

IMM385Y1 Syllabus

Course coordinator: Arthur Mortha, PhD – arthur.mortha@utoronto.ca

Course Description:

An opportunity for specialized research in Immunology under the supervision of a member of the Faculty. Dedicated to Immunology Specialist students in their third year. Not eligible for CR/NCR option. Graduate students are not eligible for this course.

IMM385Y is a full credit course in which the student takes part in an original research project in the laboratory of a faculty member associated with the Immunology Specialist program. The program is designed to provide an opportunity for the student: to

- (1) discover if she/he has an interest in and a capability for a career in research
- (2) discover the depth of research projects being undertaken in a specific laboratory through active participation

Moreover, it allows for faculty appraisal of the potential of the student for graduate research education and continued research opportunities in fourth year undergraduate research opportunities.

The student is expected to devote a minimum of seven hours per week (normally one full day or two half days) to the course from the week the fall term lectures begin to the last week of the spring term in which lectures are given. This time is to be **spent in the laboratory** carrying out experiments. Data evaluation, literature reading, report and oral presentation preparation are to be done outside of the laboratory time. The time available should be sufficient for the student to complete a project and to become familiar with a number of techniques used in cellular or molecular biology.

Course Requirement

IMM250H1 is a pre-requisite and IMM340H1-F/IMM341H1-F a co-requirement for every student applying to IMM385Y1. Previous lab experience will likely be of advantage but is not a mandatory requirement for the application. Applications by Immunology Specialist students and Immunology Major students will be given greater consideration in the application process.

Application

Students interested in applying to IMM385Y1 have to contact Professors within the Department of Immunology or Professors associated with the Immunology program, to inquire about open positions and available projects.

Helpful tips students should consider when contacting potential supervisors:

1. *Draft a respectful and thought out e-mail tailored to address the potential supervisor.*
2. *State which aspect of the laboratory's research focus you are most interested in and why.*
3. *Give a summary of your research interest and possible wet-lab experience.*
4. *Attach a complete Curriculum Vitae (CV) to your e-mail.*
5. *Attach an unofficial transcript of your academic history to the e-mail.*
6. *PI's are very busy and get a ton of e-mails – don't hesitate to resend your when you do not get a reply within a week.*

This course must be balloted and approved by Dr. Mortha.

A copy of your University transcript and a paragraph (200 words maximum) outlining your reasons for taking the course are also required. Details are found on the ballot form.

Applications are due by 5pm on September 30, 2019.

Evaluation:

Report and Oral Presentation

Each student will be required to submit a **1 page summary of the project** to the course coordinator. Each student will be required to further submit a **final report** to the course coordinator containing the purpose, rationale, results, discussion and conclusions of the project (maximum of 10 pages including figures and references). In addition, an **oral presentation** of about 10 minutes will be given by the student to the other students in the course and their supervisors (supervisor attendance not mandatory). It will take place the day after the end of the April exam period.

**The 1 page summary is due the last day before the Xmas holidays
(Friday Dec. 20th, 2019).**

**The final report is due on the Thursday before classes ends
(Friday Apr. 3rd, 2020).**

Grading:

The grade awarded will be based on the **talk 10%**, the **final report 20%** and two **evaluations by supervisor** (a total of **70%** divided as 35% mid-term to be provided by Friday Dec. 20th, 2019 and 35% final to be provided by Friday Apr. 3rd, 2020)

Failure to submit your final report on time will result in a deduction of **20% per day late**.

Formatting guidelines and templates for the summary page and the final report can be found after the Ballot form.

Leaving the course:

The last day to drop IMM385Y1 from the academic record and GPA is Feb 17, 2020!!

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>.

IMM385Y-Summary page (Student#:_____)

Project title: Arial 14pt bold

Supervisor: Arial 12pt bold

Summary – 1page, Arial 12pt, 1.5 spaced

Briefly state the scientific background of your project, the rationale, the hypothesis and the experimental system(s)/method(s) you will be using.

IMM385Y-final report (Student#:_____)

Project title: Arial 14pt bold

Supervisor: Arial 12pt bold

Final report – 10pages, Arial 12pt, 1.5 spaced

Break the report down into the following sections:

- 1. Introduction and Background*
- 2. Rational and Hypothesis*
- 3. Methods and Experimental Approach*
- 4. Results (including Figures and Figure legends)*
- 5. Discussion*
- 6. References*