
ANSC*4710 - Research in Animal Biology II

Fall 2025 Course Outline

Section: 01

Credits: 0.50

Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

Calendar Description

This course is a continuation of ANSC*4700, Research in Animal Biology I. It allows more sophisticated projects to be undertaken or to provide an opportunity to build upon the work of ANSC*4700. Evaluation of the course requires a greater emphasis on data analysis or experimental design than for ANSC*4700. Selection of a faculty advisor and approval of course coordinator must be obtained before course selection.

Prerequisite(s): ANSC*4700

Restriction(s): Restricted to students in BSC.ABIO and BSAG.ANSC. Instructor consent required.

Department(s): Department of Animal Biosciences

Course Description

Following ANSC*4700, this course provides an opportunity for students to become more actively involved in a specific research topic in a discipline of their choosing. The student will work closely with an individual faculty advisor and be part of their research team working on a project of mutual interest. This course allows the student to review current literature and analyze lab data and/or design new protocols to further research development and knowledge in their chosen research area.

Lecture Schedule

There are no scheduled lectures for this course. There will be a class meeting at the beginning of the semester (date and time will be voted upon and announced on Courselink before the start of classes). Students work closely with their research project advisor to determine a schedule for their regular one on one weekly meeting.

Instructor Information

Julang Li

Email: jli@uoguelph.ca

Thomas Hicks

TA

Email: hickst@uoguelph.ca

Communicating with your advisor, course coordinator and TA

Announcements: The instructor will use **Announcements** on the Course Home page to provide you with course reminders and updates. Please check this section frequently for course updates from your instructor.

Email: If you have a conflict that prevents you from completing course requirements, or have a question concerning a personal matter, you can send your advisor or course coordinator a private message by email. The instructor will attempt to respond to your email within 24 hours.

Meetings: If you have a complex question you would like to discuss with your advisor, or coordinator you may book an in person or virtual meeting with them. These meetings depend on availability and are booked on a first come first served basis.

Learning Resources and Course Technologies

CourseLink

CourseLink System Requirements:

You are responsible for ensuring that your computer system meets the necessary system requirements (<http://spaces.uoguelph.ca/ed/system-requirements/>). Use the browser check (<https://courselink.uoguelph.ca/d2l/systemCheck/>) tool to ensure your browser settings are compatible and up to date. (Results will be displayed in a new browser window).

<http://spaces.uoguelph.ca/ed/system-requirements/> <https://courselink.uoguelph.ca/d2l/systemCheck/>

Technical Support:

If you need any assistance with the software tools or the CourseLink website, contact CourseLink Support.

Email: courselink@uoguelph.ca

Tel: 519-824-4120 ext. 56939 Toll-Free (CAN/USA): 1-866-275-1478

Support Hours (Eastern Time):

Monday thru Friday: 8:30 am–8:30 pm

Saturday: 10:00 am–4:00 pm

Sunday: 12:00 pm–6:00 pm

Teams (via Office 365)

Office 365 Teams is a collaboration service that provides shared conversation spaces to help teams coordinate and communicate information. This course may use Teams for one on one meetings with your Instructor. It is recommended that you use the desktop version of Teams. As a student you are responsible for learning how to use Teams and it's features.

For Teams Support (<https://www.uoguelph.ca/ccs/services/office365/teams/>) visit the CCS website for more information.

<https://www.uoguelph.ca/ccs/services/office365/teams>

Zoom

This may use Zoom for meetings. Check your system requirements (<https://opened.uoguelph.ca/student-resources/system-and-software-requirements/>) to ensure you will be able to participate.

<https://opened.uoguelph.ca/student-resources/system-and-software-requirements>

Technical Skills

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:

- Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
- Install software, security, and virus protection;
- Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
- Be comfortable uploading and downloading saved files;
- Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
- Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Quizzes, Discussions, and Grades (the instructions for this are given in your course);
- Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
- Perform online research using various search engines (e.g., Google) and library databases.

Contact your course coordinator, TA or advisor if you need support with any of the above.

Campus Resources

If you are concerned about any aspect of your academic program: Make an appointment with a Program Counsellor (<https://www.uoguelph.ca/uaic/programcounsellors/>) in your degree program. If you are struggling to succeed academically: There are numerous academic resources offered by the Learning Commons (<https://www.lib.uoguelph.ca/using-library/spaces/learning-commons/>) including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills.

Cost of Textbooks and Learning Resources

Textbook / Learning Resource	Required / Recommended	Cost
Final poster for poster presentation	Course related expense	approx. \$45

Field Trip Fees

For those courses in the Department of Animal Biosciences that have a field trip component - an associated fee for each field trip in the amount of \$20 will apply. Further details on how these fees will be collected will be provided in class/on CourseLink; along with a waiver form that will need to be completed prior to the trip(s).

Library Course Reserve (Ares)

For this course, you may be required to access course reserve materials through the University of Guelph McLaughlin Library. To access these items, select **Ares** on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve.

For further instructions on accessing reserve resources, visit How to Get Course Reserve Materials (<https://lib.uoguelph.ca/find/course-reserves-ares/how-get-course-reserve-material/>).

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621 | Email: libres2@uoguelph.ca | Location: McLaughlin Library, First Floor, University of Guelph

Course Level Learning Outcomes

At the completion of this course, the student will have had the unique opportunity to explore an individual research project and achieve these learning outcomes:

1. Develop an understanding of the research in a specific field of interest
2. Critically assess the primary literature in the research area
3. Further develop written communication skills
4. Further develop oral and visual presentation skills
5. Obtain research experience and interpret scientific data
6. Work independently and take responsibility for their own research

Course Content

This course is very unique in that the content depends upon the area of research chosen by the student in conjunction with the research advisor. During the course of the semester, the student will explore research in their chosen area of research and in conjunction with the research advisor, follow through on a research proposal developed in ANSC-4700. The research proposal should represent a research project that can be accomplished in a single semester.

