Welcome to BCMB 301

We acknowledge and respect the lək^{w}əŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

We strive to create an environment where all students will be treated with respect, and we welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expression, national origins, religious affiliations, sexual orientations, ability-and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class.

We will gladly honour your request to address you by an alternate name and invite you to share your pronouns. Please reach out to us if there are other ways in which we can improve your experience.

Expected Learning Outcomes

In BCMB 301A, you will have the opportunity to employ fundamental biochemical, microbiological and molecular biological laboratory techniques to investigate experimental problems. Using data generated in a range of experiments, you will learn to apply relevant theoretical concepts to analyse the data and evaluate experimental outcomes. In addition to developing analytical and practical laboratory skills, you will develop problem solving and critical thinking skills by relating acquired knowledge to new problems or trouble-shooting questions. Time management skills will be developed through efficient organization of experimental components.

Upon successful completion of BCMB301 you will have an understanding of principles studied and be able to apply that understanding to new problems; you will be able to communicate scientific principles effectively; and keep accurate records of your experimental work. You will have also demonstrated a proficiency in the following laboratory techniques: setting up assays; pouring and running gels; protein purification; sterile technique in tissue culture experiments; and be able to perform calculations for solution preparation.

Evaluation

The final mark will be based on:

Prelab Quizzes	5%
Discussion Quizzes	10%
Practical Assessments	15%
Lab Journals	5%
Lab Summaries	15%
Exam #1 (Labs 2, 3 & 4)	25%
Exam #2 (Labs 5, 6 & 7)	25%

Final course percentages and assignment of letter grades*:

A^{+}	90 -100	**B**$^{+}$	77 - 79	**C**$^{+}$	65 - 69	**F**	< 50
A	85 - 89	**B**	73 - 76	**C**	60 - 64	**N** **	< 50
A^{-}	80 - 84	**B**$^{-}$	70 - 72	**D**	50 - 59		

*All percentages will be rounded to the nearest whole number. For example, a calculated percentage of 79.49% will be recorded as 79% whereas 79.50% will be recorded as 80%.

** N grades
When you have written all examinations and completed the laboratories, you will be assigned a final grade. Failure to complete one or both of these elements may 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.

Attendance

BCMB 301 is a practical course that progressively builds your expertise in lab techniques; your attendance and punctuality for each lab session is important. If you are not able to attend your regularly scheduled lab session, please contact the lab instructor responsible for that particular lab as soon as possible. Students unable to attend multiple lab sessions may be unable to complete the course requirements, which may result in the assigning of an N grade (see requirements for course completion).

BCMB 301A Laboratory Schedule Fall 2021

Week	Date	Day 1	Day 2	Due Dates
1	Sept. 13-17	Safety Orientation Lab 2: pH & Buffers	Lab 1: Literature Exercise (Library Classroom 130)	Day 2: Lab 2 Journal Day 2: Lab 1 Ex. By 11:59pm
		Introductory Quiz - complete on Brightspace by Sept. 19		
2	Sept. 20-24	Lab 3: Biuret, Lowry, Bradford, A_{280}		Day 2: Lab 3 Journal & Practical
		Calculation Exercise - complete on Brightspace by Sept. 26		
3	Sept.27 - Oct. 1	Lab 2 Discussion	Lab 2 Discussion (only B04)	Day 1: Lab 2 Summary
		Sept. 30: National Day for Truth and Reconciliation		
4	Oct. 4 - 8	Lab 4:AS precip, SEC, IEC	Lab 3 Discussion	Day 2: Lab 3 Summary
5	Oct. 11-15	No Labs	Lab 5: Coat ELISA plate, Subculture hybridomas	
		Oct. 11: Thanksgiving		
6	Oct. 18 – 22	Lab 4: Prepare & Run SDS-PAGE & ß-gal assay	Lab 4: Image gel, Bradford	Day 2: Lab 4 Practical & Journal
7	Oct. 25 – 29	Lab 5: ELISA	Lab 4 Discussion	Day 2: Lab 4 Summary Day 2: Antibody Titre Graph
8	Nov. 1-5	Lab 5: SDS-PAGE & Transfer	Lab 5: Image gel, Develop blot	Day 2: Lab 5 Journal Day 2: Lab 6 Contract
9	Nov. 8 – 12	Exam #1: Labs 2, 3 & 4 (25%), Monday, Nov. 8 from 7-9 pm in BWC 150		
		Reading Break: November 10-12		
10	Nov. 15 – 19	Lab 6: Reversible Inhibition	Lab 5 Discussion	Day 2: Lab 5 Summary
11	Nov. 22 – 26	Lab 7: Irreversible Inhibition	Lab 6 Discussion	Day 2: Lab 6 Summary
12	Nov.29-Dec. 3	Lab 7 Discussion		Day 1: Lab 7 Summary
Exam #2: Labs 5, 6 & 7 (25%) will be scheduled during the December exam period				

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 sessions unless being used for the purpose of connecting and engaging with the class.

3. No recordings of live lectures are permitted without permission of the instructor. However, many courses will be recorded by the instructor for accessibility for students unable to attend. If you do not wish to be recorded, contact your instructor to determine if alternative arrangements can be made.

4. Students and instructors are expected to assess their health daily and avoid campus if they are ill.

5. Course materials, such as notes, problem sheets, quizzes, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.

6. Students are expected to be available for all exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction. Although students do not require documentation, students must contact their instructor and BCMB office (biocmicr@uvic.ca) with the reason for their absence within 48 hours after the midterm exam. The Department will keep a record of the absences. It is the responsibility of the student to ensure all required components are complete, and to arrange deferred exams/assignments with the instructor, which normally should occur within one week of the original exam date.

7. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking an examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Students must abide by UVic academic regulations and observe standards of scholarly integrity (no plagiarism or cheating). Online exams must be taken individually and not with a friend, classmate, or group, nor can you access notes, course materials, the internet, or other resources without the permission of the instructor. You are prohibited from

sharing any information about the exam with others. Use of unauthorized electronic devices and accessing the internet and class material during exams is prohibited unless permission is granted by the instructor. Instructors may use Browser Lockdown Software to block access during classes and exams.

8. Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams or spring term courses will be arranged through Undergraduate Records and must be written before the end of the summer term as stipulated in the University Calendar.

9. Requests for review/remark of a midterm exam must be made within one week of the exam being returned.

10. The instructor reserves the right to use plagiarism detection software or other platforms to assess the integrity of student work.

11. Supplemental exams or assignments will not be offered to students wishing to upgrade their final mark.

12. Anonymous participation in online classes is not permitted without permission of the instructor.

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.