

IMM431 Syllabus, Winter 2025

Course Coordinator: T McGaha, email: tracy.mcgaha@uhn.ca

Lecturer	Email
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Teaching Assistants

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Class Time:

Fridays, 1:00 pm -3:00 pm. Class will be in person.

Class Location:

TBD

Course Goals:

Immunotherapy has generated great excitement and has revolutionized clinical approaches to many diseases. While direct targeting of immune bottle necks has shown promise in a range of clinical pathologies, it is now becoming clear that many other therapeutic approaches owe their efficacy partially through induction of immune reactions. The course will cover general approaches to cellular and biologics-mediated targeting of the immune response in a range of

disease states; and clinical management of disease from an immunologic perspective including discussion of adverse reactions to immunotherapy.

Office hours:

Please email course director Dr. Tracy McGaha for an appointment.

Recommended Textbook:

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

Evaluation:

Midterm:

February 24, 2025, 1pm-3pm

TBD

Will cover material from lectures 2-6. The format will be 20 short-answer questions.

Make-up Mid-term Test:

TBD

Exclusively for students with documented illness.

Final exam:

Date, time and location TBA.

The exam will cover material from lectures 7-10. The format will be 20 short-answer questions.

Written Assignment:

April 11, 2025

A 1-page proposed research plan for the Canada Graduate Scholarship – Master's (CGS-M) program based on a topic covered in class (details to be provided).

Midterm	35%
Final Exam	35%
Written assignment	20%
Attendance and participation	10% (<i>Attending class, participation in the Q&A</i>)

Missed Term Test Policy:

If a term test is missed due to illness, then the student will be allowed to write a make-up test on a date and location to be announced per current University of Toronto policy (<http://www.illnessverification.utoronto.ca/index.php>). You may use the ACORN Absence Declaration Tool to support your request for academic consideration in your courses. **Note:** The ACORN Absence Declaration Tool cannot be used to seek academic consideration for any matters that requires a petition- i.e. missing the final

exam. More information can be found here (<https://registrar.utoronto.ca/policies-and-guidelines/absence-declaration/>).

Students who are unable to write their final examination due to illness, etc., should contact the Faculty of Arts and Sciences Registrar. More information can be found here (<https://artsci.calendar.utoronto.ca/petitions-and-appeals#types-petitions>).

Missed Written Assignment Policy:

The writing assignment will be only accepted late with prior approval of the course coordinator. Approval will only be given in the event of illness or other significant extenuating circumstances. Please contact Dr. McGaha for further information.

Generative AI

The use of generative artificial intelligence tools or apps for assignments in this course, including tools like ChatGPT, Gemini, Claude, Microsoft Copilot and other AI writing or coding assistants, is prohibited. Furthermore, the knowing use of generative artificial intelligence tools for the completion of, or to support the completion of, an examination, assignment, or any other form of academic assessment, may be considered an academic offense in the course.

Deadline to drop the course: March 10, 2025

Course Schedule:

Lecture	Subject	Lecturer
Jan 10	Introduction to Immunotherapy	C. Paige
Jan 17	Radiotherapy as Immunotherapy	S. Harding
Jan 24	Immunometabolism as a Therapeutic Target	S. Saibil
Jan 31	Checkpoint Inhibition therapy (ICI)	A. Sacher
Feb 7	Immune targeting in Systemic Lupus Erythematosus	J. Wither
Feb 14	Myeloid cells in tumor progression	J. Kazan

and immunotherapy

Feb 17-21	Reading week, no class	
Feb 24	Midterm Exam	
Feb 28	Clinical considerations for immunotherapy (adverse responses and clinical management)	M. Butler
March 7	Tumor Infiltrating lymphocytes And TCR/CAR cell infusion therapy	N. Hirano
March 14	Combining ICI with other approaches	K. Kahn
March 21	Immunotherapy for infectious disease	D. Brooks
March 28	Bugs as drugs	D. Philpott