



# BIOM\*6100 Research Proposal in Biomedical Sciences

Fall 2022  
Section(s): C01

Department of Biomedical Sciences  
Credit Weight: 0.50  
Version 1.00 - August 22, 2022

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## 1 Course Details

### 1.1 Calendar Description

This is a 2 semester course (students must register for the course in each semester) focused on preparing students for their MSc defense while improving their critical thinking, oral communication skills and written communication skills. Students will submit a research proposal and present a seminar on their research proposal. Students will also write lay summaries on other student's seminars.

**Restrictions:** Restricted to MSc Biomedical Sciences students.

### 1.2 Course Description

#### **Classes/Seminars**

There will be three lectures in the first semester (please refer to the CourseLink site for dates and times). The first lecture will outline the roles and responsibilities of graduate students as well as important dates. The second and third lectures will provide students on effective strategies for preparing their research proposal and research seminar, respectively. Research seminars will be presented during the Department of Biomedical Sciences Graduate Student Seminar Series, current scheduled on Wednesdays 12:30-1:30. Seminar attendance is mandatory and attendance will be taken at each seminar. As there may be circumstances preventing students from attending all the seminar sessions students will be allowed to miss a maximum of 3 seminars. Students will be penalized 1% of their final grade for each seminar missed beyond the maximum allowable limit (written explanations for missing more than the maximum allowable limit will be considered by the Course Coordinator).

## **Course Objectives**

**General Objectives:** This graduate level course is designed for thesis-based MSc students and is meant to prepare students for their MSc defense and provide feedback on their oral and written communication skills.

### **Specific Objectives:**

- Understand the expectations and roles of graduate students
- Perform a literature review and create a research proposal
- Learn how to translate scientific results in lay terms suitable for the general public

## **Learning Objectives**

It is expected that students will gain a number of valuable skills from this course that will enhance their ability to successfully complete their MSc program including; (1) improve their oral and written communication skills, (2) understand how to create an effective research proposal, (3) critically evaluate scientific literature, and (4) learn how their research and the research of others impact our understanding of global health issues. These skills will be developed through instructional classes and feedback from their supervisory committee.

## 1.3 Timetable

Please see CourseLink site for the Timetable

## 1.4 Final Exam

There is no final exam. Students will be graded on their research proposal, oral presentation and written lay summaries as described in the assessments section

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## 2 Instructional Support

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## 3 Learning Resources

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## 4 Learning Outcomes

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## 5 Teaching and Learning Activities

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## 6 Assessments

### 6.1 Assessment Details

Research Proposal (50%)

**Research Proposal:**

The research proposal will be a **maximum** of 15 pages double-spaced using 1 inch margins

and 12 point font. The page limit does not include the reference list or a maximum of 2 pages for figures/tables (figures/tables are not required). The research proposal will consist of a literature review and a detailed experimental plan. The literature review provides background information about the research project and should include a statement regarding how the research project will contribute to the scientific literature. The experimental plan should include a hypothesis, one or more specific objectives and a description of how the experiments will be performed. The experimental plan should also contain a statement regarding the significance of the research proposed. The research proposal should also comment on the anticipated outcomes of the experiments and potential problems that may be encountered. The research proposal must be submitted to the course coordinator by deadline indicated on the CourseLink site. It is anticipated that students will receive feedback from their supervisory committee and the course coordinator prior to their research seminar so changes/suggestions can be incorporated into the research seminar.

### **Research Seminar (40%)**

**Date:** Mon, Jan 9 - Wed, Mar 29

**Research Seminar:** Research seminars will be presented as part of the Department of Biomedical Sciences Seminar Series. Research seminars must be completed before the end of the third semester. These seminars will be approximately 20 minutes in duration and should cover relevant background information, research plan and if appropriate, preliminary findings (preliminary findings are not a required component of the seminar). The research seminars will be marked by the student's supervisory committee and the course coordinator. It is the student's responsibility to select a date when all supervisory committee members can be in attendance. If a supervisory committee member is unable to attend, the absent member can designate another faculty member to mark the seminar. In the event that the course coordinator cannot attend the seminar, the course coordinator will designate another faculty member to evaluate the seminar.

### **Lay Summaries (10%)**

**Due:** Thu, Apr 6, 11:59 PM

**Lay Summaries:** Students will select 5 presentations and write lay summaries about these presentations. Lay summaries will be a maximum of 250 words and should be suitable for a general audience. **LAY SUMMARIES CANNOT BE WRITTEN ON PROJECTS PRESENTED BY OTHER STUDENTS IN YOUR LAB.** Information on how to write a lay summary can be found at <http://www.dcc.ac.uk/resources/how-guides/write-lay-summary> and [https://mssociety.ca/en/pdf/Guide%20to%20Writing%20Lay%20Summary\\_ENG\\_Final20130726.pdf](https://mssociety.ca/en/pdf/Guide%20to%20Writing%20Lay%20Summary_ENG_Final20130726.pdf) as well as other websites.

## **7 University Statements**

## 7.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

## 7.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

## 7.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

## 7.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

## 7.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared

responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

For Guelph students, information can be found on the SAS website  
<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website  
<https://www.ridgetownc.com/services/accessibilityservices.cfm>

## 7.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community—faculty, staff, and students—to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct  
<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct  
<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

## 7.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student,

or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## 7.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars

<https://www.uoguelph.ca/academics/calendars>

## 7.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

## 7.10 Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g.. final exam or major assignment).

## 7.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- <https://news.uoguelph.ca/return-to-campus/how-u-of-g-is-preparing-for-your-safe-return/>
- <https://news.uoguelph.ca/return-to-campus/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

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