

# **BIOL\*4410 Field Ecology - DRAFT**

# Virtual Course

Fall 2022 Section(s): 02

Department of Integrative Biology Credit Weight: 0.75 Version 1.00 - April 23, 2022

# **1 Course Details**

## **1.1 Calendar Description**

This is a 12-day field course held in Algonquin Park, Ontario, during August. Students independently conduct and write reports about 2 research projects of their choice and design (in consultation with faculty members), on any of: vertebrate, invertebrate, or plant ecology, and/or behaviour, in terrestrial or aquatic habitats. Emphasis is placed upon students asking ecological questions, designing experiments, and then collecting data from intensive field work. There are no formal lectures, but an organizational meeting is held in the winter semester prior to the field course. The charge by the field station for room and board will be passed on to the student. Students are also responsible for their own transportation to and from the field station. A departmental application form must be submitted for approval at least 4 weeks prior to the last day of course selection for the Summer semester, and the signature of the course coordinator will be required to select the course. This course must be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly. Students taking this course DO NOT use course numbers reserved for Ontario Universities Program in Field Biology. Detailed information is available from the Department of Integrative Biology.

Pre-Requisites:	0.50 credits in Ecology
Restrictions:	Instructor consent required.

## **1.2 Course Description**

#### Welcome!

Welcome to Field Ecology! Taking a field course is often a formative experience for biology students. Field courses are valuable for learning new applied skills; putting those skills into practice in the context of a research project; collaborating with and learning with others; and preparing for your Honours thesis, graduate studies, and/or your future career. We look forward to observing and learning together.

#### **Section 02: Remote Format**

Please note that Section 01 is being offered in Algonquin Park, as per the above calendar description. This is the course outline for Section 02: Biodiversity and Integrative Field Ecology. This section is offered in **remote format** in 2022. What does that mean? That means that you will engage in guided learning activities, as well as conduct an independent research project, **in your local environment where you currently live**.

Life is all around us! Through this course, you will learn skills to study your own garden, local public areas, urban parks, a weedy patch next to a parking lot, or more naturalistic areas near where you live.

All of these types of environments, and many more, are suitable for scientific investigation. For participation in this course, you should be able to access safely an outdoor environment near where you live, whether urban, suburban, or rural.

#### **Cost and Fall Registration**

Please note that BIOL\*4410 Section 02 is a fall 2022 course. If you are already registering for full-time studies in the fall, there is no additional tuition fee for this course. If this will be your final credit for graduation, then you should register and pay tuition for a single course.

Students can expect to spend approximately \$40-75 for materials for this course, depending upon materials you already have on hand. Details are provided below regarding required and recommended supplies.

Students do not register for this course via WebAdvisor. The Department of Integrative Biology will help to register students who are accepted into this course for the fall credit. You will submit a course waiver form to the department.

#### **Ethical Behaviour**

All instructors and students participating in this course will adhere to ethical behaviours including: interacting respectfully with others, following all pandemic-related protocols that are in effect in your local area, observing the taught research protocols when observing organisms, and following principles of academic integrity.

#### Pre-Requisite and Recommended Background

Students are required to have completed at least 0.5 prior credits in ecology prior to taking

this course. It is strongly recommended that students have taken at least one prior course in either statistics or biostatistics. Additional prior courses in zoology, entomology, and/or botany would be helpful but are not required, and it is not expected that students will have background in all of these topics.

## 1.3 Timetable

#### Synchronous Class Meeting Overview

There will be a mandatory weekly meeting from 7:00-9:00 PM Eastern Time on Tuesdays via Zoom. The Zoom meeting link will be available through CourseLink. Activities will include: short lectures, instructions regarding field activities and assignments, guest speakers, group learning and sharing activities, tutorials, and question/discussion sessions. Typically, the planned activities will be 60-90 minutes, with the remaining time available to address any further questions. We will also provide feedback along the way, such as regarding your study design, data organization for your project, etc.

