



# BIOL\*3010 Laboratory and Field Work in Ecology

Fall 2022

Section(s): 01

Department of Integrative Biology

Credit Weight: 0.50

Version 2.00 - September 07, 2022

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## 1 Course Details

### 1.1 Calendar Description

This course emphasizes field and laboratory work in ecology. Students will gain experience with experimental designs, sampling, analysis and interpretation of data collected to answer ecological questions. Local field sites will be used to run in-course experiments. Critical thinking about ecological issues relevant to society will be emphasized.

**Pre-Requisites:**

BIOL\*2060, (STAT\*2040 or STAT\*2230)

**Restrictions:**

Restricted to students in BSCH.WBC, BSES.ECOL, BSES.ECOL:C, ECOL minor

### 1.2 Course Description

This course is designed to help students formulate and critically evaluate research questions about ecological processes, plan studies to answer these questions, and communicate the results of these studies. Students will work in groups to identify a research question, develop hypotheses, design a study to answer their research question, collect data using appropriate experimental and/or sampling design, analyze the data, interpret the data in the context of the scientific literature, and write up the study in the form of a scientific paper. There is considerable emphasis on the iterative process of writing and revising in response to feedback from the instructors because we want you to practice critical thinking and communication skills. Student evaluation is primarily based on the research proposal, research paper, and self-reflection.

This is also an experiential learning course, with the University of Guelph Arboretum as your "employer". Consequently, you will also interact with Dr. Aron Fazekas (research coordinator at the Arboretum) while you conduct research at the Arboretum. Many of the learning outcomes identified in Section 4 are real-world employable skills and, together with the required self-reflection, will help to foster your professional growth.

### 1.3 Timetable

T, Th 10:00 – 11:20

W 2:30 – 5:20

Class periods will be used for data collection, workshops, and small-group consultation. We will either meet at the University of Guelph Arboretum or on Zoom. For detailed information on which classes will be in the Arboretum and which will be in SSC 2306, see the "Activities" section of the Course Outline.

Please note that course delivery format (face-to-face vs remote) 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.

### 1.4 Final Exam

There will be no final exam for this course.

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## 2 Instructional Support

### 2.1 Instructional Support Team

**Instructor:** Christina Caruso  
**Email:** carusoc@uoguelph.ca  
**Office:** SSC 1471  
**Office Hours:** By appointment

**Instructor:** Ryan Norris  
**Email:** rnorris@uoguelph.ca  
**Office:** SSC 2451  
**Office Hours:** By appointment

### 2.2 Teaching Assistants

**Teaching Assistant (GTA):** Hannah Brazeau  
**Email:** hbrazeau@uoguelph.ca

**Teaching Assistant (GTA):** Erika Myler

Email: emyler@uoguelph.ca

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## 3 Learning Resources

### 3.1 Required Resources

#### Writing in the Biological Sciences (Textbook)

Hofmann, A.H. 2021. Writing in the Biological Sciences. Oxford University Press, 4th Edition.

This inexpensive book contains information for good practices for writing and revising that will be useful for Biol\*3010 as well as for all of your other science courses. Readings from Hofmann will be assigned in advance of many of our workshops, and many of the rubrics for Biol\*3010 assignments will explicitly refer to advice from Hofmann.

Hofmann is available from the University and Co-op Bookstores. It is also available at Amazon.ca.

#### Class Notes (Notes)

Class notes will be posted to Courselink when necessary.

### 3.2 Recommended Resources

#### Writing services at the University of Guelph Learning Commons (Other)

<https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops>

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## 4 Learning Outcomes

### 4.1 Course Learning Outcomes

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

1. Distinguish mechanistic research (why/how is it there?) from descriptive research (who/what is there?).
2. Apply the scientific method, and gain facility with making observations, implementing sampling techniques, and developing hypotheses and predictions.
3. Use your understanding of ecological processes from prior courses (BIOL\*2060) to create a research study that advances understanding about ecological processes.
4. Critically evaluate the scientific and societal value of potential research questions.
5. Analyze scientific literature in order to motivate and contextualize your research question, hypotheses, and conclusions.

