Department of Biochemistry & Molecular Biology Dalhousie University

Teaching Assistant Posting

Department: Biochemistry & Molecular Biology

Posting Date: November 7, 2025

Application Deadline: November 17, 2025

Term/Dates: January 7, 2026 to April 10, 2026

Pay Rate: In accordance with CUPE Collective Agreement

BIOC2300 - Introduction to Biochemistry

• # of Position: **3 X 65-hour paid positions**

• Supervisor: Dr. Shawn Xiong

- Job Description:
 - O Preference will be given to BMB graduate students who require a teaching assistantship as a program requirement. Among other candidates, preference will be given to students who have worked as teaching assistants in the course before OR have taken the course in the past two years.
 - Possess & demonstrate proficiency in foundational knowledge in biochemistry and molecular biology (acid-base, protein structure and function, enzyme kinetics, thermodynamics, redox, structure and metabolism of biomolecules, integration of metabolism).
 - o TAs will attend and facilitate the weekly flipped "practice & review" session (usually on Fridays).
 - o Beyond the flipped class, TAs will have relatively flexible working hours throughout the semester.
 - o TAs will host weekly help sessions.
 - TAs will monitor and respond to virtual communications (email, Brightspace Discussion & Norton Smartwork)
 - O TAs will help with exam proctoring and grading 2x midterms (1.5 h each) and 1x final exam of 3 h through *Crowdmark*.
 - o TA meeting: to be determined after recruitment.

BIOC2610 - Biochemistry Laboratory Methods & Techniques

- # of Positions:
 - O Tuesday 2-5:30 PM:
 - 4 X 65-hour paid positions
 - o Wednesday 2-5:30 PM:
 - 4 X 65-hour paid positions
 - o Thursday 2-5:30 PM:
 - 3 X 65-hour paid positions
 - o Friday 2-5:30 PM:
 - 3 X 65-hour paid positions
- Supervisor: Dr. Shawn Xiong
- Job Description:
 - Preference will be given to BMB graduate students who require a teaching
 assistantship as a program requirement. Among other candidates, preference will be
 given to students who have worked as teaching assistants in the course before OR
 have taken the course in the past two years.
 - Possess & demonstrate proficiency and comfort in applying biochemistry concepts and techniques/methods, such as lab safety/clean-up, basic properties of proteins/nucleic acids, titration, various chromatographic methods, electrophoresis, enzyme assays, enzyme kinetics
 - TAs will supervise students during their designated lab sections, including instructing, demonstrating, and answering questions about the experiments or grading related issues.
 - o TAs will grade in total 45 full reports and 45 short reports throughout the entire semester (OR ∼90 reports combined).
 - TAs with smaller sections thus less reports to grade will contribute to marking a few short answer questions on Mid-Term or Final exams through Crowdmark.
 - TAs will no longer be involved in grading pre-labs and extended learning questions.
 - o TAs will prepare for the lab and attend the instructional meeting at 2 PM on the day of assigned lab section to discuss the operation of the lab.
 - o TAs will reinforce safety and monitor students' clean-up at the end of the designated lab sections.
 - o **TA training session**: All TAs are required to attend the training session:
 - Time: Friday December 12th at 1 PM
 - Venue: Tupper 8-J01 Undergraduate Teaching Laboratory

BIOC 3300 - Cellular and Integrated Metabolism - Tutorial

- # of Positions: 2 X 65-hour paid position
- Supervisor: Dr. Barbara Karten
- Job Description:
 - Preference will be given to BMB graduate students who require a teaching assistantship as a program requirement. Among other candidates, preference will be given to students who have taken the course in the past three years.
 - TAs must possess & demonstrate proficiency in foundational knowledge in metabolism and biochemistry (structure and metabolism of biomolecules, integration of metabolism, metabolism in health and disease).
 - O Independently lead weekly tutorial sessions (2x 1.5 h per week) with approximately 25 students in each group.
 - Assist in the planning of tutorial sessions and meet weekly with the supervisor or instructor of the corresponding lecture section
 - o Answer questions about course material during the tutorial.
 - o Administer and grade one short quiz in each tutorial session.
 - o Grade one home assignment
 - Assist with exam proctoring of 2x midterms of 1 h each and 1x final exam of 3 h.

BIOC 4403 - Genes and Genomes

- # of Positions: 1 X 65-hour paid position
- Supervisor: Dr. Claudio Slamovits
- Job Description:
 - <u>Preference will be given to BMB graduate</u> <u>students</u> who require a teaching assistantship as a program requirement. Among other candidates, preference will be given to students who have taken the course in the past three years.
 - o Past teaching/tutoring/mentoring experiences and excellent time/project management skills are assets
 - Possess & demonstrate <u>proficient knowledge and technical skills in DNA sequence</u> <u>and genome analysis including initial sequencing data processing,</u> assembly, annotation and principles of functional genomics.
 - o Interested in teaching and further developing science communication skills
 - Experienced in working with students 1-on-1 or in groups as well as managing small groups
 - Successful candidate will prepare and supervise students in 3-4 assigned computer lab sessions throughout the entire semester
 - o Successful candidate will run a once a week help session
 - o Successful candidate will grade and provide timely feedback to registered students
 - o Successful candidate will assist in marking midterms and final exams
 - TA training session: All TA candidates regardless of new or returning are required to attend the training session: January 5, 2026.
 - Venue: TBD

BIOC 4010 – Bioinformatics

• # of Positions: 1 X 90-hour paid position

• Supervisor: Dr. Andrew Roger

Job Description

This course offers opportunity for one-to-few student interaction teaching experiences during the computer labs. Knowledge of bioinformatic methods and theory is important, as is experience with a variety of online computational tools. It is demanding of marking, computer and math competency concentrated in computer labs and short problem-based assignments. Typically there are up to 30 students in the class.

• Tuesday 11:35-12:55

• Thursday 11:35-12:55

Two additional 'office hours' per week are required with times to be decided by the TA.

Application procedure:

If you are interested in the above positions, please apply in writing by the application deadline to:

Roisin McDevitt via email (Roisin.McDevitt@Dal.Ca)

c.c. Dr. Shawn Xiong via email (shawn.xiong@dal.ca)

Department of Biochemistry & Molecular Biology

In your application email, please include:

- A short cover letter detailing your teaching preference by ranking the course code/laboratory section in order of decreasing preference (if no preference is given, it will be assumed that you are available for all sections of the course)
- *C.V.* highlighting previous teaching/tutoring/mentoring experience with specific course number(s) and term of employment/service
- Research Supervisor TA Consent Form is required only for graduate students.

All offers of employment are conditional upon sufficient student enrolment in the course and approval by the University.

Dalhousie University is committed to fostering a collegial culture grounded in diversity and inclusiveness. The university encourages applications from Indigenous persons, persons with a disability, racially visible persons, women, persons of a minority sexual orientation and/or gender identity, and all candidates who would contribute to the diversity of our community. For more information, please visit www.dal.ca/hiringfordiversity