#### **Dates for the 12 Synchronous Class Meetings**

(ordering of topics may be revised)

May 17 - Introduction to Course and Natural History Journal

May 24 and 31- Vertebrates Module (acoustics surveys)

June 7 and 14 - Invertebrates Module

June 21 and 28 - Plants Module

- July 5 Introduction to Research Design
- July 12 Short Proposal Presentations and Feedback
- July 19 Data Organization Tutorial and Discussion (project refinement)
- July 26 Graphics Tutorial
- August 2 Statistics tutorial

Sept 13 - Final statistics and graphics questions/help session, using your own data. (There will also be a few office hours available for any students who have another evening class or lab in the fall semester.)

#### **Asynchronous Activities Overview**

Students will also work ca. 5-7 hours/week independently. Activities will include: completing pre-class activities, performing observations outdoors in your own local area (~3 hours/ week), identifying organisms, and working on your assignments and independent research

project.

## 1.4 Final Exam

No Final Exam

# **2** Instructional Support

Dr. Sarah (Sally) Adamowicz is the course instructor for BIOL\*4410 Section 02 for 2022, and students may also have the opportunity to interact with other instructors as well as guest speakers.

Dr. Adamowicz gratefully acknowledges the teaching team from 2021, who worked together to co-design the exciting first offering of this course in virtual format: Amy Newman, Sheri Hincks, Dori McCombe, Lisa Robertson, Sarah Schorno, Shaylah Tuttle-Raycraft, Mike Davies, Carole Ann Lacroix, and Colin DeMill. Several learning activities and assessments are adapted here in 2022, with permission. Activities adapted from those designed by prior co-instructors are credited, where suitable, throughout the course materials.

Please ask course-related questions at the end of the synchronous class time or post your questions to the appropriate Discussion forum on CourseLink, so that all students can benefit from the answers. Additionally, there will be blocks of office hours scheduled at key times during the course (e.g. July to discuss research design and September to discuss statistics). If you require an individual meeting to discuss a more personal circumstance, please email Dr. Adamowicz for an appointment.

Please note that all meetings for this course will take place in virtual format using Zoom.

## 2.1 Instructional Support Team

Instructor:	Sarah Adamowicz Associate Professor	
Email:	sadamowi@uoguelph.ca	
Office Hours:	Please email Dr. Adamowicz for an appointment. Several	
	blocks of office hours for consultation on projects will be	
	scheduled for July and September.	

## **3 Learning Resources**

### **3.1 Required Resources**

Field Kit (Equipment) Required Items for Field Activities

- book: Plants of Southern Ontario. Trees, Shrubs, Wildflowers, Grasses, Ferns & Aquatic Plants. (By Richard Dickinson & France Royer)
- hand lens and measuring tape
- trowel, pitfall traps & sorting trays
- field journal and pencils
- camera (phone camera is fine)
- water bottle & small back pack

#### Plastic Containers

We will go over how to make a pitfall trap together to study ground-dwelling invertebrates. It's important not to use a deep container that can trap small vertebrates. To make pitfall traps, you can use small plastic containers that are common household items (such as small yoghurt containers) or other small containers available at a dollar store. It is also helpful to have larger plastic containers or trays to examine what you find (e.g. 500-mL white plastic margarine container or other similar containers).

https://www.nhm.ac.uk/discover/how-to-make-pitfall-trap-to-catch-insects.html

#### Plant Book

The plant identification resource is suitable for multiple geographic regions in North America. For any students residing outside of Canada during the summer semester, please contact the course instructor to discuss suitable identification resources for your geographic area. This book is available online through several sources, such as:

https://www.chapters.indigo.ca/en-ca/books/plants-of-southern-ontario/9781774510568item.html?ikwid=Plants+of+Southern+Ontario&ikwsec=Home&ikwidx=0#algoliaQueryId=2707423ba92a6f

https://www.amazon.ca/Plants-Southern-Ontario-Richard-Dickinson/dp/1774510561/ref=sr\_1\_fkmr0\_1?keywords=Plants+of+Southern+Ontario.+Trees%2C+Shrubs 1-fkmr0

We have also frequently seen this book in independent bookstores (such as the Bookshelf in Guelph).

