BOT*3710 Plant Diversity and Evolution - DRAFT

Winter 2022
Section(s): C01

Department of Integrative Biology
Credit Weight: 0.50
Version 1.00 - December 09, 2021

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1 Course Details

1.1 Calendar Description

This course integrates fundamental and applied aspects of plant evolution, focusing on the evolutionary history of plants, classification and identification, and hypotheses related to the evolution of plant form and life history. Specific topics include evolutionary process in plants and evolution of physiological, reproductive, behavioural, and morphological traits. Labs will focus on methods and contemporary tools for phylogenetic reconstruction, comparative analyses, identification, and basic morphology/anatomy. This course is especially valuable for students interested in plant or wildlife and environmental management.

Pre-Requisites: 7.50 credits including BIOL*1070

1.2 Course Description

This course will provide an introduction to the identification and interpretation of plant biodiversity. Students will explore the taxonomic diversity of flowering plants and investigate evolutionary hypotheses to explain variation in their reproductive, life history and growth characteristics. The principles and methods of evolutionary biology will form the underlying framework for the course. The course will be of value to students interested in biodiversity, the practical aspects of identifying plants, and understanding the variety of forms and life-styles observed among plants.

1.3 Timetable

- Lectures 1:00–2:20 Tuesday & Thursday, Room TBA
  - (note: some Thursday lecture periods will be used as labs. Please check the schedule below)
- Labs 2:30-5:20 Thursday, SSC 3315

1.4 Final Exam

There will be a take-home final exam.

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2 Instructional Support

2.1 Instructional Support Team

Instructor: Hafiz Maherali
Email: maherali@uoguelph.ca
Telephone: 519-824-4120 ext. 52767
Office: SSC 1472
Office Hours: TBA

Lab Co-ordinator: Carole Ann Lacroix
Email: botcal@uoguelph.ca
Telephone: +1-519-824-4120 x56444
Office: SC1 2507
Office Hours: By appointment

2.2 Teaching Assistants

Teaching Assistant (GTA): TBA TBA

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3 Learning Resources

For lectures: There is no required text. Any assigned readings will be posted to Courselink.

3.1 Required Resources

Field Manual of the Michigan Flora (Lab Manual)

For labs: Field Manual of the Michigan Flora, Voss E.G. & A.A. Reznicek, Cranbrook Institute of Science.

This manual is available in the U of G and Coop Bookstores.

Courselink (Website)

https://courselink.uoguelph.ca
This course will make use of the University of Guelph's course website on D2L (via Courselink). Consequently, you are responsible for all information posted on the Courselink page for BOT*3710. Please check it regularly.

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4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. Recognize the major families of flowering plants in Ontario and their distinguishing morphological/ecological attributes.
2. Identify the major flowering plant families using taxonomic keys.
3. Identify select genera and species using taxonomic keys.
4. Interpret the evolutionary history of plants through an examination of phylogenetic trees.
5. Critically evaluate empirical evidence that tests hypotheses for the evolution of key vegetative, reproductive and genetic attributes of plants.
6. Interpret the patterns and causes of trait evolution in plants using phylogenetic information and comparative analytical software.
7. Effectively work with group members to complete quizzes and assignments.

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5 Teaching and Learning Activities

The course is organized according to the philosophy that we learn best about biodiversity by: 1st, learning to recognize and identify different groups of plants; 2nd, observing character variation within and between these groups and; 3rd, interpreting this diversity by investigating the evolutionary causes of variation through comparative approaches. As a result, the course emphasizes classification and identification in the early stage and evolutionary interpretation in the latter stage.

5.1 Lecture Periods

Lecture periods will be used for (1) team quizzes on the characteristics of the plant families that you are learning to identify in during lab periods and (2) team activities on how to use phylogenetic trees to test hypotheses about flowering plant evolution. Although class materials will be posted on Courselink, they are not a substitute for coming to lecture and participating in class activities.

