



FALL WINTER Teaching Assistant Application: DEPARTMENT OF CHEMISTRY

Please submit your completed application via Microsoft Form by **Monday, June 19, 2023**

Appendix 1: TA Positions

Course, term offered	TA Duty	Estimated Number of Positions (1.0=60 hours, F=fall,W=winter)	TA Qualifications ¹
APSC 102, fall	Lab	24 x 0.75 F	Knowledge of general chemistry.
CHEM 112, fall-winter	Lab	100 x 1.0 (50 F, 50 W)	Excellent organizational and communication skills; knowledge of general chemistry.
CHEM 112, fall-winter	Tutorial	40 x 1.0 (20 F, 20 W)	Excellent communication skills, knowledge of general chemistry; experience teaching is an asset.
CHEM 112, fall-winter	Lecture	2 x 0.5 (1 F, 1 W)	Excellent communication skills, familiarity with online classroom management system, knowledge of general chemistry; experience teaching is an asset.
CHEM/ENCH 211, fall	Lab	18 x 1.0	Inorganic, transition metal and organic chemistry.
CHEM/ENCH 211, fall	Theoretical Lab	1 x 2.0	Knowledge of computational chemistry. Experience using Gaussian. Excellent presentational skills.
CHEM/ENCH 211, fall	Tutorial	2 x 1.0	Inorganic, transition metal and organic chemistry. Good communication and organizational skills.
CHEM/ENCH 212, fall	Lab	9 x 1.0	Physical organic chemistry (reaction mechanisms and kinetics).
CHEM/ENCH 212, fall	Tutorial	2 x 1.0	Physical organic chemistry (reaction mechanisms and kinetics). Good communication and organizational skills.
CHEM/ENCH 213, fall	Lab	6 x 2.0	General and analytical chemistry (UV-VIS, fluorescence and atomic spectroscopy).
CHEM/ENCH 213, fall	Tutorial	2 x 1.0	General and analytical chemistry (UV-VIS, fluorescence and atomic spectroscopy).
CHEM 221, winter	Lab	3 x 1.0	General and physical chemistry (including redox, thermodynamics and electrochemistry).
CHEM 221, winter	Tutorial	2 x 1.0	General and physical chemistry (including redox, thermodynamics and electrochemistry). Good communication and organizational skills.
CHEM/ENCH 222, winter	Tutorial	4 x 1.0	Spectroscopy (UV-vis, IR, NMR, MS). Good communication and organizational skills. Use of NMR and/or MS in own graduate research an asset.
CHEM 223/ ENCH 245, winter	Lab	14x 1.0	Organic chemistry.

CHEM 223, winter	Tutorial	2 x 1.0	Organic chemistry. Good communication and organizational skills.
ENCH 245, winter	Tutorial	1 x 1.0	Organic chemistry. Good communication and organizational skills.
CHEM 281, fall	Marking	10 x 0.25	Marking midterm and final exams. Must have a strong understanding of 2 nd year organic chemistry, a good eye for correctly drawn organic molecules, formal charges, stereochemistry, and curly arrow depiction of mechanisms. Must have excellent communication skills; online tutorial sessions will need to be given; online forum monitoring and editing tasks; prior experience in online organic chemistry course delivery desirable
CHEM 281, fall	Head TA	1 x 0.5	Head TA will be responsible for scheduling and coordination of TA team during the course. Advising TA team on technical requirements and solutions for Zoom tutorial meetings, disseminating problem sets and posting upcoming activities for students.
CHEM 282, winter	Lab	28 x 1.0	Organic chemistry. Marking midterm and final exams. Must have a strong understanding of 2 nd year organic chemistry, a good eye for correctly drawn organic molecules, formal charges, stereochemistry, and curly arrow depiction of mechanisms. Must have excellent communication skills.
CHEM 282, winter	Head TA	1 x 0.5	Head TA will be responsible for scheduling and coordination of TA team during the course. Advising TA team on technical requirements and solutions for Zoom tutorial meetings, disseminating problem sets and posting upcoming activities for students.
CHEM/ENCH 311, fall	Tutorial	2 x 1.0	Physical organic chemistry. Must have a strong understanding of mechanisms in organic chemistry and their analysis from the perspective of orbitals, linear free energy relationships, kinetic isotope effects, and free energy diagrams.
CHEM/ENCH 312, fall	Tutorial	2 x 1.0	Excellent communication and organizational skills; knowledge of transition metal chemistry.
CHEM/ENCH 313, fall	Tutorial	2 x 1.0	Theoretical chemistry.
CHEM 314, fall	Tutorial	1 x 1.0	Organic Chemistry. Must have a strong understanding of mechanistic organic chemistry, with a particular emphasis on stereoselective reactions, including diastereo- and enantioselective.
CHEM/ENCH 321, winter	Marking	2 x 1.0	Instrumental chemical analysis.
CHEM/ENCH 322, winter	Tutorial	2 x 1.0	Spectroscopy.
CHEM/ENCH 323, winter	Marking	1 x 1.0	Biological chemistry.
CHEM/ENCH 326, winter	Marking	1 x 1.0	Green chemistry.

CHEM/ENCH 397/398/399, fall-winter	Lab (must take 2x2 positions fall and winter included)	8 x 2.0 fall 12 x 2.0 winter	All TAs: general chemistry, spectroscopy (NMR, FTIR, UV-VIS, Mass-Spec), reaction mechanisms. Additional specialization: 2x2 TAs – inorganic and transition-metal chemistry; 2x2 TAs – organic and physical organic chemistry; 2x2 TAs – computational/theoretical, physical chemistry and molecular spectroscopy (PhD or strong MSc students) 2x2 TAs – analytical separations (SPE, GC, HPLC) and molecular spectroscopy (PhD or strong MSc students)
CHEM/ENCH 397/398/399, fall-winter	Tutorial	2 x 1.0 (1 F, 1 W)	General chemistry, spectroscopy (NMR, FTIR, UV-VIS, Mass-Spec); reaction mechanisms. GC and HPLC. Good communication and organizational skills.
CHEM497/ ENCH 417, fall-winter	Lecture	2 x 0.5 (1 F, 1 W)	Upper level graduate student with experience attending conferences and poster presentations.. Strong computer and design skills (e.g., PowerPoint, ChemDraw, Biorender, CAD). Aiding in running workshops on poster preparation and presentation, final report writing, oral presentations, and general Q+A about research project progress.. Students will aid in course management and grades, collating feedback from supervisors/examiners and provide that to the students at each assessment point. Also advise in-coming class about choosing a supervisor or project in their 4 th year, accelerated M.Sc. options and applying to graduate school/awards.

¹ Proficiency in English and good communication skills are a requirement for all TA positions.