6. Incorporate uncertainty during the design and implementation of a research study. This means measuring, testing, accounting for, and acknowledging uncertainty throughout the scientific process.
  7. Use prior knowledge from statistics courses (STAT\*2040 or STAT\*2230) to summarize, compare and communicate patterns in collected data and evaluate the quality of evidence.
  8. Practice logic- and evidence-based approaches to reach defensible conclusions.
  9. **Constructively revise your writing based on feedback from your instructors.**
  10. Communicate science effectively by writing about your original research contribution. Practice writing 'with the reader in mind', including mastery of structural and grammatical tools to effectively communicate the rationale and importance of your study, and the implications of your findings.
  11. Effectively work with group members to design and complete a research project.
  12. Implement best practices for research data management.
  13. Reflect on indigenous understandings of traditional ecological knowledge
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## 5 Teaching and Learning Activities

### Learning Methods

Biol\*3010 students will be immersed in performing and communicating original ecological research in small groups with their peers. In these groups, students will collaboratively develop hypotheses and carry out ecological studies in the Arboretum. There are no traditional lectures or labs (i.e., there is no real distinction between what we do during Tuesday/Thursday and Wednesday periods). Students can expect up to 6 contact hours per week with faculty and/or teaching assistants, and to invest a total of 15 hours per week designing, conducting, and writing up research projects. Biol\*3010 class time will be devoted to discussions and exercises supporting critical thinking, problem solving, and writing skills.

In addition, our goal is to create a learning environment that supports a diversity of thoughts, perspectives, and identities. We view the diversity that each of you brings to Biol\*3010 as the key to creating smarter and more creative teams. If you have questions or concerns about the Biol\*3010 learning environment, please contact any of the instructional team members via email.

### 5.1 Lab

**Thu, Sep 8**

**Topics:** -Introduction to course philosophy (Arboretum)

**Tue, Sep 13**

**Topics:** -Whole-class research problem: Developing hypotheses and predictions (Zoom)

**Wed, Sep 14**

**Topics:** -Whole-class research problem: Introduction to Arboretum, followed by data collection (Arboretum)

**Thu, Sep 15**

**Topics:** -Whole-class research problem: Data analysis and interpretation (Zoom)

**Tue, Sep 20**

**Topics:** -Overview of research proposal and workshop on developing research questions (Zoom)

**Wed, Sep 21**

**Topics:** -Work on developing research questions, hypotheses, and predictions for research proposal (Arboretum)

**Thu, Sep 22**

**Topics:** Brittany Luby (History): Plants as Other-than-Human Relations (Zoom)

**References:** How to Prepare:

Read Basil Johnston, "The Nature of Plants," Ojibway Heritage (1976; Toronto, ON: McClelland & Stewart Ltd., 2005), 32-45.

Read Joe Pitawanakwat, "Relational Vocabularies," Manomin: Sustaining Anishinaabe-Aki, eds. by @manominproject (Vancouver, BC: UBC Press, undergoing review), 4027 words.

Listen to Robin Wall Kimmerer, "The Intelligence of All Kinds of Life," YouTube.com, 23 September 2019, <https://youtu.be/2YuB1iU6DQI>.

### **Tue, Sep 27**

**Topics:** -Work on writing research proposal (Zoom)

**References:** Draft proposals due to Courselink Dropbox by 7:00 PM

### **Wed, Sep 28**

**Topics:** -Workshop on group work: Writing group contracts (Arboretum)

-Draft proposals returned with feedback. Work on revising research questions, hypotheses, and predictions for final proposal (Arboretum)

### **Thu, Sep 29**

**Topics:** Brittany Luby (History): Braiding Knowledge and Plant Senses (Zoom)

\*note: Final proposal and group contract due to the Courselink dropbox by 7:00 PM on Oct 1

**References:** How to Prepare:

Watch Cheryl Bartlett with Elder Alfred Marshall, "Two-Eyed Seeing," YouTube.com, 8 November 2012, [https://youtu.be/\\_CY-iGduw5c](https://youtu.be/_CY-iGduw5c).

Daniel Chamovitz, "What a Plant Feels," *What a Plant Knows: A Field Guide to the Senses* (2012; New York, NY: Scientific American, 2017), 69-90.

Daniel Chamovitz, "What a Plant Remembers," *What a Plant Knows: A Field Guide to the Senses* (2012; New York, NY: Scientific American, 2017), 135-156.