#### **Computer and Internet (Equipment)**

Students will require access to a computer and internet to join the synchronous learning sessions. A computer is also needed for searching for literature and other resources for your project, for data analysis, and for preparing your assignments.

Several freely available software resources will be used during this course. Students will be sent instructions at the suitable time during the course.

## **3.2 Recommended Resources**

#### Recommended Items (Equipment) Personal Gear, Health & Safety

Your needs will depend upon the climate and conditions where you are living during the summer semester. Please consider the following as guides, and then speak with the course instructors if you have questions about your unique setting and field sites.

**Footwear** - It is recommended that students wear comfortable footwear suitable for the conditions in the area being studied (e.g. sneakers, rubber boots, hiking boots). Closed-toed shoes should be worn during field work.

**Clothing** - It is recommended that students wear comfortable clothes suitable for the weather conditions. Items that are commonly useful include: long-sleeved shirt, long pants, bug jacket or head net, rain jacket, rain pants, and wide-brimmed hat. If it is hot or humid, then light-weight and quick-dry clothing options improve comfort. Also, tuck your pants into your socks (to help prevent ticks) when walking through vegetation.

**Sunscreen** - Please look up the UV conditions on the days of conducting fieldwork. Take appropriate precautions on high-UV days (e.g. wear long-sleeved shirt, sunhat, sunscreen, sunglasses).

**Biting insect/tick protection** - Take the time to look up any health hazards in the local region relating to biting flies, ticks, or other organisms. As suitable for the specific area, take appropriate precautions, such as: wearing insect repellent, wearing a bugshirt or headnet, and checking oneself for ticks after completing fieldwork each day. Students may find it helpful to keep handy an insect bite treatment (such as "Afterbite"). We will also discuss field safety together.

**Buddy and Sites** - Students should not work alone at remote sites; go with a field buddy. Tell someone where you are going. Students should study their own yard, urban parks, and/or sites close to home if no field buddy is available.

#### **Recommended Field Supplies**

Depending upon your own learning goals and project interests, we recommend to consider investing in several additional items.

**Field Guides** - Students are encouraged to borrow or purchase additional field guides for the local flora and fauna of their own geographic area for taxonomic groups of particular interest. Some materials are also available through the U Guelph library.

**Jars/Containers** - Rinse out and save several household jars and containers with lids. These could include yoghurt containers, glass jars with lids, etc. These items will be useful for sorting and examining invertebrate specimens. **Clipboard** - You may find a clipboard helpful when filling out data sheets outdoors. We also recommend to take with you extra pencils and a pencil sharpener.

**Binoculars** - It is recommended, but not required, that students either borrow or purchase a pair of binoculars, particularly for anyone with a special interest in studying birds as part of their independent research project. For those students who do not already have access to binoculars, one relatively affordable option can be found a this link:

https://www.amazon.ca/Binoculars-HONEYWHALE-Watching-Stargazing-Telescope/dp/B08PBFYB2V/ref=sr\_1\_4?crid=2IKLCUHN0437X&dchild=1&keywords=binoculars+for+bird+ 4

**Clip-On Lens for Phone Camera** - If you have a particular interest in photography, and especially studying small organisms, we recommend that you can consider a clip-on lens to use with your phone camera, such as:

https://www.amazon.ca/CamKix-Universal-Camera-Smartphonesincluding/dp/B00CSJ50II/ref=sr\_1\_2?crid=WLVKMN4G4ETW&keywords=camkix+lens&qid=1650724119& 2

## **4 Learning Outcomes**

Field Ecology is an opportunity for students to be inspired by, explore, and discover the natural environment. At the end of this course, the successful student will be able to work collaboratively and efficiently with peers and instructors to achieve the following:

## 4.1 Course Learning Outcomes

By the end of this course, you should be able to:

- 1. appreciate biodiversity and an ecosystem (wherever the area) and express key factors that regulate the distribution, abundance, and diversity of local organisms.
- 2. identify selected taxonomic groups (trees and shrubs, general terrestrial invertebrate groups, vertebrates) using morphological traits and acoustic observations.
- 3. calculate and compare biodiversity metrics across space and time.
- 4. express a research question using your understanding of ecological processes in a local ecosystem (may be natural, urban, suburban, or agricultural).
- 5. develop a suitable study design to address your question. This will typically involve developing a hypothesis and testable prediction(s).
- 6. collect field data through applying identification skills as well as sampling and datacollection techniques, using provided guidance and methods. Record data clearly and accurately.

