

## Safety Expectations for Teaching Assistants in the Department of Chemistry

Graduate students teaching in chemistry laboratories need to know and follow the appropriate safety practices mandated by the Department of Chemistry. Teaching laboratories is part of your duties as graduated student and your attitude towards safety should include value safety, work safely, prevent at-risk behavior, promote safety, and accept responsibility for safety<sup>1</sup>. Teaching assistants (TAs) have responsibilities for operating and overseeing undergraduate students and laboratories. A list of minimal expectations that encompass the department commitment is described below<sup>2</sup>.

- 1. Understand the organizing principles of safety (RAMP). Recognize the hazards, Assess the risk of hazards, Minimize the risk of the hazards, Prepare for emergencies from uncontrolled hazards and how these apply to each experiment.
- 2. Read and sign the Safety Agreement for Instructors for the teaching laboratories.
- 3. Participating in safety training programs as required by department of chemistry policy and their supervisors and instructors.
- 4. Know the location of the Safety Data Sheets (SDS) and Chemical Hygiene Plan (CHP) for their assigned laboratories
- 5. Know the underlying chemistry for each experiment being taught.
- 6. Demonstrate proper laboratory techniques for each experiment to the students.
- 7. Demonstrate appropriate procedures for operation of common laboratory equipment (In accordance with the assigned teaching lab), such as burners, hot plates, stirring plates, melting points, IR, GC, NMR, pH meter, spectrometer etc.
- 8. Provide appropriate laboratory safety instruction to students, including explaining the health hazards and risks associated with each experiment.
- 9. Manage the setup and cleanup of laboratory experiments.
- 10. Follow appropriate safety and PPE protocols during laboratory preparation activities, such as making solutions and preparing student samples.
- 11. Maintain good housekeeping in assigned laboratories.
- 12. Know, follow, and enforce the institutional policies and procedures for the following: Appropriate use of PPE and laboratory clothing, responding to students who have mental health problems, generation and disposal of hazardous waste.
- 13. Know, follow, and enforce institutional procedures and reporting protocols for emergencies, including: Lab chemical spills, building evacuation, near miss, injury and non-injury incident, fire and fire alarm