Recommended Activities to Deepen Your Learning:

Watch Stefano Mancuso, "The Roots of Plant Intelligence," TED, 2010,  
[https://www.ted.com/talks/stefano\\_mancuso\\_the\\_roots\\_of\\_plant\\_intelligence](https://www.ted.com/talks/stefano_mancuso_the_roots_of_plant_intelligence)

Watch Suzanne Simard, "How Trees Talk to Each Other," TED Summit, n.d.,  
[https://www.ted.com/talks/suzanne\\_simard\\_how\\_trees\\_talk\\_to\\_each\\_other](https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other)

#### **Tue, Oct 4**

**Topics:** -Workshop on data management (Zoom)

**References:** In preparation for workshop, read Broman and Woo (2018; available on Courselink).

#### **Wed, Oct 5**

**Topics:** Final proposals returned with feedback. Work on data collection (Arboretum).

#### **Thu, Oct 6**

**Topics:** -Workshop on writing an introduction (Zoom).

**References:** In preparation for workshop, read pp. 123-125 (Section 8.7) of Hofmann.

**Tue, Oct 11**

**Topics:** Fall Study Break Day, No Class

**Wed, Oct 12**

**Topics:** -Work on data collection (Arboretum)

**Thu, Oct 13**

**Topics:** -Workshop on fundamentals of scientific writing: Style (Zoom)

**References:** In preparation for workshop, read pp. 9 (Section 1.5) and 11-29 (Chapter 2) of Hofmann.

First data submission due to the Courselink Dropbox by 7:00 PM.

**Tue, Oct 18**

**Topics:** -Workshop on groupwork: Mid-semester check-in, Writing an authorship statement (Zoom)

Introduction due to Courselink Dropbox by 7:00 PM

**Wed, Oct 19**

**Topics:** -Data collection (Arboretum)

**Thu, Oct 20**

**Topics:** -Workshop on writing a methods section (Zoom)

**References:** In preparation for workshop, read pp. 126-129 (Section 8.8) of Hofmann.

**Tue, Oct 25**



**Topics:** -Workshop on fundamentals of scientific writing:  
Composition (Zoom)

**References:** In preparation for workshop, read pp. 30-45 (Chapter 3)  
of Hofmann.

**Wed, Oct 26**

**Topics:** -Data collection (Arboretum)

**Thu, Oct 27**

**Topics:** -Introduction section returned with whole-class  
feedback, plus workshop on revising your writing  
(Zoom)

**References:** In preparation for this workshop, read pp. 171-  
175 (Sections 10.2-10.4) of Hofmann.

**Tue, Nov 1**

**Topics:** -Work on writing methods section (Zoom)

**References:** Methods section due to the Courselink Dropbox by 7:00  
PM.

**Wed, Nov 2**

**Topics:** -Data collection (Arboretum)

**Thu, Nov 3**

**Topics:** -Finish data collection (Arboretum)

**References:** Second data submission due to Courselink Dropbox by  
7:00 PM

**Tue, Nov 8**

**Topics:** -Methods section returned with whole-class feedback (Zoom)

-Data analysis and presentation workshop (Zoom)

