

## **IMM431 Syllabus, Winter 2024**

Course Coordinator: T McGaha, email: [tracy.mcgaha@uhn.ca](mailto:tracy.mcgaha@uhn.ca)

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### **Teaching Assistants**

**Louis Ngai.** Email: [louis.ngai@mail.utoronto.ca](mailto:louis.ngai@mail.utoronto.ca)

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**Sarah Colpitts.** Email: [sarah.colpitts@mail.utoronto.ca](mailto:sarah.colpitts@mail.utoronto.ca)

### **Class Time:**

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

### **Class Location:**

See ACORN for location information

### **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*: 9<sup>th</sup> Edition by K. Murphy

**Evaluation:**

**Midterm:**

February 26, 2024, 1pm-3pm

EX 320 (Exam Centre, McCaul St.)

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 7-11. The format will be 20 short-answer questions.

**Written Assignment:**

April 12, 2024

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&amp;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.

**Deadline to drop the course:** March 11, 2024

### **Course Schedule:**

<b>Lecture</b>	<b>Subject</b>	<b>Lecturer</b>
Jan 12	Introduction to Immunotherapy	C. Paige
Jan 19	Radiotherapy as Immunotherapy	S. Harding
Jan 26	Immunometabolism as a Therapeutic Target	S. Saibil
Feb 2	Immune targeting in Systemic Lupus Erythematosus	J. Wither
Feb 9	Checkpoint Inhibition therapy (ICI)	A. Sacher
Feb 16	Myeloid cells in tumor progression and immunotherapy	J. Kazan
Feb 19-23	Reading week, no class	
Feb 26	Midterm Exam	
March 1	Clinical considerations for immunotherapy (adverse responses and clinical management)	M. Butler

March 8	Tumor Infiltrating lymphocytes And TCR/CAR cell infusion therapy	N. Hirano
March 15	Combining ICI with other approaches	K. Kahn
March 22	Immunotherapy for infectious disease	D. Brooks
April 5	Bugs as drugs	D. Philpott