MICR200B Introductory Microbiology II Winter 2014

<u>Class time/location</u>: Tues, Wed, Fri, 11:30 – 12:20, Engineering and Computer

Sciences, ECS 123

Instructors: Dr. Doug Briant email: dbriant@uvic.ca

office: Petch 227

Dr. Terry Pearson email: parasite@uvic.ca

office: Petch 250

Office hours: to be announced in lecture

<u>Textbook:</u> Prescott's Microbiology (9th Edition), J.M. Willey, L.M. Sherwood and C.J.

Woolverton, 2014, McGraw-Hill.

<u>i>clickers:</u> 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

<u>Note:</u> Laboratory classes start during the week of January 13. Laboratory attendance is mandatory, and a passing mark in the laboratory portion is required in order to obtain credit for the course

<u>Moodle site:</u> a Moodle 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 recognition 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	instructor	dates	text
1)	Genetics and Molecular Biology	Briant	Jan. 7 - 28	13 - 17
2)	Scientific Method	Briant	Jan. 29	NA
	Midterm 1	Briant	Jan. 31	22% of final grade
3)	Prokaryotic and Eukaryotic organisms	Briant	Feb. 4 - 5	20, 25 - 26
4)	Environment	Briant	Feb. 7 – 25	28 - 31
5)	Microbial Interactions	Briant	Feb. 28	32
	Midterm 2	Briant	Mar. 04	22% of final grade
6)	Bacteria and Human Disease	Briant	Mar. 5 – Mar.18	35, 39
7)	Microbes and Industry	Briant	Mar. 19 - 21	41
8)	Immunology	Pearson	Mar. 25 – Apr. 4	TBA
	Final Exam	Briant and Pearson	ТВА	2 hrs, 23% of final grade

Important dates and evaluation:

EVALUATION	Date	
22% midterm 1 exam	<i>in class</i> Friday, January 31, 2014	
22% midterm 2 exam	<i>in class</i> Tuesday, March 04, 2014	
23% final exam	2 hours, set by registrar	
30% laboratory	based on laboratory components (reports, quizzes, laboratory exam etc.). See lab manual for grading details	
3% lecture participation (requires i>clicker)	≥80% class participation, 3% ≥70% class participation, 2% ≥60% class participation, 1% <60% class participation, 0% * participation is measured by response to i>clicker questions in lecture	

• 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).	

Conversion of marks to final letter grades:

*** PLEASE NOTE CHANGES TO THE GRADING SCALE ***

The total mark, calculated from the marks on all of the exams according to the weighting scheme above, will be converted to a percentage and then to a letter grade in the following way:

Passing Grades	Grade Point Value	Percentage for Instructor Use Only *	Description
A+ A A-	9 8 7	90 – 100 85 – 89 80 – 84	Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ B B-	6 5 4	77 – 79 73 – 76 70 – 72	Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ C	3 2	65 – 69 60 – 64	Satisfactory, or minimally satisfactory. These grades indicate a satisfactory performance and knowledge of the subject matter.
D	1	50 – 59	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49	Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental.
N	0	0-49	Did not write examination or complete course requirements by the end of term or session; no supplemental. Failure to complete one or more components of the course evaluation will result in a grade of "N" regardless of the cumulative percentage on other components of the course. An N is a failing grade, and it factors into a student's GPA as O. 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 plagiarism and cheating. 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. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for <u>midterm</u> examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm 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 <u>final</u> 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.
- 5. Scan sheets for multiple choice exams (bubble sheets) will not be made available for review. Therefore, in addition to filling in answers on the scan sheet, students should also circle their answers in ink on their exam.
- 6. Professors may refuse to review/remark exams not written in 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.
- 7. Examination papers that have pages removed, or are mutilated will not be marked.