5.2 Lab Periods

Nine weeks of lab periods will focus on learning the characteristics and associated terminology of some of the most common, important, and interesting families of flowering plants. You will apply this knowledge to use professional taxonomic keys to identify vascular plants. Learning family characteristics, by allowing you to group related species together, makes it much easier to identify plants. The remaining lab periods will focus on designing and collecting data for a final group project using phylogenetic trees to test hypotheses about flowering plant evolution.

Note on teamwork: Throughout the semester, you will be working with a team of 4-5 other students to complete team quizzes during lecture periods, complete team assignments during lecture periods, and complete a final phylogenetic analysis project. We are incorporating teamwork into the class because one of the best ways to learn is to explain

your thinking to others, and because on average teams produce higher-quality work than any one individual does. Further information on how teams will be assembled will be provided in class and via email.

5.3 Tentative Lecture Schedule

Please note that some Thursday lecture periods will be used for labs.

Week	Date	Lecture Topic (Tues, Thurs)	Lab Topic (Thurs)
1	Jan 11	Introduction to class Fill out team questionnaire	
1	Jan 13	No lecture; lab starts at 1 pm in the scheduled lab room	Classification & Identification; Morphology and use of keys: Magnoliaceae, Ranunculaceae
2	Jan 18	Write team contract In-class team assignment #1: Introduction to phylogenetic trees	
2	Jan 20	In-class team quiz on morphology, Magnoliaceae, and Ranunculaceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Caryophyllaceae, Papaveraceae, Brassicaceae
3	Jan 25	In-class team assignment #2: Interpretation of phylogenetic trees	
3	Jan 27	In-class team quiz on	Classification & Identification: Fabaceae,

		Caryophyllaceae, Papaveraceae, and Brassicaceae Lab starts at 1:45 pm in the scheduled lab room	Rosaceae, Apiaceae **PLANT IDENTIFICATION-LAB QUIZ #1**
4	Feb 01	In-class team assignment #3: Using phylogenetic trees to test hypotheses, Example 1	
4	Feb 03	In-class team quiz on Fabaceae, Rosaceae, and Apiaceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Euphorbiaceae, Boraginaceae, Lamiaceae, Onagraceae
5	Feb 08	In-class team assignment #4: Using phylogenetic trees to test hypotheses, Example 2	
5	Feb 10	In-class team quiz on Euphorbiaceae, Boraginaceae, Lamiaceae, and Onagraceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Caprifoliaceae, Apocynaceae, Asteraceae **PLANT IDENTIFICATION-LAB QUIZ #2**
6	Feb 15	In-class team assignment #5: Using phylogenetic trees to test hypotheses,	

		Example 3	
6	Feb 17	In-class team quiz on Caprifoliaceae, Apocynaceae, and Asteraceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Iridaceae, Liliaceae, Juncaceae
WINTER BREAK	Feb 19-27	NO LECTURES	NO LABS
7	Mar 01	In-class team assignment #6: Using phylogenetic trees to test hypotheses, Example 4	
7	Mar 03	In-class team quiz on Iridaceae, Liliaceae, and Juncaceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Cyperaceae, Poaceae,- Part 1 **PLANT IDENTIFICATION-LAB QUIZ #3**
8	Mar 08	In-class team poster assignment	
8	Mar 10	In-class team quiz on Poaceae and Cyperaceae Lab starts at 1:45 pm in the scheduled lab room	Classification & Identification: Poaceae, - Part 2
9	Mar 15	In-class team assignment #7: Poster presentation	
9	Mar 17	No lecture; lab starts	**PLANT IDENTIFICATION – LAB EXAM**

		at 1pm in the scheduled lab room	
10	Mar 22	Final phylogenetic analysis project: Remote lecture via Zoom	
10	Mar 24	No lecture; lab starts at 1 pm	Final phylogenetic analysis project: Team meetings with Prof. Maherali
11	Mar 29	Final phylogenetic analysis project: Drop-in help session with Prof. Maherali	
11	Mar 31	No lecture; lab starts at 1pm	Final phylogenetic analysis project: Team meetings with Prof. Maherali
12	Apr 5	Final phylogenetic analysis project: Drop-in help session with Prof. Maherali	
12	Apr 7	No lecture; lab starts at 1pm	Final phylogenetic analysis project: Drop-in help session

