

**MICR200B**  
**Introductory Microbiology II**  
**CRN 22171**  
**Winter 2020 COVID-19 UPDATED**

**Class time/location:** online through CourseSpaces

**Instructor:** Dr. Doug Briant      email: dbriant@uvic.ca  
office: Petch 182

**Office hours:** I will not be meeting students face-to-face

- during Tuesday and Wednesday lecture periods, I will be on the CourseSpaces chat forum
- you can email me with other concerns

**Textbook:** Brock Biology of Microorganisms (15th Edition), M.T. Madigan, J.M. Martinko, K.S. Bender, D.H. Buckley and D.A. Stahl, 2018, Pearson.

**i>clickers:** students will require **their own** i>clicker for in class participation marks in both the lecture and laboratory components. i>clickers are available in the bookstore

**Laboratory:** Laboratory manuals are available in the bookstore

**Note:** Laboratory classes start during the week of January 08. Laboratory attendance 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 laboratory sessions will not be able to complete the course and will receive a grade of "N".

**CourseSpaces site:** a CourseSpaces site will be maintained for this course. Some, but not all, lecture notes will be made available

**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:**

| <b>topic</b>                             | <b>dates</b>                          | <b>text (subject to revision)</b>                          |
|--|---------------------------------------|--|
| 1) <b>Scientific Method</b>              |                                       | NA   |
| 2) <b>Genetics and Molecular Biology</b> |                                       | 4, 6   |
| <b>Midterm 1</b>                         | Jan. 24                               | <del>45</del> 20% of final grade                           |
| 3) <b>Organisms and Phylogeny</b>        |                                       | 14 – 17  |
| 4) <b>Environment</b>                    |                                       | 18 – 21  |
| 5) <b>Microbial Interactions</b>         |                                       | 22   |
| <b>Midterm 2</b>                         | Feb. 25                               | <del>45</del> 20% of final grade                           |
| 6) <b>Immunology</b>                     |                                       | 24 – 26  |
| 7) <b>Bacteria and Human Disease</b>     |                                       | 23, 28 – 32  |
| 8) <b>Microbes and Industry</b>          |                                       | 24   |
| <b>Final Exam</b>                        | TBA<br>Apr. 09, 2:00 –<br>4:00 online | <del>2 hrs, 27%</del> of final grade<br>17% of final grade |

**Important dates and evaluation:**

| <b>EVALUATION</b>   | <b>Date</b>  |
|---|--|
| 45 20% midterm 1 exam   | <b>in class</b><br>Friday, January 24, 2020  |
| 45 20% midterm 2 exam   | <b>in class</b><br>Tuesday, February 25, 2020  |
| 27 17 % final exam  | <b>Must be completed online</b><br><b>Thursday, April 9, between 2:00 and 4:00 pm (exam will be equivalent in length to a one hour in-class exam)</b>  |
| 40% laboratory  | <b>based on laboratory components (reports, quizzes, laboratory exam etc.). See lab manual for grading details</b>   |
| 3% lecture participation (requires i>clicker)<br>includes three weekly online quizzes, due Friday March 20, Friday March 27 and Friday April 03 (each quiz will count as one “clicked” class) | <b>≥80% class participation, 3%</b><br><b>≥70% class participation, 2%</b><br><b>≥60% class participation, 1%</b><br><b>&lt;60% class participation, 0%</b><br><b>* participation is measured by response to i&gt;clicker questions in lecture</b> |

- Students are responsible for ensuring that they are properly registered in the course.
- Students are expected to have met all pre/co-requisites for the course (see above).

### **Grading:**

|                      |          |                      |         |                      |         |             |      |
|----------------------|----------|----------------------|---------|----------------------|---------|-------------|------|
| <b>A<sup>+</sup></b> | 90 - 100 | <b>B<sup>+</sup></b> | 77 - 79 | <b>C<sup>+</sup></b> | 65 - 69 | <b>F</b>    | < 50 |
| <b>A</b>             | 85 - 89  | <b>B</b>             | 73 - 76 | <b>C</b>             | 60 - 64 | <b>N **</b> | < 50 |
| <b>A<sup>-</sup></b> | 80 - 84  | <b>B<sup>-</sup></b> | 70 - 72 | <b>D</b>             | 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:

- ***Both midterm exams and the final exam must be completed to complete the course. Additionally, students must successfully complete both the laboratory and lecture components of the course (see details above).***

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

### **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 unless being used for a purpose relevant to the class. Students having a cell phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.
3. Any recordings of lectures may only be performed with written permission of the instructor, and are for personal use only. The instructor retains copyright to such recordings and all lecture materials provided for the class (electronic and otherwise); these materials must not be shared or reposted on the Internet.
4. 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.
5. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm exam. The deferred exam must be written within five business days of the original exam. 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 a deferred examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). 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 for 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.

6. Multiple choice scan sheets for machine scoring (bubble sheets) are considered the authentic exam answer paper and will be retained by the department for 1 year.
7. Professors may refuse to review/remark exams not written in indelible ink. In addition, requests for review/remark of a midterm exam must be made within one week of the exam being returned. Students are expected to promptly pick up midterm exams after marking has been completed, either in class or from the instructor.
8. Examination papers that have pages removed, or are mutilated will not be marked.
9. I reserve the right to use plagiarism detection software or other platforms to assess the integrity of student work.”

### **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 (<https://www.uvic.ca/services/cal/>) in order to assess your specific needs

### **Course Experience Survey (CES)**

I 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 me regarding the course and my 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. I will remind you nearer the time but please be thinking about this important activity