

Biology 1290B—Biology and Microorganisms

Course Outline (Syllabus) Winter 2022

1. Course Information:

Biology 1290B – Biology and Microorganisms

The fundamental principles of biology with emphasis on cell function and the role of microorganisms in public health, sanitation, food, and nutrition. Restricted to Food and Nutrition modules or by permission of the Department of Biology.

Prerequisites:

Grade 12 U (4U) Biology

May not be taken for credit by students registered in any modules offered by either the Faculty of Science or the Schulich School of Medicine and Dentistry.

Course Objectives

- Identify and describe the function of the organelles and structures found in cells
- Compare and contrast eukaryotic and prokaryotic cells
- Understand the basic growth requirements of prokaryotes
- Be able to list the methods of controlling prokaryotic growth
- Be able to list the methods of controlling prokaryotic and eukaryotic pathogens in humans
- Describe the major groups of prokaryotic and eukaryotic pathogens and parasites - describe the basic concepts of public health microbiology regarding municipal water purification and sewage treatment
- List other uses of microbes in Applied Microbiology

2. Instructor Information

Office hours:

Dr. Richard Gardiner

Email: rgardine@uwo.ca

Office: Room 301J North Campus Building

Available by appointment

Communicating with instructor: Use your UWO email account only. I will not respond to emails originating from non-UWO email accounts. **Make sure, at all times, that your UWO account doesn't go over quota as you may not be able to receive any messages or responses from us by email.**

3. Delivery mode

Biology 1290B will be administered and delivered through OWL. You will be able to access this syllabus (course outline) on the course web page, as well as a folder containing lecture files in PDF format, a folder containing answers for completed exams and sample questions, a "My Grades" link that will give your evaluation marks, and an announcement link on which I will post further information as necessary. Students must check OWL (<http://owl.uwo.ca>) and their uwo.ca email on a regular basis. This is the primary method by which information will be disseminated to all students in the class. The missing of critical information due to your failure to check OWL or email cannot be used as a basis for appeal.

Lectures: Tuesday and Thursdays 1:30pm – 2:30pm (NSC Room 1)

Lectures will follow a standard lecture format. Course notes are available on the web page.

Tutorials: Tuesdays 2.30pm – 3:30pm (NCS Room 1)

Tutorials are used to administer tests and give review sessions, and to catch up in lectures in the event of bad weather class cancellations etc.

Important Information:

If you would like to make an audio recording of the lectures/tutorials in this course, you **MUST** ask permission first. According to intellectual property laws, not asking permission constitutes stealing. We do **NOT** permit videotaping or photographing lectures. Course material (i.e. lecture slides, videos, and other supplementary material posted on OWL) is the intellectual property of your instructor and is made available to you for your personal use in this course. Sharing, posting or using this material outside of your personal use in this course is considered an infringement of intellectual property rights.

4. Course Material

Required Course Materials:

Textbook: Fundamentals of Microbiology, J. C. Pommerville, 12 th. Edition
Available at the Bookstore

5. Methods of Evaluation

The overall course grade will be calculated as listed below:

Assignments	60%
Final Exam	40 %

Assignments

Evaluation will be based on grades received on posted assignments. There will be approximately 10 assignments, and are due 1 week-later. Late penalties will apply. for late submissions. Assignments consist of short answer on topics either from the course or related to it. Each assignment will be worth the same all together adding up to 60%.

Attendance

Attendance at Lecture is recommended as all material mentioned in lecture, whether on the slides or not, is testable.

6. Accommodation and Accessibility

Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf

Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are not met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf and for the Student Medical Certificate (SMC), see: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Religious Accommodations

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar: <https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (see http://www.registrar.uwo.ca/examinations/exam_schedule.html). If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See Academic Calendar for details (under [Special Examinations](#)).

7. Academic Policies

The website for Registrar Services is <http://www.registrar.uwo.ca> .

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, the centrally administered e-mail account provided to students will be considered the individual’s official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

Electronic devices (such as smart watches, laptops, phones, graphing/modified calculators) are not permitted in examinations or tests.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf .

Turnitin ***aids*** in identifying plagiarism. All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Tests and examinations in this course may be conducted using the remote proctoring service, such as Proctortrack if course delivery remains online. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link: <https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf> .

8. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on add/drop courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (<http://www.health.uwo.ca/mentalhealth>) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC: <https://westernusc.ca/your-services/>