To complete the course requirements for ANSC-4710, students will write a research paper on their work and present a poster at the end of the semester. The student is expected to incorporate aspects of their literature review and research proposal from ANSC-4700 in the paper for ANSC-4710.

Assessment Breakdown

Component	Weighting (%)	Description
Research Paper	50%	A paper that is graded by the research advisor
Poster Presentation	25%	A scientific poster presented to the department of Animal Biosciences at the end of classes, graded by the course coordinator, TA, and/or other faculty
Poster Presentation Participation	5%	Submission of 8 evaluations of peer's posters and presentations
Semester Performance	20%	Graded by the research advisor

Grading Schemes

Research Paper- 50%, Learning Outcomes: 1, 2, 3, 5, 6

The research paper should outline the background and current issue of the field of your focus, your research hypothesis, objectives, the experimental design of your project (methods used), and the results obtained. You should include a discussion/conclusion section to explain what the results mean, as well as explain the significance of the research and future directions.

Requirements: Approximately 18 pages double-spaced, not including your data figures, margins 1-inch all around, 12-pt Times New Roman font. Page limits do not include your reference list. The report should be written in the format of a journal paper of the advisor's choosing. Discuss the format and contents of the review with your advisor, as they will be grading the paper.

It is appropriate for the supervisor to read a draft of the paper/report once and offer specific suggestions for improvement before the student submits the final version. This feedback is crucial to the learning process and students should schedule this preliminary reading with their advisors well in advance of the due date of the report.

Poster Presentation- 25%, Learning Outcomes: 1, 2, 3, 4, 5, 6

Please see ANSC-4710 Poster Outline for instructions.

Peer evaluation of posters - 5%, Learning Outcomes: 1, 2, 3, 4, 5

Submission of 8 evaluations of peer's posters & presentations. Please see ANSC-4710 Poster Outline for instructions.

Student Performance (assessed by supervisor) - 20%, Learning Outcomes: 1, 2, 3, 4, 5

The student should discuss the specific criteria for this assessment with the supervisor at the beginning of the semester, to make sure the expectations are clear. This could include but is not limited to: initiative taking, preparation for weekly meetings, interaction with others in the laboratory, development of technical competence, research performance, data organizing, time management, response to feedback, etc.

Last Day to Drop Course

The final day to drop Fall 2025 courses without academic penalty is the last day of classes: November 28

After this date, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

Course Grading Policies

Submission of Assignments

See assignment outlines for specific submission instructions.

Late Assignment

- Unofficial assessment marks will be uploaded to the **Grades** tool of the course website when available. You can view your grades on the course website by selecting **Grades** from the **Tools** dropdown menu on the navbar. Your course will remain open to you for seven days following the last day of the final exam period.
- Extensions will be considered for medical reasons or other extenuating circumstances. If you require an extension, discuss this with the instructor as soon as possible and well before the due date. Barring exceptional circumstances, extensions will not be granted once the due date has passed.

These rules are not designed to be arbitrary, nor are they inflexible. They are designed to keep you organized, to ensure that all students have the same amount of time to work on assignments, and to help to return marked materials to you in the shortest possible time.

Course Standard Statements

Grading Policies and Missed or Late Final Papers

The report ***deadline is defined by mutual agreement between the research advisor and student***. The research advisor and the student can mutually agree to modify the deadline if needed. If the grade is not provided in time to meet the Registrar's Grade deadline (see above), the grade will need to be resolved through the incomplete grade system in the Registrar's Office. Therefore, every effort should be made to complete the course requirements before the final grade deadline.

Grading Policies and Missed or Late Poster Presentation

The poster presentation is scheduled by the Course Coordinator to coincide with the end of classes or early during the exam schedule at a mutually agreeable time. Students with a valid academic conflict can make other arrangements with the Course Coordinator to present the poster at a different time. If a student misses their scheduled presentation time and has not contacted the Course Coordinator, the University's requirements for documentation of academic consideration come into play (see below).

Final Report Due Date and Poster Presentation Date

Final Report Due Date:

The due date for the advisor to submit final grades is usually ~ 1-1.5 weeks after the last day of class. We have provided a suggested report submission date to your advisor in the "important dates and deadlines list". However, the advisor and student could mutually agree upon an alternative due date for the final report to ensure that the research advisor has enough time to evaluate your assignment and can submit the grade in time.

***Final date to be posted once details arrive from the Registrar's Office.**

Poster Presentation Date:

Please see important date list on Courselink. Location: ANNU 141 (main floor, beside the main office).

Standard Statements for Undergraduate Courses

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 discourages misconduct. 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.

The Academic Misconduct Policy (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-misconduct/>) is outlined in the Undergraduate Calendar.

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 10 days in advance, and no later than the first business day in November, March or July as appropriate for the semester. Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. For students at the Guelph campus, information can be found on the SAS website. (<https://www.uoguelph.ca/sas/>)

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodations of Religious Obligations (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-accommodation-religious-obligations/>).

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.

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 undergraduate students 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 the Undergraduate Calendar - Dropping Courses (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/dropping-courses/>).

Email Communication

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

Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (<https://wellness.uoguelph.ca/>). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (<https://wellness.uoguelph.ca/navigators/>) who can help develop a plan to manage and support your mental health or check out our mental wellbeing resources (<https://wellness.uoguelph.ca/shine-this-year/>). The Student Wellness team are here to help and welcome the opportunity to connect with you.

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).

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.

Resources

The Academic Calendars (<http://www.uoguelph.ca/registrar/calendars/?index>) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

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. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration. (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/>)