5.4 Important Dates

- January 11 (Tues): First lecture in BOT*3710, 1:00 pm
- January 27 (Thurs): First lab quiz
- February 10 (Thurs): Second lab quiz
- February 19-27 (Sat – Sun): Winter break: No classes
- March 03 (Thurs): Third lab quiz
- March 16 (Thurs): Plant identification – lab exam
- April 08 (Fri): Poster on final phylogenetic analysis project due (by 5:00 PM in Dropbox)
- April 22 (Wed): Final take-home exam due (by 9:00 AM in Dropbox)

6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)	Scheme B (%)	Scheme C (%)
Plant Identification Lab Quiz #1 (Individual Grade)	6	6	0
Plant Identification Lab Quiz #2 (Individual Grade)	6	0	6
Plant Identification Lab Quiz #3 (Individual Grade)	0	6	6
Plant Identification Lab EXAM (Individual Grade)	30	30	30
In-Class Team Quiz #1 through #7 (Mean of individual & group grades; best 5 of 7)	5	5	5
In-Class Team Assignment #1 (Group Grade)	3	3	3
In-Class Team Assignment #2 (Group Grade)	3	3	3
In-Class Team Assignment #3 (Group Grade)	3	3	3
In-Class Team Assignment #4 (Group Grade)	3	3	3
In-Class Team Assignment #5 (Group Grade)	3	3	3
In-Class Team Assignment #6 (Group Grade)	3	3	3
In-Class Team Assignment #7 (Group Grade)	3	3	3
Poster on Final Phylogenetic Analysis Project (Group Grade)	15	15	15
Take-Home Final Exam (Individual Grade)	15	15	15
Self-reflection (Individual Grade)	2	2	2
Total	100	100	100

6.2 Assessment Details

Plant Identification Lab Quiz #1 (Individual Grade) (6%)
Date: Thu, Jan 27
Learning Outcome: 1, 2, 3

- Best 2 of 3
  - 2 X 6% = 12%
- Course Activity:

- Lab, weeks 1-2

Plant Identification Lab Quiz #2 (Individual Grade) (6%)
Date: Thu, Feb 10
Learning Outcome: 1, 2, 3

- Best 2 of 3
  - 2 X 6% = 12%
- Course Activity:
  - Lab, weeks 1-4

Plant Identification Lab Quiz #3 (Individual Grade) (6%)
Date: Thu, Mar 3
Learning Outcome: 1, 2, 3

- Best 2 of 3
  - 2 X 6% = 12%
- Course Activity:
  - Lab, weeks 1-7

Plant Identification Lab EXAM (Individual Grade) (30%)
Date: Wed, Mar 16
Learning Outcome: 1, 2, 3

- Course Activity:
  - Lab, weeks 1-9

In-Class Team Quiz #1 (Mean of individual & group grades) (1%)
Date: Thu, Jan 20
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Quiz #2 (Mean of individual & group grades) (1%)
Date: Thu, Jan 27
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Quiz #3 (Mean of individual & group grades) (1%)
Date: Thu, Feb 3
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Quiz #4 (Mean of individual & group grades) (1%)
Date: Thu, Feb 10
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Quiz #5 (Mean of individual & group grades) (1%)
Date: Thu, Feb 17
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Quiz #6 (Mean of individual & group grades) (0%)
Date: Thu, Mar 3
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:

- Lecture, weeks 2-8

In-Class Team Quiz #7 (Mean of individual & group grades) (0%)
Date: Thu, Mar 10
Learning Outcome: 1, 2, 3, 7

- Best 5 of 7
  - 5 X 1% = 5%
- Course Activity:
  - Lecture, weeks 2-8

In-Class Team Assignment #1 (Group Grade) (3%)
Date: Tue, Jan 18
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
  - Lecture, weeks 2-9

In-Class Team Assignment #2 (Group Grade) (3%)
Date: Tue, Jan 25
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
  - Lecture, weeks 2-9

