



MICR*2420 Introduction to Microbiology

W22

Winter 2022

Section(s): C01

Department of Molecular and Cellular Biology

Credit Weight: 0.50

Version 1.00 - January 10, 2022

1 Course Details

1.1 Calendar Description

This course will introduce students to the diversity of microorganisms, including, bacteria, viruses, and fungi, and the impact of microbes on everyday life. The interactions of microorganisms with the biotic and abiotic worlds will be discussed. Topics will include the roles of microorganisms in host-pathogen interactions in disease, the beneficial aspects of microorganisms in bioremediation and food production, and their application in biotechnology.

Pre-Requisites:

4.00 credits including (1 of BIOL*1070, BIOL*1080, BIOL*1090, CHEM*1040)

Restrictions:

This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.

1.2 Course Description

This course will introduce students to the diversity of microorganisms, including, bacteria, viruses, and fungi, and the impact of microbes on everyday life. The interactions of microorganisms with the biotic and abiotic worlds will be discussed. Topics will include the roles of microorganisms in host-pathogen interactions in disease, the beneficial aspects of microorganisms in bioremediation and food production, and their application in biotechnology.

MICR2420 is a restricted course in Winter 2022.

Students that wish to register for MICR2420 in Winter 2022 but are not permitted to self-enroll via Web Advisor need to contact the BSc academic counsellors (bscweb@uoguelph.ca call 519-824-4120 Ext. 53788) and inquire about a waiting list.

Please do not contact a member of the MICR2420 teaching team, the counsellors will handle enrollment.

1.3 Timetable

Lecture material will be recorded and provided for students.

Monday, Wednesday 10:30-11:20 a.m. - Asynchronous

Friday 10:30-11:20 a.m. - Synchronous

An optional Help/Discussion session will be held during scheduled time from 10:30 - 11:20 a.m. (Friday) as needed. Topics discussed in the session will be posted online.

Labs are in SSC4102 from 2:30 - 4:20 PM on Mon and Tues. Please see WebAdvisor for your scheduled lab time. Please note that labs will begin in a remote format. Announcements will be provided in CourseLink with the latest information on the return to campus policy.

Please Note: All times reported are reported in Eastern Time (Guelph, Ontario, Canada).

1.4 Final Exam

Take home final exam

Take Home Release Due Date and Time: April 11, 2022, 9:00 a.m. ET

Take Home Submission Due Date and Time: April 14, 2022, 9:00 a.m. ET

2 Instructional Support

2.1 Instructional Support Team

Instructor: Dr. Charlotte de Araujo (she/her)
Email: cdearauj@uoguelph.ca
Office: Virtual
Office Hours: Optional Help/Discussion session will be held during scheduled time from 10:30 - 11:20 a.m. (Friday).

Additional details will be posted on CourseLink.

Lab Co-ordinator: Catrien Bouwman
Email: cbouwman@uoguelph.ca
Telephone: +1-519-824-4120 x52533
Office: SCC 3504 and/or Virtual
Office Hours: Office hours and format will be posted on CourseLink. You can also reach me via email (cbouwman@uoguelph.ca) with regards to any lab issues.

3 Learning Resources

3.1 Required Resources

Computer with internet access (Equipment)

There is a CourseLink website set up for this course. Students can access course materials including animations from the textbook, lecture slides, check grades, write on-line quizzes, post questions, and see other students' replies. Students are encouraged to post links to news items on microbes relevant to the course. Note: instructors may post lecture slides on CourseLink. These slides provide basic outlines (they are NOT notes) of the topic and selected diagrams from the text. Many important points & concepts that are not on the slides will be discussed during the lectures. The course website will be used extensively and will include all relevant course materials, discussion boards, links for additional readings & a course calendar.

A laptop will be required for face-to-face labs.

Microbiology- An Evolving Science (5th edition) (Textbook)

<https://wwnorton.com/books/9780393419962>

Microbiology - An Evolving Science

Fifth Edition

by Joan L Slonczewski (Author, Kenyon College), John W Foster (Author, University of

South Alabama), Erik R Zinser

Online subscriptions and hard copies are available through the Campus Bookstore.

Not required, but strongly recommended.

Zoom (Software)

We will be using Zoom (<https://zoom.us>) in this course.

