

# **BIOLOGY 150B – Modern Biology**

If you have access to another university-level general biology text that is reasonably recent (published in the last ten years), you are free to use that.

The text is optional in this course, in the sense that I will not test anything that the text mentions but that I do not. However, I strongly recommend you acquire this text (or another text) and read it. It will help you understand the course better than the lectures alone.

### **Questions and Problems**

At the end of each chapter of lecture notes, I will give you some multiple choice back-of-the-chapter questions from the text for you to do. I will also give you some study questions of my own that will require written answers.

These question sets are not assignments for grading; they are only for your own understanding of the course. To make the best use of them, I recommend you attempt them first, then look up the answer. Don't just read the question and then flip right away to the answer.

I will of course be available for any help you might need on these question sets.

### **Learning Objectives**

This course is concerned more with functional biology than Biology 150A was.

By the end of the course, you should have an understanding of the material and energetic bases of life, from the level of molecules and cells all the way to the entire organism, both plant and animal.

Although this is not a lab course, I hope you will also have an understanding of how functional questions are addressed in biology experimentally.

### **Course Website**

Biology 150B has a Brightspace website. There you will find lecture notes, audio recordings of the lectures, notices, marks and links. You should look on the website before each class and bring the lecture notes posted there. The lecture notes I post are skeletal notes only, and you should expand upon them during class with your own notes, questions, comments and clarifications.

Please be aware that the lecture notes are for personal use only and must not be re,bs00.00000912 0 612 nt,bs00

## **B. Evaluation**

### **Midterms and final exam**

Midterm 1 (Saturday, February 10)	25%
Midterm 2 (Friday, March 15)	25% (not cumulative)
Final Exam (April final exam period)	50% (cumulative)

*Midterm 1* is part of a pilot project the university has undertaken to revamp how midterm exams are conducted. The university has scheduled us for Saturday, February 10, at 9:00 AM, in the CARSA fieldhouse. It will be a multiple choice exam of approximately 30 questions, and will take 45 minutes. **Please clear this day and time of other responsibilities and activities.**

*Midterm 2* will be a more conventional exam. It will be held in class on Friday, March 15, in your regular classroom. It will also be approximately 30 multiple choice questions and will take 45 minutes. It will be non-cumulative – it will not test material that was tested on Midterm 1.

*The final exam* will be multiple choice, and will have approximately 70 questions. It will test material from the entire course, but the emphasis will be on material covered in class since Midterm 2.

Writing at least one of the midterms and the final exam (either at the regular time or deferred) are course requirements. If you do not meet both these requirements, your course grade will be N.

### **Policies for Midterms, Final Exam, and Grading**

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

During the midterms and the final exam, invigilators cannot answer any clarification questions about the exam. 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.

If you must miss a midterm for a valid reason (illness, accident, family affliction, or competition as a UVic athlete), you must notify the course coordinator (Dr. Beaulieu, [gregoryb@uvic.ca](mailto:gregoryb@uvic.ca)) as soon as possible. The university is n



grade submitted for you will be an N. This grade will change when you write the deferred midterm or final.

- If you do not write either midterm (at the regular time or deferred), your course grade will be N.
- If you do not write the final exam (at the regular time or deferred), your course grade will be N.

I cannot change your grade, except if you write a deferred exam or if I have made an error in determining your grade. There is no extra work that you can do to raise your grade. *Please do not ask me to raise your grade because you need or want a higher one.*

### **C. Important Dates**

On the UVic website you will find a fuller list of important dates, but the ones listed below are the ones that will matter to students in this course and to students wishing to add the course.

Monday, January 8	First day of classes for the Winter session, second term
Tuesday, January 9	First day of class for Biology 150B
Sunday, January 21	Last day for 100% reduction in fees for standard courses
Wednesday, January 24	Last day for adding courses that begin in the second term
Wednesday, January 31	Last day for paying second term fees without penalty
Saturday, February 10	<b>Midterm 1, held in the CARSA fieldhouse at 9:00-9:45 AM; all multiple choice; 45 minutes; 25% of course grade</b>
Sunday, February 11	Last day for 50% reduction in tuition fees for standard courses
Monday, February 19 – Friday, February 23	Reading Break; no classes
Thursday, February 29	Last day for withdrawing from full year and second term courses without penalty of failure
Friday, March 15	<b>Midterm 2, held during regular class time in your regular room; all multiple choice; 45 minutes; 25% of course grade</b>
Friday, March 29	Good Friday; university closed
Monday, April 1	Easter Monday; university closed
Friday, April 5	Last day of class for Biology 150B
Monday, April 8	Last day of classes for the Winter session, second term
<b>Thursday, April 11</b>	<b>First day of final examinations period</b>
<b>Friday, April 26</b>	<b>Last day of final examinations period</b>

## **D. Lecture Topics**

The text readings for each topic will be given at the beginning of each chapter of lecture notes.

Biomolecules

Cells

Membranes and transport

Bioenergetics and enzymes

Cellular respiration

Photosynthesis

DNA replication and gene expression

Plant structure and growth

How plants work

Introduction to animal physiology

Thermal physiology

Circulation

Centre for Accessible Learning - *The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.*

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

### **Public Health Policies**

All staff and students are expected to abide by the guidelines provided by the University of Victoria (<https://www.uvic.ca/covid19/>).

### **Academic Integrity**

The University of Victoria and the Department of Biology take academic integrity (including plagiarism) as a serious matter. Please read this:

[https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk\\_0xsM\\_V](https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V)

### **Official UVic Territory Acknowledgment**

“We acknowledge and respect the l k n peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNE peoples whose historical relationships with the land continue to this day.”