- 7. apply standard statistical and graphical methods to summarize, compare, and communicate patterns in collected data and to test predictions.
- 8. exhibit critical thinking and make judgments and conclusions based on logic and evidence during all stages of your research, including: identifying research goals; expressing your thinking and judgment in oral, visual, and written form; evaluating information in the face of uncertainty; trouble-shooting your research in the face of unexpected occurrences; and identifying and using relevant scientific literature to motivate and contextualize your research.
- 9. collaborate effectively and respectfully with other class members and with course instructors to solve problems related to performing your research, to ask questions, to deliver constructive feedback to others, and to manage timely completion of projects.
- 10. communicate effectively in oral, written, and graphical formats to diverse audiences.
- 11. contribute to broader society and understanding, through participating in a citizen science project and/or creating a resource for public understanding.

## **5 Teaching and Learning Activities**

This course involves an exceptional opportunity to study field ecology in a guided fashion while also having the opportunity to explore your own interests. Before signing on, students should be aware this is an academically rigorous course, not an "easy credit". You will be rewarded for your efforts through developing field and communication skills that will help you going forward.

Section 02 involves a combination of synchronous learning (2 hours/week) and, mainly, learning at your own pace through activities designed to facilitate active learning, practical skills, curiosity, critical thinking, and creativity.

### 5.1 Synchronous Class Time

We will hold synchronous class meetings on Tuesday evenings from 7:00-9:00 PM Eastern Time (see Timetable section for the specific dates). The synchronous sessions are mandatory and will help students to be successful in the assessments. Activities will vary from week to week, including:

- Introduction to the course, field safety, and natural history journal
- · Short lectures or instructions regarding activities
- Guest speakers and Q&A sessions
- Group learning and sharing activities
- Tutorials on various topics (e.g. research design, graphics, statistics)
- Time for questions and discussion

## **5.2 Asynchronous Activities**

Other than the Tuesday evening classes, the remainder of the activities will be completed on your own schedule each week. The instructional team has designed a range of learning activities that you will complete independently, including:

- Reading, watching, or listening to posted learning resources
- Identifying plants in your local area
- Calculating biodiversity measures
- Collecting and identifying major groups of terrestrial invertebrates in your area
- Studying vertebrates through sightings and acoustic surveys
- Making observations and preparing a natural history journal
- Observing various habitat types in your local area and formulating your own
  question for your research project
- Completing an end-to-end research project, with guidance along the way

Near the beginning of the course, weekly activities will be quite structured and guided. As the course progresses, you will apply your skills and use the methods more independently in the context of conducting your research project. Example project ideas will be provided, and you will have the opportunity to receive feedback on your study question and research design.

## **5.3 Course Modules and Topics**

#### **Overview of Course Modules**

After an introduction in week 1, the first half of the course will be divided into three twoweek "biodiversity modules", in which students learn practical skills to observe and identify organisms. These modules will provide class members with the skills needed to pose questions that motivate self-directed research, leading to enhanced understanding in organismal ecology. For the second part of the course, students will design and implement their own independent research projects, with guidance and tutorials provided along the way.

#### **Biodiversity Modules**

**Vertebrates** - In this module, students will become familiar with the birds, mammals, and herps all around them. They will learn how to identify a variety of vertebrates by sightings and sounds. They will learn to identify who is calling in the forest around them (and when!).