CourseLink (Website)

CourseLink (<https://courselink.uoguelph.ca>) powered by D2L's Brightspace is the course website and will act as your classroom. It is recommended that you log in to your course website every day to check for announcements, access course materials, and review the content.

3.2 Recommended Resources

High speed internet connection (Equipment)

Although high speed connection to the internet is not required, it is highly recommended so that a better online experience with the tools, videos, and other materials used in the course can be achieved.

3.3 Campus Resources

The 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>

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

* make an appointment with a program counsellor in your degree program.

<http://www.bsc.uoguelph.ca/index.shtml> or

<https://www.uoguelph.ca/uaic/programcounsellors>

If you are struggling to succeed academically:

* 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. <https://www.lib.uoguelph.ca/get-assistance>

If you are struggling with personal or health issues:

The Department of Student Wellness provides support through Accessibility Services, Counselling Services, Health Services, Health & Performance Centre and Wellness Education & Promotion: <https://wellness.uoguelph.ca/sws/>

* 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.uoguelph.ca/~ksomers/>

If you have a documented disability or think you may have a disability:

* Student Accessibility Services (SAS) can provide services and support for students with a documented learning or physical disability. They can also provide information about how to be tested for a learning disability. For more information, including how to register with the centre please see: <https://www.uoguelph.ca/accessibility>

4 Learning Outcomes

Course Goals

This course serves as the foundation of the Microbiology program. It is designed to capture your interest by introducing you to the relevance of Microbiology in everyday life, discussing the global impact of microbes, and by providing an opportunity for hands-on experience with microbes in a laboratory setting. The course learning outcomes and the specific conceptual details associated with those outcomes (in bullet point) are listed below. Specific LOs and concepts will be identified at the beginning of each lecture and collectively will be assessed through the various graded components of the course. The list may be updated periodically during the semester, through deletion or addition, depending upon the pace and depth of coverage of a given topic. Course readings, class discussions and group work will also further develop the broader MCB Program Learning Outcomes (MCB Learning Outcomes) and the University of Guelph learning outcomes (UofG Learning Outcomes).

4.1 Course Learning Outcomes

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

1. By the end of the course, successful students will
 - Appreciate the roles of cells as the fundamental unit of life and the essential roles of the microbes in the biosphere, biotechnology, the food industry and health and disease
2. By the end of the course, successful students will
 - Demonstrate an understanding of how cells, organelles and all major metabolic pathways evolved from early prokaryotic cells, the differences between the cellular microbes and the viruses and how the evolutionary history and relatedness of cellular life is depicted in the Universal tree of Life

3. By the end of the course, successful students will

- Demonstrate an understanding that the properties and metabolic diversity among eukaryotes, prokaryotes and viruses are a function of the chemical structures of their constituent macromolecules and how their evolutionary history relates to the greater metabolic diversity of the prokaryotes compared to the eukaryotes

4. By the end of the course, successful students will

- Demonstrate an understanding of the interactions of microbes with their environment, and specifically the macromolecular interactions that underlie cellular motility, biofilm formation, quorum sensing, antimicrobial therapy, immune recognition and response, and pathogenesis

5. By the end of the course, successful students will

- Demonstrate an understanding that mutations, recombination and horizontal gene transfer have selected for a huge diversity of microorganisms and the various factors that affect the frequency of genotypes and phenotypes in a population over time

6. By the end of the course, successful students will

- demonstrate an understanding of the scientific method, by describing or assessing the appropriate method of visualization and identification of example microbes, performing experiments using appropriate safety precautions, and microbiological techniques for the isolation, identification and enumeration of representative groups of bacteria, archaea and fungi, using appropriate and accurate mathematical calculations for microbial enumeration and successfully interpreting and communicating scientific data

5 Teaching and Learning Activities

This course will be run using CourseLink.

These **lectures** are approximate dates and are subject to minor alteration.

Labs are subject to minor change.

5.1 Lecture

Topics:

The approximate textbook sections are given as a reference to enhance your understanding of the lecture content.

The course schedule is a tentative list of the topics covered in. Note that this represents a tentative guide only; this is not a complete or exhaustive list of topics covered and is subject to change, both in the topics covered as well as the schedule of the topics.