In-Class Team Assignment #3 (Group Grade) (3%)
Date: Tue, Feb 1
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
  - Lecture, weeks 2-9

In-Class Team Assignment #4 (Group Grade) (3%)
Date: Tue, Feb 8
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%

- Course Activity:
    - Lecture, weeks 2-9

In-Class Team Assignment #5 (Group Grade) (3%)
Date: Tue, Feb 15
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
    - Lecture, weeks 2-9

In-Class Team Assignment #6 (Group Grade) (3%)
Date: Tue, Mar 1
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
    - Lecture, weeks 2-9

In-Class Team Assignment #7 (Group Grade) (3%)
Date: March 8 & 15
Learning Outcome: 4, 5, 6, 7

- 7 X 3% = 21%
- Course Activity:
    - Lecture, weeks 2-9

Poster on Final Phylogenetic Analysis Project (Group Grade) (15%)
Due: Final Version Due April 08 by 5:00 PM
Learning Outcome: 4, 5, 6, 7

- Course Activity:
    - Lecture, weeks 10-12
    - Lab, weeks 10-12

Self-reflection on Your Group's Performance (Individual Grade) (2%)
Date: Due April 16 by 5:00 PM
Learning Outcome: 7

- Course Activity:

- Lecture, weeks 1-12
- Lab, weeks 10-12

Take-Home Final Exam (Individual Grade) (15%)
Due: Due April 22 by 9:00 AM
Learning Outcome: 4, 5, 6

- Course Activity:
  - Lecture, weeks 1-12
  - Lab, weeks 10-12

6.3 Description of Assessments

- Plant identification lab quizzes and exam
  - Your ability to identify plant specimens using a professional key will be assessed through three lab quizzes and a lab exam.
- In-class team quizzes
  - Research indicates that frequent, low-stakes quizzing improves performance by making you aware of what you do not know well in advance of the exam. Consequently, prior to seven of the plant ID labs, you will complete a quiz on plant morphology and family characteristics. You will first complete the quiz on your own, and then complete the same quiz with your team.
- In-class team assignments
  - In seven of the lecture periods, you will work with your team members on assignments. Six of these assignments are designed to help you learn about phylogenetic trees and how they can be used to test hypotheses about flowering plant evolution. One assignment is designed to help you learn how to do a poster presentation.
- Poster on final phylogenetic analysis project
  - During the last 3 weeks of labs and lectures, you will work with your team on a final phylogenetic analysis project. Your team will be expected to choose a question, identify a group of plants to use for the study, collect data from the literature, analyze the data using the methods learned through the in-class team assignments, and complete a poster describing the results.

- Self-reflection on your group's performance
  - You will reflect on your group's performance over the semester.
- Take-home final exam
  - For the take-home final exam, you will complete a poster describing the results of the analyses from take-home assignment 3, 4, 5, or 6.

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7 Course Statements

7.1 Grading

If you are absent from classes during the semester, you will be expected to make up missed lecture and laboratory material on your own. An assignment handed in late will be penalized 5% for every day that it is late.

7.2 Policy for Re-Grading of Exams and Assignments

Students who wish to have their exam or assignments re-graded must submit their exam or assignment within 1 week of the return of the exam or assignment. The entire exam or assignment will be re-graded so the mark may go up, down or remain unchanged.

7.3 We Expect You To:

- Take responsibility for your own learning
- Prepare for and attend class and lab regularly
- Participate enthusiastically in class activities and labs
- Set high standards for your performance in the course
- Treat others in the course respectfully
- Turn in work on time
- Stay informed about course information distributed online
- Maintain academic integrity

7.4 You Can Expect Us To:

- Help you become a better learner
- Create interesting and challenging ways for you to learn about plant diversity and evolution
- Set high standards for the class
- Treat you with fairness and respect

- Promptly respond to your questions and concerns about the course
- Take an interest in your development as a botanist
- Be excited and knowledgeable about the course material
- Grade and hand back your work promptly

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-campuses/how-u-of-g-is-preparing-for-your-safe-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.
