BIOLOGY 150B – MODERN BIOLOGY

Department of Biology, University of Victoria Spring 2018

Course Description

An introduction to biological science, emphasizing cellular and physiological processes. Topics include principles of genetics, cell biology, plant physiology and animal physiology.

Lecture Meetings

A01 (CRN 20267): TWF 9:30 – 10:20 am, ECS 123 A02 (CRN 20268): TWF 1:30 – 2:20 pm, ECS 125

Instructors

Rossi Marx, Petch 105, email: <u>zoology@uvic.ca</u>. Office hours: group study sessions and by appointment. Dr. Marx will also be serving as course coordinator, so if you have any course business or other issues, she is the person to see.

Kim Curry, email: <u>cellbiol@uvic.ca</u>. Office hours by appointment.

If you send an email to either one of us, please put "Biology 150B" in the message line.

Weekly group study sessions: Fridays 4:00 pm – 5:50 pm in Bob Wright Centre B150, except for February 2: BWC A104 and March 9: ECS 125.

We love biology, have had a lifelong involvement with it, and would like to share with you our endless fascination and excitement of the scientific study of life.

Required Text

Campbell Biology – Concepts and Connections, Canadian edition. Available in the bookstore. We do not recommend any other edition of this text or any other text. This is the same text that was used in Biology 150A. You will not need digital access to the publisher's website.

Course Website

Biology 150B has a CourseSpaces website. You will find there lecture notes and notices, marks, and links.

Please be aware that the lecture notes are for personal use only and must not be published, distributed, or sold.

Class Conduct

Most people come to class with a laptop and a cell phone. Under no circumstances should you use either device for non-course business. Do not text or shop during class time. Do not surf or play games during class time. Studies have shown that such behaviour lowers your grade in the class and lowers the grades of people sitting around you.

Please turn your cell phones and all social media sites OFF during class time.

We also would like to remind students that talking in class about non-course subjects is equally irksome, both to the students sitting nearby and to the instructor. We ask that you be mindful of this and treat the people around you with respect and courtesy. Remember where you are. Your continued presence in this course, after the first day of class, means that you have read and understood these rules and have agreed to abide by them. You risk expulsion from class if you do not.

Evaluation

Midterm 1	(January 31, 2018)	25%
Midterm 2	(March 7, 2018)	25%
Final Exam		50%

Midterms and Final Exam

All exams will have multiple choice questions.

The two midterms will be written during the regular class periods. The final exam will be cumulative, with emphasis on material covered since Midterm 2.

If you must miss a midterm for a valid reason (illness, accident, family affliction, or competition as a UVic athlete), you must notify us as soon as possible and provide suitable documentation for your absence. Your course grade will be computed from the other components of the course, and you will not be penalized.

This term, the final exam period ends for all faculties on Tuesday, April 24; the last exam will be in the evening of that day. Your last exam might be on this date, or it might be sooner – you will know for sure when the final exam schedule is drawn up in February.

Travel plans are not a valid reason for missing a midterm or the final exam, even if a plane ticket has been purchased for you by someone else without your knowledge. Please do not make plans to leave Victoria until all your exams are finished.

No supplemental final exam will be given in this course.

Exam policies

No electronic devices will be permitted during the midterms and final exam.

Please bring your UVic One Card or other photo ID to both midterm exams and the final exam.

During exams, invigilators cannot answer any clarification questions. However, if you believe a question is bad (no correct answer, more than one equally correct answer), please bring your concerns to the attention of an invigilator as soon as possible after the exam.

Deferred final exam

The final exam can be deferred in cases of illness, accident, family affliction, or commitments as a UVic athlete. If you expect to miss the final exam for any of these reasons, please notify Rossi Marx as soon as possible. You must also fill out a Request for Academic Concession (RAC) form, available from Undergraduate Admissions and Records in the University Center or online (http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf).

For those students who need to defer the final exam for any of the reasons listed above and who have submitted a RAC form, the deferred exam will be scheduled by the Examinations office and will be written near the end of July. If this timing presents a hardship to you, alternative exam arrangements can be made. Contact Rossi Marx for more information.

Grading Policy

In determining final grades for the course, our spreadsheet will round your course score to the nearest whole percent. That is the official course grade that will be submitted for you. Under a new policy, instructors at UVic no longer submit letter grades for students.

We cannot change your grade for any reason, except if we have made an error calculating it. There is no extra work that you can do to raise your grade.

Important Dates

In the UVic calendar (https://web.uvic.ca/calendar2017-09/general/dates.html) you will find a fuller list of important dates, but the ones listed below are the ones that will matter to students in Biology 150B.

Monday, January 3 First day of classes

Tuesday, January 16 Last day for 100% reduction of tuition fees for standard courses.

Wednesday, January 19 Last day for adding courses
Wednesday, January 31 Biology 150B Midterm Exam 1

Tuesday, February 6 Last day for 50% reduction in tuition fees for standard courses.

100% of tuition fees will be assessed for courses dropped after this date.

Monday, February 12 – Friday, February 16 Reading break

Wednesday, February 28 Last day for withdrawing from courses without penalty of failure.

Wednesday, March 7 **Biology 150B Midterm Exam 2**

Friday, March 30 Good Friday, no classes Friday, April 6 Last day of classes

Monday, April 9 – Tuesday, April 24 Final exam period

Lecture topics (tentative)

Each instructor will let you know the relevant readings from the text.

Topic

The Living Cell

The essential chemistry of life	Chapter 2
The compounds of cells	Chapter 3
Cellular structure	Chapter 4
Cellular function	Chapter 5
How cells harvest energy	Chapter 6

Plants: Structure and function

Photosynthesis	Chapter 7
Plant structure, growth, and reproduction	Chapter 22
Nutrition in plants	Chapter 23

Structure and function of animals

Unifying concepts of animal structure and function	Chapter 25
Gas exchange	Chapter 27
Circulation and waste removal	Chapter 28
Nervous and Sensory Systems	Chapter 31
Sensation	Chapter 32
Animal locomotion	Chapter 33

Cellular reproduction and genetics

DNA replication, Gene Expression Chapter 10

UVic is committed to promoting, providing and protecting a supportive and safe learning and working environment for all its members.