*Invertebrates* - In this module, students will learn to appreciate the diversity of terrestrial invertebrates and how to identify the major taxa using practical skills. They will learn how to sample ground-dwelling invertebrates (pitfall traps) and will investigate invertebrate diversity in varied habitats. Students will also develop communication skills in conveying the ecological roles and importance of invertebrates.

**Plants -** In this module, students will come with us to experience, remotely, the joy of identifying trees and surveying a hardwood forest. They will learn how to use a field guide and determine the biodiversity of a hardwood forest on the University of Guelph Campus. They will then have the opportunity to explore their own local areas, using what they learned.

#### Integrative Research Module

Using the knowledge and curiosity gained through the biodiversity modules and activities, students will design and implement their own independent research projects. After an introduction to the skills and basic equipment needed, the opportunity to do authentic research will be a highlight of the course! Students will work with peers and instructors to identify and refine their research questions, sampling and observational protocols, and analytical methods. Students will then be responsible for implementing these plans safely and will develop the ability to troubleshoot experiments effectively. Students will then communicate the research project through preparing a scientific poster.

### 5.4 Work Habits for Success

**Preparedness & Safety** - Depending on the research question you pose and area you would like to study, extended time outside may be needed to collect your field observations. You will likely need to be in the field in diverse weather conditions. Students should plan ahead regarding field supplies needed each day, including clothing choice, hydration, food, insect protection, sun protection, communication (e.g. checking in with a peer or family family with regards to every single outing), and other safety plans. Strong organizational skills are needed. Write a checklist of needed items for your project in your field notebook, and check your list each outing, to avoid the situation of arriving at your field site without the gear you need.

**Hard work** - Field work and scientific research are extremely rewarding and fun, but are also hard work, requiring focus. You need to plan on making a significant effort with this 0.75-credit, fourth-year course. You will be rewarded with increased appreciation for your local area, new practical skills and improved communication ability, and new scientific

perspectives that will help you with your future academic and career endeavours.

**Time management** - Start all assignments right away for each module. Make sure that you leave time to proofread your work and avoid last-minute efforts. Ensure that you start field data collection for your research project right away during the "Integrated Research Module" portion of the course. Remember that you also need time for data entry, data analysis, making graphs, reading literature, interpretation, and preparing your poster. Make yourself your own timeline of mini milestones to help you to be successful in reaching your overall research goals and to submit a high-quality final project poster. This project is an excellent stepping stone towards Honours thesis research, grad studies, and/or a work environment, and these skills will serve you well going forward!

## 6 Assessments

Assessments are in the form of three assignments, one oral presentation, a field journal and self-reflection essay, and a final research poster. There is no exam for this course.

The instructional team has designed assignments that double as active learning opportunities, helping to meet the course learning outcomes. We hope that you enjoy completing these assignments.

All assignments are due to the labeled Dropbox folder on the CourseLink site on Tuesdays by 6:00 PM Eastern Time, on or before the due date.

If students wish, they may upload a copy of the assignments in advance and check the TurnItIn score, followed by improving the paraphrasing if needed. Assignments are expected to be written in one's own words, with the exception of quotations used for profound remarks or definitions from other sources. Credit must be given for any ideas from other sources (e.g. through referencing a journal article or other resources). Note that we do expect exact matches to literature (e.g. journal titles in your reference list for your poster). If a student chooses to upload an assignment in advance for checking, then delete this version and ensure to upload the final version for grading by the due date and time.

We recognize that the pandemic has created additional challenges for many individuals, whether impacting one's personal health, familial responsibilities, etc. Please email the course instructors if you are unable to meet a deadline due to health or compassionate circumstances. We request that you contact the instructors in advance of the deadline to discuss your situation.

Detailed instructions will be posted to the CourseLink site for each assignment.

