

GA(T) Position – 3 Full

MDSC 408 – Research Design in Molecular Biology and Bioinformatics

Fall 2025 & Winter 2026 term

Bachelor of Health Sciences Program, Cumming School of Medicine

4 Full GA(T) positions are available for MDSC 408 - Research Design in Molecular Biology and Bioinformatics

TIME: Tuesdays and Thursdays, 9:00 – 12:00

Position Requirements:

MDSC 408 is designed to give biomedical and bioinformatics students the basic conceptual framework, knowledge and skill set to work and think independently in a medical science or life science research environment. By the end of MDSC 408, students will be able to successfully utilize a number of bioinformatics tools and perform a number of molecular biology techniques, troubleshoot when problems arise and interpret results. The main goal of MDSC 408 is to enhance: 1) the student's understanding and use of scientific methodology and thought process, 2) the student's ability to understand and approach problems at the molecular level, 3) the student's ability to design experiments in a creative manner.

For this course we have 2 types of TAs

- 1) Graduate students (MSc or PhD program), with a background or hands on experience in molecular biology laboratory techniques (for instance Western Blot, PCR, ELISAs, recombinant DNA technologies, cell culture).
- 2) Graduate students with backgrounds or hands-on experience with bioinformatics (ie BLAST, sequence alignments or genomics and gene expression analyses). Experience with R and command line, will be required

The duties of the TAs will be as follows:

- Attend all lectures
- Supervise and coordinate the activities in the wet-lab setting or supervise the bioinformatics lab activities (tutorials)
- Assist with Grading lab assignments (notebooks) or the bioinformatics assignments
- For those TAs that are interested there is the possibility to assist with delivering lectures

To apply, please send the application form, a CV, and a cover letter describing your interests and motivation for applying to Dr. Guido van Marle (vanmarle@ucalgary.ca)

Application Deadline: July 28, 2025