Lecture	General Topic	Approximate Textbook Reference
1-3	Introduction.	Ch 1
	Relevance of Microbes in society, health, industry, tree of life	
4-7	Microscopy	Ch 2
	Specific characteristics of bacteria, archaea. Comparison to eukaryotic microbes.	Ch 3-5
8-9	Viruses, bacteriophages. Size/structure, unique properties, how they grow	Ch 6

5.2 Lab

10-13	Applied microbiology: bioremediation, biocontrol, vaccines, antibiotics & resistance	Ch. 10, Ch. 15, Sec. 19.5
14-18	Microbial Associations – biofilms, quorum sensing, symbioses, human microflora	Sec. 4.1, 4.2/12.7, 10.2
18-23	Microbes in health and disease - innate vs. acquired immunity, Koch's postulates, characteristics of a pathogen, select infectious diseases – diagnosis, treatment, control, resistance	Select Sections & subsections from Ch. 16-27

Topics:

Lab demonstrations & technique overview. Students will be required to read the corresponding content in the lab manual

Week Lab Topic**Readings**

- | | | |
|---|--|--------------|
| 1 | Rules & regulations, biosafety; aseptic techniques, streak plate isolation, brightfield microscopy, yeast cellular morphology, Gram's stain. Submit lab report 1. | Lab Report 1 |
| 2 | Culturing microorganisms, preparation of tryptic soy agar (TSA), direct isolation with selective and differential media, enrichment and isolation of <i>Halobacterium</i> , efficacy testing of hand washing & alcohol-based gel disinfection of hands. Submit lab report 2. | Lab Report 2 |
| 3 | Pour plate count, enrichment and isolation of bacteriophage from soil. Submit lab report 3. | Lab Report 3 |

Week	Lab Topic	Readings
4	Bioluminescence of <i>Aliivibrio fischeri</i> , bacterial swimming and swarming motility, complete <i>Halobacterium</i> isolation. Submit lab report 4.	Lab Report 4
5	Complete all observations and submit lab report 5.	Lab Report 5

5.3 Method of Presentation

This course is designed to capture students' attention and interest; as such classroom teaching will be interactive wherever possible, and centered on microbiology as it pertains to everyday life, current affairs and news items. The lab component consists of 4 2-hour labs and will provide hands-on experience as well as demonstrations. Please note that with the remote start to W22, Lab 1 will be online for all students (the former 2-cycle schedule has been suspended until further notice due to the remote start). The current date for resumption of in-person learning is Jan. 24th, but this may be extended. Any changes will be communicated via email and CourseLink Announcements - please check these regularly.

For educational purposes, instructors impose conditions on assignments that may limit students' permission to collaborate with others or to utilize external sources (including, but not limited to, software, data, images, text, etc.). The use of **Chegg and such like websites is not allowed**. Any permitted utilization must be done with proper references. Instructors may use automated tools: such as **TurnItIn** to detect possible cases of plagiarism.

5.4 Important Dates

These will also be identified in the CourseLink calendar.

Monday January 10 - First class

Jan 17 & 18 - Lab 1 online for all Sections.

Feb. 21 - 25 - Reading week– no classes

Apr 8 - Classes conclude – drop deadline

Final exam: Cumulative, Day / Time (TBA) See lab manual for report due dates & mark distribution

6 Assessments

Assessment due dates and times reported in this course outline and in CourseLink are in Eastern Time (Guelph, Ontario, Canada). Please ensure that when completing course assignments that the documents are submitted by the due date and time as indicated in the course schedule.

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Assignments	10
Midterm	30
Lab	20
Final Exam	40
Total	100

6.2 Assessment Details

Midterm (30%)

Date: Fri, Feb 18

Please note there will not be Make-up midterms; it will not be possible to reschedule the midterm because of illness or any other absence. The midterm weighting will be simply redistributed.

Assignments (10%)

Date: Ongoing, Due March 11, 2022, Online
See CourseLink for more details.

Lab (20%)

Lab reports (online data sheets) are worth a total of 10%. 5% pre-lab online quizzes; 5% in-lab quizzes.

Final Exam (Comprehensive) (40%)

Date: Mon, Apr 11, 9:00 AM - Thu, Apr 14, 9:00 AM

The Final examination is compulsory and will be comprehensive and cover ALL lecture

materials BEFORE & AFTER the midterm. The final exam will cover lecture material and not specific lab content, although some content overlaps lectures and labs.

7 Course Statements

7.1 Instructor Policies

Grading

1. Assignments/reports - are to typed and submitted online after each lab (as indicated in the instructions). The time for submission of other assignments will be posted for each report under Lab Info tab.. For ALL assignments/reports, deductions for late submissions will be 10% per day (the weekend will cost a 20% grade reduction), up to a 30% deduction. After 3 days, the submission will not be accepted.

