive ending. High quality overall. Content and presentation always appropriate for intended audience
Content/Research	Content does not reflect the chosen topic and has several inaccuracies.	Content represents the chosen topic but has some inaccuracies.	Content illustrates well the chosen topic and is mostly accurate.	Content illustrates well the chosen topic and is accurate throughout. A critical understanding of the topic is demonstrated
Script/Narrative	Narrative is not clear, a script was not generated, references were not cited consistently.	Script was generated 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.
Use of digital media/Creativity and editing	Lacks originality, poor quality and selection of images 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.	Lacks originality but the quality and use of non-original images is acceptable 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.	Good ideas throughout, some original images created for the video. Good use of non-original images. Good quality altogether Video has a good flow and presentation is captivating, music (if used) complements well the images. Good use of lights, audio is good	Contains innovative ideas, several original images created for the video and great presentation of non-original images. Excellent quality altogether 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

3. Tests and Final Assessment

Term Tests 1 and 2 will take place online via Quercus Quizzes. The Final Exam will be in person. Test dates and coverage/format are highlighted below:

Test 1 (20%): Test 1 will be online on September 26, 2024, from 9:30 am to 11 am. It will cover Lectures 1-3 of the course, with 10 questions per lecture in a multiple-choice format.

Test 2 (20%): Term Test 2 will be online on October 24, 2024, from 9:30 to 11 a.m. It will cover Lectures 4-6 of the course, with 10 questions per lecture in a multiple-choice format.

Final Exam (40%): The Faculty of Arts & Science will schedule the date of the final assessment. The final exam will cover lectures 7-10 of the course, with 10 questions per lecture in a multiple-choice format.

Please refer to the “Missed Assessment Policy” section below for information on how to request accommodation for a missed test or 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 [Absence Declaration on ACORN](#) for illness-related circumstances.
- Other reasons for missing course assessments will require prior approval by the course coordinator. If approval is not granted in advance 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.
- InQuizitive Homework – There are no make-ups for missed InQuizitive homework, given the nature of the assessment and since there is a one-week period to complete it.
- Missed Tests– Missed tests/final assessments will be accommodated at the course coordinator’s discretion. Make-up tests will be composed of a mix of short-answer and multiple-choice questions.
- Group Assignment—Due to the nature of this assessment, there are no accommodations for individuals or groups for the group assignment under any circumstances. Late videos will not be accepted, and there are no accommodations available for individuals’ missed contributions to their group’s video.

Course Schedule

Lecture Date	Lecture	Lecturer
Sept 5	Overview of the Immune System	L. Clemenza
Sept 12	Innate immunity	L. Clemenza
Sept 19	The inflammatory response and the Complement System	L. Clemenza
Sept 26	Test 1	
Oct 3	Antibody structure and diversity	R. Amith
Oct 10	B cell development	R. Amith
Oct 17	The MHC complex & antigen presentation	T. Mallevaey
Oct 24	Test 2	
Oct 31	No Class. Reading week	
Nov 7	T cell development	T. Mallevaey
Nov 14	T cell activation, differentiation and functions	L. Clemenza
Nov 21	B cell differentiation and functions of Ig classes	L. Clemenza
Nov 28	Lymphocyte Signaling	L. Clemenza?

Tutorial Date	Groups	TA
Sept 16	Groups Lectures 1 & 2	TA1 and 2
Sept 23	Groups Lectures 3	TA3
Sept 30	No Tutorial	
Oct 7	Groups L. 4 Antibody structure and diversity	TA4
Oct 14	No Tutorial Thanksgiving	
Oct 21	Groups L. 5 B cell development and L. 6 The MHC complex	TA1 and 2
Oct 28	No tutorial. Reading week	
Nov 4	No Tutorial	
Nov 11	Groups L. 7 T cell development	TA3
Nov 18	Groups L. 8 T cell activation, differentiation and functions	TA4
Nov 25	Groups L. 9 B cell differentiation and functions of Ig classes	Any of TA 1-4
Dec 2	No Tutorial	

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>.

Masks on Campus:

While the mask mandate has been paused as of 1 July 2022, the use of medical masks continues to be strongly encouraged in high density indoor settings where physical distancing is not possible. Please wear a mask when attending lectures or tutorials unless not able to do so due to health condition.