MICR302

s GPA as 0. The maximum percentage that can accompany

Tentative Class Schedule:

	topic	***comments***
1	***Introduction***	
2	***DNA***	
	a) gene structure and expression	comparison between prokaryotic and eukaryotic systems
3	***RNA***	
	a) structure and regulation	mRNA stability, riboswitches
	b) CRISPR	RNA silencing in prokaryotes, gene editing
4	***Protein***	
	a) two component systems	introduction to prokaryotic protein signalling
	b) protein splicing	inteins and exteins, applications
	c) translational surveillance	identification and destruction of aberrant proteins in prokaryotes
5	***Environment***	
	a) heat shock	role of sigma factors, chaperones and proteases
	b) envelope stress	antisigma factors
	c) stationary phase	S
	d) stringent response	ppGpp
	e) sporulation	role of phosphorylation and sigma factors
6	***Bacterial Signalling***	
	a) environmental and community	chemotaxis and two component systems, quorum sensing and bacterial communication, importance of biofilms
7	***Microbiome***	how does the microbiome impact human health?
8	***Fungal microbes of medical and industrial importance***	a survey of important fungal species that impact human health and disease.
9	***Budding yeast: a model eukaryote***	lifecycle, examples of conserved signal transduction pathways, advanced molecular, genetic and proteomic techniques.
10	***Systems and synthetic biology***	how budding yeast tools enable high-throughput genomic and proteomic interrogation of biology

DEPARTMENT INFORMATION AND POLICIES

1. The Department of Biochemistry and Microbiology upholds and enforces the 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 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.

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.