2. Quizzes - Pre-Lab and Lab quizzes to be completed as per posted dates & instructions. Please contact the course coordinator Catrien Bouwman (cbouwman@uoguelph.ca) if you have valid grounds for being unable to complete one or more of these. See above for information on academic consideration.

Student responsibilities

1. Respectfulness: students are expected to treat classmates, the instructor and teaching staff with respect at all times.

2. Laboratory participation and completion of laboratory components is mandatory. If you cannot complete the online lab report or quizzes by the posted date please e-mail about making up the missed reports and quizzes.

3. Laboratory preparedness: you must have read the relevant assigned laboratory exercise in advance of the lab, and completed the associated online pre-lab quiz, prior to completing the report.

7.2 Submission of Assignments to Dropbox

Assessments for this course should be submitted electronically via the online Dropbox tool. When submitting your file using the Dropbox tool, do not leave the page until your file has successfully uploaded. To verify that your submission was complete, you can view the submission history immediately after the upload to see which files uploaded successfully. The system will also email you a receipt. Save this email receipt as proof of submission. Be sure to keep a back-up copy of all of your files in the event that they are lost in transition. In order to avoid any last-minute computer problems, your instructor strongly recommend you save your files to a cloud-based file storage (e.g., Google Docs), or send to your email account, so that should something happen to your computer, the file could still be submitted on time or re-submitted.

It is your responsibility to submit your documents on time as specified on the Schedule. Be sure to check the technical requirements and make sure you have the proper computer, that you have a supported browser, and that you have reliable Internet access. Remember that technical difficulty is not an excuse not to turn in your assignment on time. Don't wait until the last minute as you may get behind in your work.

If, for some reason, you have a technical difficulty when submitting your file electronically, please contact your instructor or CourseLink Support prior to the deadline.

7.3 Course Email Policy

All communications must contain an appropriate subject line. The body of the email must contain your name, student number and course number. The email must have text with complete sentences, correct spelling, and proper grammar. Overall, it should have a professional tone. Failure to have any of the aforementioned criteria may result in the instructor not responding to the message. The instructor will attempt to respond to emails within 48-72 hours, not including weekends/holidays. Note, non-uoguelph emails may not be addressed.

Student inquiries will not be answered on nights, weekends, or holidays. In addition, because of the sheer volume of e-mails your instructor receives, e-mail inquiries for which the answer is easily available by checking the lab manual, course outline, or other information on the CourseLink site will not be answered. Please note that course related issues will not be acknowledged/resolved by phone.

7.4 Netiquette Expectations

For this course the same protections, expectations, guidelines, and regulations used in face-to-face settings apply, plus other policies and considerations that come into play specifically because these courses are online. Inappropriate online behaviour will not be tolerated.

Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students;
- Using obscene or offensive language online;
- Copying or presenting someone else's work as your own;

- Adapting information from the Internet without using proper citations or references;
- Buying or selling term papers or assignments;
- Posting or selling course materials to course notes websites;
- Having someone else complete your quiz or completing a quiz for/with another student;
- Stating false claims about lost quiz answers or other assignment submissions;
- Threatening or harassing a student or instructor online;
- Discriminating against fellow students, instructors, and/or TAs;
- Using the course website to promote profit-driven products or services;
- Attempting to compromise the security or functionality of the learning management system;
and
- Sharing your username and password.

7.5 Recorded Course Material

Recordings of classes/course content are solely for the use of the authorized student, and may not be reproduced, edited in whole or part, or transmitted to others, without the express written consent of the instructor.

7.6 Late Assessments

It is your responsibility to submit your assessments on time as specified on the schedule. Remember that technical difficulty is not an excuse not to turn in your assessment on time. Penalties for late assignments are assessed at 10% per day. For example, an assignment due at 10:10 a.m. submitted at 10:11 a.m. is considered one day late and will be assessed a late penalty of 10%. If it is handed in at 10:10 a.m. the following day it is also considered one day late and will be assessed a 10% penalty. Submissions received after 3 days will not be accepted and will receive a grade of zero. Please note, it is the student's responsibility to ensure the assessment file is submitted in the correct format.

8 Department of Molecular and Cellular 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.
