

**BIOL 186 – Physiology and Cell Biology  
University of Victoria  
Syllabus (Summer 2022)**

**Welcome back to normal life (almost)!**

Biology 186 will be fully in-person this summer. The virus has never tired of throwing us curve balls, and we should keep in mind that anything can happen, but there is good reason for optimism.

“Fully in-person” means that all instruction in lab and lecture will be face-to-face; there will be no recordings of the lecture, no Zoom labs, and no online exams.

As of this writing, the university maintains its policy direction from the PHO that masks are encouraged but not required.

**Course content**

This course, the companion course to Biology 184, focusses on functional aspects of organisms. Biochemistry, cellular components, membrane structure and function, energy transduction, DNA replication and gene expression. Insight into plant structure and response mechanisms of these light-eating organisms. Principles of animal physiology including homeostatic mechanisms, circulation, gas exchange, osmoregulation, thermoregulation, defense systems, chemical signaling, reproduction and development.

**Contact Hours & Delivery of Course Materials**

Lectures: Monday, Wednesday & Thursday, 8:30am - 10:20am, Cornett B143

Labs\*: Monday and Wednesday, 10:30am (B01) or 1:30pm (B02) in CUN 004 and CUN 018

*\*Enrolment in the laboratory section is mandatory, and students are required to attend face-to-face laboratory sessions*

**Instructors**

- Dr. Greg Beaulieu (Lecture Instructor)
- Dr. David Punzalan (Lecture Instructor and Coordinator)
- Alicia Rippington (Laboratory Coordinator)

Queries regarding the Lecture portion should be directed to Dave ([davidpunzalan@uvic.ca](mailto:davidpunzalan@uvic.ca)).

Queries regarding the Laboratory portion should be emailed to Alicia ([biologylabs@uvic.ca](mailto:biologylabs@uvic.ca)).

***\*Please include “BIOL 186” in the subject line of e-mails, and expect a response within 48h.***

**Prerequisites**

Any one of: Biology 11, Biology 12, Biology 150A, Biology 150B, Biology 184, or equivalent, or placement exam. You need not have passed Biology 184 in order to take Biology 186.

Although a course in **chemistry** is not a prerequisite for Biology 186, such a course at the high school, college or university level is strongly recommended.

If your chemistry is shaky, we recommend you do one of the following:

- Read Chapters 2 and 3 of the text as your first priority in this course. These chapters cover in summary form the basic chemistry that an intro biology student should know.

The concepts in these chapters will be touched on only briefly during lecture at the beginning of the Biomolecules section of the course. The rest of that section, and the rest of the course, will assume that you are on top of this basic stuff.

- Defer taking Biology 186 until after you have studied some chemistry in a basic chemistry course.

### **Course Website**

Brightspace (BRS) course website: <https://bright.uvic.ca/d2l/home/215232>

You are expected to check this page regularly for important information and announcements.

### **Required text**

*Campbell Biology*, third Canadian edition, by Urry *et al.* 2021. Available through the bookstore. You can purchase either a hardcopy or e-text version. This is the same text as was used in Biology 184 in the fall. If you have access to the previous edition of the text (second Canadian edition), that will be sufficient, but bear in mind that some of the pagination, figure numbers and problem numbers might be different.

New copies of the text come with access to the publisher's website, which has Mastering Biology. Mastering can be useful, **but we do not require it in this course and we will not reference it in class**, so a used text will do fine. A couple of notes:

- If you bought your text new in the fall, your access to Mastering Biology will still be good.
- If you decide to go with a used copy, but you wish to purchase website access separately from the publisher, you may do so. It will cost approximately \$115.
- A .pdf on will be provided on Brightspace giving you directions on how to register with the publisher (if you are not already registered), how to purchase access if you bought a used text, and how to access Mastering.

### **Assessment**

You will have the opportunity to demonstrate your progress and proficiency through various forms of evaluation, including:

Exam 1: Lecture Content	30%
Exam 2: Lecture Content	30% (not cumulative)
Laboratory Assessments	40%

Distribution of lab marks:

Integrity Matters course	1% (course requirement)
Lab Quizzes	4%
Lab Assignments	15%
Exam 1: Lab Content	10%
Exam 2: Lab Content	10% (not cumulative)

**NOTE: you must pass the laboratory section (including attendance) to pass the course**

### **Policy on missed labs**

You are required to arrive on time and attend all of the scheduled lab sessions for the entirety of the session in order to fulfill the requirements of this course. **If you miss, for any reason, more than two of the laboratory sessions you will not have completed the course requirements and you will receive an incomplete grade (N) in the course.** Make-up labs will not be available. If you miss a lab, you will be responsible for the material you missed and you will be examined on this material. Be sure to connect with a TA and your peers to catch up on what you missed.

### **Policy on missed exams**

If you must miss an exam because of course conflict, illness, accident, family affliction, or competition as a UVic athlete, you must notify the course coordinator as soon as possible. You will not be required to provide a note or other documentation. Travel plans are not a valid reason for missing either of the exams.

*Missed Exam 1* – since Exam 2 will not be cumulative, you must eventually write a deferred Exam 1 as soon as possible. Please contact Dr. Beaulieu ([gregoryb@uvic.ca](mailto:gregoryb@uvic.ca)) to schedule this exam.

*Missed Exam 2* – if you anticipate any issues with being able to write Exam 2, please contact Dr. Punzalan ([davidpunzalan@uvic.ca](mailto:davidpunzalan@uvic.ca)) 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>

### **Important Dates**

1. Monday May 9<sup>th</sup>, 8:30am -10:20am PDT – first lecture
2. Monday May 9<sup>th</sup>, 10:30am – 1:30pm (B01) or 1:30pm – 4:30pm (B02) – first lab
3. Monday May 23<sup>rd</sup>, Victoria Day (holiday) – No lecture or labs
4. Monday June 6<sup>th</sup>, 8:30am -10:20am – Exam 1 (Lecture + Lab)
5. Thursday June 24<sup>th</sup> 23<sup>rd</sup>, 8:30am -10:20am – Exam 2 (Lecture + Lab)

## **Appendix: Other Policies and Information**

### **Academic Integrity**

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

<https://web.uvic.ca/calendar2020-01/undergrad/info/regulations/academic-integrity.html>

### **Accessibility and special needs**

Students with special needs will be welcomed and accommodated, provided those needs are registered through the Centre for Accessible Learning (<https://uvic.ca/services/cal>; phone: 250-472-4947)

### **Commitment to Inclusion and diversity**

UVic is committed to promoting, providing and protecting a supportive and safe learning and working environment for all its members. All students and staff are expected to treat each other with respect. For more info on University policies regarding student conduct, please see this link: <https://www.uvic.ca/services/studentlife/student-conduct/index.php>

### **Course Grade and Academic Transcript**

Grades for all UVic courses are submitted as percentiles. A student's academic transcript will include the percentile grade and a letter grade plus the class average and the number of students registered in the course at the time of the final exam. Percentiles will be rounded to the nearest whole number; a grade of xx.5 will be rounded up. Percentile grades will be converted to letter grades on the student's academic transcript according to the table given below.

A+	90 – 100%	B+	77 – 79%	C+	65 – 69%
A	85 – 89%	B	73 – 76%	C	60 – 64%
A-	80 – 84%	B-	70 – 72%	D	50 – 59%

**A grade less than 50% is a failing grade and will result in an “F” on your transcript**  
**Failure to complete lab requirements, or missing more than 2 labs will result in failing grade and**  
**an “N” on your transcript**  
**No supplemental exams will be offered for this course**