BIOLOGY 365 Animal Physiology Course Outline

Fall 2025 A01

Department of Biology, University of Victoria

Course instructor and coordinator:

Dr. Raad Nashmi

Contact information:

Raad Nashmi:

raad@uvic.ca "BIOL 365" in the subject line

Phone: 250-721-6169

Time and Place: Sept 3 – Dec 3, 2025; Tues, Wed, Fri 10:30am – 11:20am;

David Strong Building (DSB) room C103

Office hours for Dr. Nashmi: by appointment

Course Description:

The course will cover fundamentals of animal physiology, including: principles of cellular signaling, endocrinology, neuronal function and nervous system organization, cellular movement and muscle contraction, circulation, respiration, digestion, salt/water balance and renal function. Laboratory exercises will provide the opportunity to gain experiential learning for the study of physiological processes.

Learning Outcomes:

- 1. Understand the basic physiological function of different systems and organs of a variety of animals from a molecular, cellular, organ and systems level.
- 2. Learn how animals in their different environments have specialized organs to allow them to survive and thrive in their environments.
- 3. Understand how different systems in the body can sense the external or internal environments and use hormones or the nervous system to signal changes in the regulation of physiological parameters.

Text book (recommended):

Moyes, Christopher D and Schulte, Patricia M (2015) Principles of Animal Physiology. 3rd edition. Pearson / Benjamin Cummings, San Francisco. Note that the 2nd edition is also acceptable

Course material:

Material such as course outline, class schedule, exam results and presentation lecture notes will be available on Brightspace (http://bright.uvic.ca/ with your Netlink ID and password). Note that there will be no recorded lectures available.

All course content and materials are made available by instructors for educational purposes and for the exclusive use of students registered in their class. The material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act.

Violations may result in disciplinary action under the Resolution of Non-Academic Misconduct Allegations policy (AC1300).

Prerequisites: All students in Biology 365 must have taken BIOL 184 and 186, or 190B; and 225; and BIOC 299 or 300B or 300A as a pre- or co-requisite.

Labs: You must attend the lab section in which you are registered during the week of Sept. 8. Wait-listed students may attend which ever lab section is convenient during that week, but the final assignment of a lab section is at the discretion of Kimberley Curry, the lab coordinator. Contact Kimberley Curry for any general lab concerns.

Senior Lab instructor:

Kimberley Curry (office: CUNN 110, phone: 250-721-7136, email: kimh@uvic.ca)

office hours: by appointment

Laboratory safety: You must follow all safety regulations as specified by your lab instructor.

Required course components:

As per the requirements of the academic calendar you must successfully pass BOTH the laboratory and the lecture components of the course to earn a passing grade. For the lecture component, two midterm exams and a final exam will be offered. You must write at least one of the two midterms and the final exam to fulfill the requirements of the course.

Evaluation:

Lab 40% Lecture 60%

The lecture mark will be calculated as:

A) First midterm exam 15% (October 7, 2025) Second midterm exam 15% (November 5, 2025) Final exam 30% (scheduled by Records)

If you miss one of the two midterms there will not be a make-up midterm and your lecture mark will be calculated as:

B) Either first or second midterm exam 20% Final exam 40% (scheduled by Records)

If you are unable to complete the midterm course-requirement of at least one completed midterm exam contact the instructor as soon as possible (no later than 48 hrs from the date of the second midterm exam) to determine whether a make-up midterm exam is possible.

Midterms and final exam will be done face-to face for all students.

Note: Sept 19 is the last day for adding courses in the first term and Oct 31 is the last day for withdrawing from first-term courses without penalty of failure.

Midterms and Final Exam:

Exams will be based on information covered in lectures and may include questions that overlap with material covered in the lab. Students are responsible for any material discussed in class, drawn on board, etc, that may not be in the textbook. Hence, attendance in class is strongly recommended. The final exam will be cumulative.

If you are unable to complete the midterm course-requirement of at least one completed midterm exam contact the instructor as soon as possible (no later than 48 hrs from the date of the second midterm exam) to determine whether a make-up midterm exam is possible. No documentation is required for illness but you will be expected to provide suitable documentation for any other reason.

The final exam can be deferred in cases of illness, accident, family affliction, or sporting commitments as a UVic athlete. If you miss or expect to miss the final exam for any of these reasons, please notify the instructor. No documentation required for illness but supporting documentation is required for other mentioned reasons. You must also fill out a Request for Academic Concession form, available from the Records office, as soon as possible in order to have your request for deferral considered. Travel plans are not a valid reason for missing the midterm test or the final exam.

No supplemental final exam will be given in this course as per Biology Dept. policy.

Grading: The final grade for the course will be submitted as a percentage grade (rounded to the nearest whole percent by our spreadsheet program).

Please do not ask us to raise your grade, and please do not ask us for extra-credit work to raise your grade; no such work is available.

Academic regulations and policies:

Please read the appropriate section of the current UVic Academic Calendar regarding your rights and obligations. In particular, students are to take note of the ADD/DROP dates published in the Calendar and posted on the Undergraduate Records website. **Students must not assume they will be dropped automatically from any course they do not attend.**

Academic Integrity

Students are required to abide by all academic regulations set as set out in the University calendar, including standards of academic integrity. Violations of academic integrity (e.g. cheating and plagiarism) are considered serious and may result in significant penalties.

Student conduct:

The University of Victoria is committed to promoting critical academic discourse while providing a respectful and supportive learning environment. All members of the university community have the right to this experience and the responsibility to help create such an environment. The University will not tolerate racism, sexualized violence, or any form of discrimination, bullying or harassment. Please be advised that, by logging into UVic's learning systems or interacting with online resources, and course-related communication platforms, you are engaging in a university activity. All interactions within this environment are subject to the university expectations and policies.

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We acknowledge and respect the ləkwəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.