

MICR200B
Introductory Microbiology II
CRN 22191
Spring 2023

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Territorial Acknowledgement:

We acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

Class time/location: Tues, Wed, Fri, 11:30 – 12:20, ECS 123.

Office Hours and Extra Help: I will **NOT** be holding face-to-face meetings in my office. I will be available online via Zoom (link on Brightspace) on Wednesdays from 1:30pm – 3:30pm. Outside of these times I can be reached via email.

Textbook: Brock's Biology of Microorganisms (16th Edition), M. T. Madigan, K. S. Bender, D. H. Buckley, W. M. Sattley and D. A. Stahl. 2021, Pearson Education Inc

Top Hat: this will be required for the lecture component of the course. More information is available on the course Brightspace site.

Brightspace site: a Brightspace site will be maintained for this course. Some, but not all, lecture notes will be made available. It contains the following sections:

General Information: course outline, discussion forum, contact information, zoom links etc.

Lecture notes: here you will find the pdf notes.

Lecture Recordings: audio recordings of lecture (where available)

Top Hat: information about Top Hat can be found here

Participation Quizzes: six participation quizzes.

Exit Competency Quiz: this is a short online quiz that you must complete before you will be allowed to write the final exam. It will open during the final week of class. It is not open book, and you should not study. It is just to assess the overall cell biology knowledge students have by the end of the course. These exams will not be used in any manner to assess students individually. I will use overall class data to improve my teaching methods.

Midterm / Final exam material: reviews, old exams and the actual exams will be here.

Laboratory: Laboratory manuals are available through the bookstore.

Note: Laboratories start during the week of January 9th. See the schedule in the Lab manual or the Lab Brightspace page for more information. Attendance in the laboratory is mandatory, and a passing mark in the laboratory portion is required in order to obtain credit for the course. Additionally, students that have missed more than two lab sessions will not be able to complete the course and will receive a grade of "N".

Learning Objectives:

The genetics of microbes will be introduced. Students will recognize the importance that genetic processes play in both health and industry.

Interactions between microbes and the environment will be described. Students will be expected to apply their knowledge of genetics, as well as biochemical pathways (from MICR200A) to analyze how microbes not only survive in a particular environment, but how they actually shape their physical environment. Students will evaluate how environmental manipulation by microbes impacts ecosystems. This theme will be carried into humans as a microbial environment. Students will recognize both beneficial and harmful (pathogenic) interactions between human hosts and microbes. Strategies to protect humans from disease will be described. Students will be expected to apply different strategies to protect and promote human health.

Tentative Class Schedule:

topic	text (subject to revision)
1) Genetics and Molecular Biology	6, 7
2) Scientific Method	NA
3) Organisms and Phylogeny	14 – 17
4) Environment	18 – 21
5) Microbial Interactions	22
6) Immunology	24 – 27
7) Bacteria and Human Disease	23, 28 – 33
8) Microbes and Industry	TBA

Grading:

A⁺	90 -100	B⁺	77 - 79	C⁺	65 - 69	F	< 50
A	85 - 89	B	73 - 76	C	60 - 64	N **	< 50
A⁻	80 - 84	B⁻	70 - 72	D	50 - 59		

**** N grades**

Students who have completed the following elements will be considered to have completed the course and will be assigned a final grade:

**** the final exam must be completed in order to complete the course ****

**** students must pass both the lab and lecture portion to complete the course ****

Failure to complete one or more of these elements will result in a grade of "N" regardless of the cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a student's GPA as 0. The maximum percentage that can accompany an N on a student's transcript is 49

Important dates and evaluation:

Date	EVALUATION	Notes
Note: the laboratory component of this course is worth 40% of the overall grade		
week of Friday, January 20	Participation Quiz 1, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade
week of Friday, January 27	Participation Quiz 2, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade
Friday, February 03	10% midterm 1 exam	in class. There are no deferrals. For missed exams, grade will be added to final exam.
week of Friday, February 17	Participation Quiz 3, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade
February 20 – 24	Reading Break	there are no classes this week!
week of Friday, March 03	Participation Quiz 4, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade
Friday, March 10	10% midterm 2 exam	in class. There are no deferrals. For missed exams, grade will be added to final exam.
week of Friday, March 24	Participation Quiz 5, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade

week of Friday, March 31	Participation Quiz 6, 0.25%	<i>open from Monday to Friday via Brightspace, must be completed by 4pm on Friday.</i> Must get at least one question correct to receive participation grade
starting Jan. 23	TopHat in class participation, 3%	<i>≥80% class participation, 3%</i> <i>≥70% class participation, 2%</i> <i>≥60% class participation, 1%</i> <i><60% class participation, 0%</i>
open April 3 - 7	Exit Competency Quiz, 0.5%	<i>closes Friday, April 7 at 4pm, 0.5% mark for participating</i>
TBD	35% final exam	<i>2 hours, set by registrar. In person, CUMULATIVE exam.</i>

- Students are responsible for ensuring that they are properly registered in the course.

DEPARTMENT INFORMATION AND POLICIES

1. The Department of Biochemistry and Microbiology upholds and enforces the University's policies on academic integrity. These policies are described in the current University Calendar. All students are advised to read this section.
2. Cell phones, computers, and other electronic devices must be turned off at all times during live class sessions unless being used for the purpose of connecting and engaging with the class.
3. No recordings of live lectures are permitted without permission of the instructor. However, many courses will be recorded by the instructor for accessibility for students unable to attend. If you do not wish to be recorded, contact your instructor to determine if alternative arrangements can be made.
4. Students and instructors are expected to assess their health daily and avoid campus if they are ill.
5. Course materials, such as notes, problem sheets, quizzes, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.
6. Students are expected to be available for all exams.
7. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking an examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Students must abide by UVic academic regulations and observe standards of scholarly integrity (no plagiarism or cheating). Online exams must be taken individually and not with a friend, classmate, or group, nor can you access notes, course materials, the internet, or other resources without the permission of the instructor. You are prohibited from sharing any information about the exam with others. Use of unauthorized electronic devices and accessing the internet and class material during exams is prohibited unless permission is granted by the instructor. Instructors may use Browser Lockdown Software to block access during classes and exams.
8. Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams or spring term courses will be arranged through Undergraduate

Records and must be written before the end of the summer term as stipulated in the University Calendar.

9. Requests for review/remark of a midterm exam must be made within one week of the exam being returned.
10. The instructor reserves the right to use plagiarism detection software or other platforms to assess the integrity of student work.
11. Supplemental exams or assignments will not be offered to students wishing to upgrade their final mark.
12. Anonymous participation in online classes is not permitted without permission of the instructor.

Important note about COVID-related stress

The current pandemic is placing added stressors- financial, mental, and physical- on everyone. Your wellbeing is of foremost importance. If you are experiencing difficulties coping, the University has resources to help. Please reach out to Counselling Services, the Centre for Academic Communication, or Learning Assistance Program for assistance.

Centre for Accessible Learning

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, approach the Centre for Accessible Learning (CAL) as soon as possible in order to assess your specific needs.

<https://www.uvic.ca/services/cal/index.php>

Course Experience Survey (CES)

We value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to us regarding the course and our teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to your [CES dashboard](#). You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. We will remind you nearer the time but please be thinking about this important activity.