Biology Honours Thesis – BIOL-4111

Application instructions

Step 1. Meet the prerequisites

To take part in the honours course, you must be registered in a **4-year program** and have completed **24 credit hours in 2000-level or higher biology courses**. Other course requirements include the completion of BIOL-1115, BIOL-1116 and three credit hours in statistics or data analysis. An **overall GPA of 2.75** and a **GPA of 3.0 in biology courses** are required. Permission can also be granted at the discretion of the department chair.

Step 2. Find a supervisor

If you are unsure of where to begin, consider professors who instructed the courses you found most interesting. You can also visit the University of Winnipeg Department of Biology research page (https://www.uwinnipeg.ca/biology/research.html) for details on research currently ongoing in the department.

Reach out to potential supervisors about the possibility of joining their lab as an honours student. Researchers are happy to discuss their research and possible opportunities to work in their lab. Note that you will not be asked to develop a research project independently. Instead, researchers will likely already have ideas and projects in mind for honours students that you may help to shape and develop, based on your interests.

It is best to contact potential supervisors in the year preceding your honours research year. If fieldwork is required for the project, this may take place in the summer before the start of the honours course in the fall, so it is important to be in touch with a potential supervisor well in advance.

In addition to potential supervisors at the University of Winnipeg in the department of biology, you may also approach researchers in other related departments or at the University of Manitoba.

Step 3. Select committee members

Along with your proposed supervisor, you will need to select two prospective advisory committee members. You should contact these individuals directly to determine whether they are willing to act as your committee member. If your proposed supervisor or committee members are unfamiliar with this course, ask them to contact the course coordinator directly.

Ideally, committee members will be local so that they can attend the in-person components of the course (e.g., presentations and defences), but they may also attend some components remotely if needed.

Please note that the availability of supervisors and committee members may limit enrolment in this course.

Step 4. Complete the Honours Thesis Application Form

In collaboration with your supervisor, you should complete the “Honour Thesis Application Form” (see page 3). The completed form should be returned to the coordinator, Dr. Jen Jeffrey

(j.jeffrey@uwinnipeg.ca), who will review your application and forward approved forms to the Biology Department Assistant, who will grant permission to register for the course on WebAdvisor.

Step 5. Complete training & ethics requirements

All students must complete relevant safety, laboratory/field, and ethics training before commencing their projects. If your research will involve the use of vertebrate animals or human subjects, you (and your supervisor) MUST receive ethics approval before commencing work. Consult with the course coordinator if you need help with this process.

Course details

The honours course takes place during the sequential fall and winter terms. The course consists of both a formal lecture delivered by the coordinator and the research component that you will undertake with your supervisor. The research component of the honours thesis will be the focus of the course, with the lecture component playing a supporting role.

For the lecture component of the course, classes will take place on Mondays from 12:30–1:20 pm. Classes will be scheduled irregularly throughout the fall and winter terms and provide guidance and support for your honours thesis research. For instance, we will focus on scientific writing, presentation of your research, data management and visualization using R, along with some other resources. Lectures will also provide a chance to practice proposal and final presentations, during which additional class time may be scheduled to accommodate student talks.

Course deliverables will include the following:

Item	Estimated due date
Written research proposal & oral presentation	Mid fall term
Written progress report and meeting with committee	Early winter term
Final presentation of thesis research	End of winter term
Final thesis due to committee	End of winter term classes
Oral thesis defence	Winter exam period

Wiegand biology undergraduate research fund

Established by Dr. Murray Wiegand and his wife, Nancy, this award supports the research expenses of students enrolled in BIOL-4111. Up to two awards may be granted each year, and selection is based on merit and needs. Preference is given to students working in a lab with limited funding.

Candidates should submit a research proposal based on their Honours research project, which includes a statement of the significance of the proposed work. The application should include a budget that details anticipated expenses and funds from their advisor for research support.

Applications are due **September 15** for consideration. Additional details on the application process will be made available summer of 2025.

Honours Thesis Application Form

Personal contact information

Name: _____ UW email: _____

Student number: _____ Phone: _____

Academic history

Overall GPA: _____ GPA in biology courses: _____

Check boxes for completed prerequisites:

☐ Cells & Cellular Processes (BIOL-1115)
☐ Evolution, Ecology, & Biodiversity (BIOL-1116)
☐ 3 credit hours in statistics or data analysis
☐ 24 credit hours in 2000 level or higher biology courses

Project information

Thesis topic:

Check boxes for necessary training & permissions:

☐ UW laboratory/WHMIS/field safety training
☐ Human ethics approval & training
☐ Animal ethics approval & training
☐ Autoclave use training

Course members

	Name	Signature	Preferred email
Student			
Supervisor			
Committee member			
Committee member			
Thesis coordinator			

* Electronic signatures are acceptable and recommended

Note that all parties signing this form are obligating themselves to attend a research proposal talk, progress meeting, final research presentation and an oral thesis defence (dates to be determined).