BIOC299 A01 (CRN 20304)
Biochemistry for Non- Majors
Spring 2023

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Territorial Acknowledgement:

We acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land

via email.

Brightspace site: a Brightspace site will be maintained for this course. Some, but not all, lecture notes will be made available. It contains the following sections:

General Information: course outline, discussion forum, contact information, zoom links etc.

Lecture notes: here you will find the pdf notes.

Lecture Recordings: audio recordings of each lecture will be posted here. Occasionally, due to technical failures, no recording will be available.

Participation Quizzes: six participation quizzes. Each is worth 0.25% of your final grade. You must get one answer correct to receive your mark.

Exit Competency Quiz: this is a short online quiz that you must complete before you will be allowed to write the final exam. It will open during the final week of class. It is not open book, and you should not study. It is just to assess the overall cell biology knowledge students have by the end of the course. These exams will not be used in any manner to assess students individually. I will use overall class data to improve my teaching methods. It is worth 0.5% participation mark

Textbook Problem Sets: these are end-of-chapter questions from the textbook.

Midterm / Final exam material: reviews, old exams and the actual exams will be here.

Textbook: Biochemistry, 9th Edition by Campbell, Farrell and McDougal.

Top Hat: this will be required for lectures starting the week of January 23. Participation grades will be awarded as follows:. ***≥80% class participation, 3%***; ***≥70% class participation, 2%***; ***≥60% class*** participation, 1% . Below 60% will not receive any par ticipation marks.

Prerequisites and expectations:

BIOC 299 introduces students to the various areas encompassed by the discipline. BIOC 299 requires a familiarization with organic chemistry and students should review functional group chemistry of organic molecules at the beginning of the course. Students must complete 2nd year organic chemistry before taking BIOC 299. Students should also review basic cell biology in preparation for this course.

Learning Outcomes:

Students will obtain a comprehensive overview of the major concepts and principles of biochemistry through lecture presentations, assigned questions, and tests. Students will be able to define and describe the properties, and metabolism of the major classes of biomolecules: DNA, RNA, protein, carbohydrates, and lipids. Specific learning outcomes include:

Structure -function relationships of biomolecules. Through a variety of examples, students will be able to relate the chemical structures of biomolecules to their biological functions and demonstrate how they interact to accomplish fundamental metabolic processes.

Metabolism and regulation of biomolecules. For each class of molecule, students should be able to describe the fundamentals of biomolecule synthesis and breakdown, the role of biomolecule interactions, how a cellular signal is transduced to a biological outcome, and how gene expression accomplished through specific examples. A demonstrated knowledge of how biochemical pathways are controlled is also expected.

Experimental biochemistry and disease. Students should be familiar with basic experimental

week of Friday, February 10	Participation Quiz 3, 0.25%	open from Monday to Friday via Brightspace, must be completed by 4pm on Friday. Must get at least one question correct to receive participation grade
Friday, February 17	20% midterm 2 exam	in class. There are no deferrals. You must write at least 2 midterms. For a missed exam, grade will be added to final exam.

Failure to complete one or more of these elements will result in a grade of “N” regardless of the cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a student’s GPA as 0. The maximum percentage that can accompany an N on a student’s transcript is 49

DEPARTMENT INFORMATION AND POLICIES

1. The Department of Biochemistry and Microbiology upholds and enforces the University’s policies on academic integrity. 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 during live class

Important note about COVID -related stress
The current pandemic is placing added stressors- financial, mental, and physical- on everyone. Your wellbeing is of foremost importance. If you are experiencing difficulties coping, the University has resources to help. Please reach out to Counselling Services, the Centre for Academic Communication, or Learning Assistance Program for assistance.

Centre for Accessible Learning
Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, approach the Centre for Accessible Learning (CAL) as soon as possible in order to assess your specific needs.
https://www.uvic.ca/services/cal/index.php

Course Experience Survey (CES)
We value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to us regarding the course and our teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to your CES dashboard. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. We will remind you nearer the time but please be thinking about this important activity.