## 6.1 Marking Schemes & Distributions

Form of Assessment	Weight of	Due Date	Learning
	Assessment		Outcomes
			Addressed

6 2 F	Vertebrate Assignment (short report, ca. 2 pages plus figures and data sheet)	15%	June 7 (6 PM)	1,2,3,6,7,10
	Invertebrate Infographic (data file; specimen photographs; 1-page infographic)	15%	June 21 (6 PM)	1,2,3,6,10,11
-	Plant Assignment (virtual plant collection, 1-page written report, data file)	15%	July 5 (6 PM)	1,2,3,6,10
	Oral Proposal Presentation (5 minutes, 5%) & Feedback to Peers (5%)	10%	July 12 (during class time)	4,5,8,9,10
	Research Poster	30%	September 27 (6 PM)	1-11
	Field Journal & Self Assessment/Reflection	15%	October 4 (6 PM)	8,10,11

## matting of this Course Outline

#### Formatting of this Course Outline and Notes about Mental Wellbeing

Kindly ignore the odd formatting to the left of the assignments table. This was a glitch in the online course creation system that instructors are required to use. This formatting glitch couldn't be rectified in any reasonable amount of time, and we prefer to put our efforts towards making the *course* awesome!

This is also an opportunity to model behaviour that we encourage students to consider as well. While perseverance is important, sometimes it is also helpful to let some things go. Let's aim for *excellence*, rather than perfection, in order to move forward with our learning while maintaining mental wellbeing.

## 6.3 Tips for Success in Assessments

\* Read over the assignment instructions carefully prior to commencing.

\* Re-read the instructions a final time prior to submitting your work to ensure your

assignment is complete.

\* Start working on each assignment at the beginning of the relevant module to ensure you have ample time and to avoid last-minute stress.

\* Proofread your work before submission.

\* Have fun!

We greatly look forward to seeing your creativity and to learning what you have discovered about the biodiversity and ecology of your local area!

## **7 Course Statements**

### 7.1 Field and Pandemic Safety

All students in this course will be required to follow the field safety protocols provided, to study organisms using the protocols we will discuss (e.g. we will not be catching vertebrates but only observing them in this course), and to adhere to any additional pandemics-related protocols mandated by Public Health authorities in your geographic area.

### 7.2 Recordings for BIOL4410 Section 02

Participation in the synchronous class sessions is mandatory. The instructors are planning to record and post instructor-led components of the course for the benefit of any students who miss a class due to illness or compassionate reasons. However, the break-out rooms will not be recorded. Please do not record your group unless you obtain permission from all group members. Recordings are intended to be used only for this course. Permission would be required before any further use.

## 8 Department of Integrative Biology Statements

## 8.1 Academic Advisors

If you are concerned about any aspect of your academic program:

 Make an appointment with a program counsellor in your degree program. <u>B.Sc.</u> <u>Academic Advising or Program Counsellors</u>

### 8.2 Academic Support

If you are struggling to succeed academically:

• Learning Commons: There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of

courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist. http://www.learningcommons.uoguelph.ca/

 Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: http://www.lib.uoguelph.ca/getassistance/studying/chemistry-physics-help and http://www.lib.uoguelph.ca/getassistance/studying/math-stats-help

## 8.3 Wellness

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance. https://www.uoguelph.ca/counselling/
- Student Health Services is located on campus and is available to provide medical attention. https://www.uoguelph.ca/studenthealthservices/clinic
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations. http://www.selfregulationskills.ca/

## 8.4 Personal information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) http://www.e-laws.gov.on.ca/index.html. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies please see the Undergraduate Calendar. (https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml)

## 8.5 Course Offering Information Disclaimer

Please note that course delivery format (face-to-face vs online) is subject to change up to the first-class day depending on requirements placed on the University and its employees by public health bodies, and local, provincial and federal governments. Any changes to course format prior to the first class will be posted on WebAdvisor/Student Planning as they become available.

# **9 University Statements**

## 9.1 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.

## 9.2 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

## 9.3 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-regregchg.shtml

Associate Diploma Calendar - Dropping Courses https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

## 9.4 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.

## 9.5 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

## 9.6 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/c08amisconduct.shtml

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

## 9.7 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.

### 9.8 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

## 9.9 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.

## 9.10 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).

## 9.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-yoursafe-return/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

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