**References:** In preparation for workshop, read pp. 73-81 (Sections 5.4-5.5) and 58-60 (Section 4.6) of Hofmann.

**Wed, Nov 9**

**Topics:** -Data analysis and presentation workshop (Zoom)

**References:** In preparation for workshop, read pp. 73-81 (Sections 5.4-5.5) and 58-60 (Section 4.6) of Hofmann

**Thu, Nov 10**

**Topics:** -Workshop on writing a results section (Zoom)

**References:** In preparation for the workshop read pp. 130-132 (Section 8.9) of Hofmann.

**Tue, Nov 15**

**Topics:** -Work on data analysis and writing results section (Zoom)

**Wed, Nov 16**

**Topics:** -Work on data analysis and writing results section (Zoom)

**Thu, Nov 17**

**Topics:** -Work on writing results section (Zoom)

**References:** Results section due to Courselink Dropbox by 7:00 PM

**Tue, Nov 22**

**Topics:** -Workshop on writing a discussion section (Zoom)

**References:** In preparation for workshop, read pp. 133-136 (Section 8.10) of Hofmann.

**Wed, Nov 23**

**Topics:** -Work on writing discussion section (Zoom)

**Thu, Nov 24**

**Topics:** -Results section returned with whole-class feedback, plus workshop on writing a self-reflection (Zoom)

**Tue, Nov 29**

**Topics:** -Work on writing final paper (Zoom)

**Wed, Nov 30**

**Topics:** -Brittany Luby (History) - Location TBA

**Thu, Dec 1**

**Topics:** -Work on writing final paper (Zoom)

## 5.2 Important Dates

September 8: First class

September 27: Group draft proposal due

October 1: Group contracts due

October 1: Group final proposal due

October 13: Group data spreadsheet #1 due

October 18: Individual introduction due

November 1: Group methods due

November 3: Group data spreadsheet #2 due

November 17: Group results due

December 2: Individual final research paper due

December 5: Individual self-reflection due

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## 6 Assessments

### 6.1 Assessment Details

**Draft proposal (Group) (4%)**

**Due:** Tue, Sep 27, 7:00 PM

Learning Outcome(s) Addressed: 1, 2, 3, 4, 5, 6, 11

**Group contract (Group) (1%)**

**Due:** Sat, Oct 1, 7:00 PM

Learning Outcome Addressed: 11

**Final proposal (Group) (6%)**

**Due:** Sat, Oct 1, 7:00 PM

Learning Outcome(s) Addressed: 1, 2, 3, 4, 5, 6, 11

**Submission of data spreadsheets #1 (Group) (2%)**

**Date:** Thu, Oct 13, 7:00 PM

Learning Outcome(s) Addressed: 11, 12

**Introduction (Individual) (10%)**

**Due:** Tue, Oct 18, 7:00 PM

Learning Outcome(s) Addressed: 1, 3, 4, 5, 9, 10

**Methods (Group) (15%)**

**Due:** Tue, Nov 1, 7:00 PM

Learning Outcome(s) Addressed: 2, 5, 6, 9, 10, 11

**Submission of data spreadsheets #2 (Group) (2%)**

**Date:** Thu, Nov 3, 7:00 PM  
Learning Outcome(s) Addressed: 11, 12

**Results (Group) (15%)**

**Due:** Thu, Nov 17, 7:00 PM  
Learning Outcome(s) Addressed: 3, 6, 7, 9, 10, 11

**Final Research Report (Individual) (40%)**

**Due:** Fri, Dec 2, 7:00 PM  
Learning Outcome(s) Addressed: 3, 5, 6, 7, 8, 9, 10

**End-of-semester self-reflection (Individual) (5%)**

**Due:** Mon, Dec 5, 7:00 PM  
Learning Outcome(s) Addressed: 13

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## 7 Course Statements

### 7.1 Inclement weather policy

Many of our class meetings will be held in the University of Guelph Arboretum. Unless there are thunderstorms or other severe weather, classes scheduled for the Arboretum will be held outdoors, so please dress appropriately. Remember that field and fashion generally do not mix! If class is moved indoors because of weather, we will both post a notification in the Announcements section of Courselink and email a notification to your uoguelph.ca address.

### 7.2 Academic Calendar

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

### 7.3 Policy on Late Submissions

Unless you have received an extension from the instructors due to illness (including quarantine) or compassionate circumstances, all items are due on the dates shown by the specified time. Late submissions will be accepted, but will be penalized 10% for each 24 hour period late, including weekends.

### 7.4 Course Evaluation information (from the CCS website)

CCS now provides the U of G Online Course Evaluation System in a secure, online environment. End of semester course and instructor evaluations provide students the opportunity to have their comments and opinions form part of the information used by Promotion and Tenure Committees in evaluating the faculty member's contributions in the area of teaching.

Course evaluations are now conducted through this web site:  
[https://courseeval.uoguelph.ca/CEVAL\\_LOGIN.php](https://courseeval.uoguelph.ca/CEVAL_LOGIN.php). Login with your central email account

login ID and password: Occasionally course evaluations are conducted in class. Instructors do NOT receive evaluations until the end of exam period. Furthermore, evaluations are anonymous, unless you specifically indicate you want to acknowledge your comments

## 7.5 Academic Misconduct & Plagiarism

The Academic Misconduct Policy is detailed in the Undergraduate Calendar applies to this course: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>. To familiarize yourself with expectations, we encourage you to take the academic integrity tutorial, which can be found at: <https://academicintegrity.uoguelph.ca/>.

University policy defines plagiarism as “...stealing and lying about it afterwards. It means using others’ work and misrepresenting that work as your own without giving the author credit” (<https://academicintegrity.uoguelph.ca/plagiarism>). Doing shared work will help you learn, but you must not engage in plagiarism when submitting written assignments. In Biol\*3010, data collection and analysis will be done in groups and we therefore expect that many of you will use the same resources, share ideas, and discuss how to interpret results. You will also draft methods and results sections as a group. However, the introduction and discussion sections of your scientific paper must be done individually. If we detect plagiarism, we will be forced to take disciplinary action under university guidelines.

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 your responsibility to verify the academic integrity of 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 the instructors or a faculty advisor. If in doubt - ASK!

## 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. [B.Sc. Academic Advising](#) or [Program Counsellors](#)

### 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/get-assistance/studying/chemistry-physics-help> and <http://www.lib.uoguelph.ca/get-assistance/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-reg-regchg.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/c08-amisconduct.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-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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