**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Chemical Technician

**Job Number:** SS-055

**NOC:** 2211

**Band:** 7

**Department:** Chemistry

**Supervisor Title:** Chair, Department of Chemistry

**Last Reviewed:** November 24, 2015

**Job Purpose**

Responsible for performing a variety of duties related to the preparation and operation of undergraduate labs in various undergraduate Chemistry courses, as assigned by Chair. Sets up and calibrates equipment for undergraduate labs. Maintains inventory of required chemicals and glassware. Assists with the development of experiments for undergraduate courses. Prepares and standardizes reagents for a variety of undergraduate labs. Oversees the work of student laboratory assistants.

**Key Activities**

1. Performs a variety of duties related to the preparation and operation of undergraduate labs in various undergraduate Chemistry courses.
2. Sets up and calibrates equipment for undergraduate laboratories including pH meters, analytical balances, spectrophotometers, water baths, ovens, incubators and several pieces of equipment specific to assigned courses. Demonstrates operation of equipment to demonstrators and students, as needed. Performs repairs on minor equipment, as required.
3. Instructs students and TAs on safety policies and procedures in assigned courses.
4. Maintains inventory of required chemicals and glassware and consumables specific to assigned courses. Tracks and records student equipment breakage.
5. Maintains science equipment inventory and needs for assigned course and recommends purchases and upgrades as necessary.
6. Obtains and organizes Material Safety Data Sheets in chemistry teaching laboratories for assigned courses and corresponding preparation area. Supplies supplementary reference material.
7. Under general direction from a course instructor assists with development of experiments for undergraduate courses including design assistance, modification of existing experiments and preliminary trials of new experiments. Troubleshoots experiments when necessary.
8. Under direction of instructors, schedules lab partners and rotation schedules for assigned courses.
9. Prepares and standardizes reagents for a variety of undergraduate laboratories. Prepares reagents for lecture demonstrations.
10. Responsible for collection and categorization of laboratory hazardous waste in assigned courses.
11. Acts as backup Instrument Technician, as required.
12. Acts as backup Science Stored Manager, as required.
13. Fills in for Laboratory Demonstrator, as required.
14. Other duties as assigned.

**Education**

Honours Bachelor of Science Degree (Chemistry).

**Experience Required**

* One year of experience as a Chemical Technician, including general scientific equipment maintenance.
* Good general scientific knowledge related to experiments and their preparation.
* Specific knowledge of the operational methods and maintenance for a variety of scientific equipment.
* Ability to instruct students in laboratory techniques.
* Good administrative and organizational skills.
* Able to commit and be flexible in work schedule, including working daytime and evenings

**Responsibility for the Work of Others**

Indirect Responsibility

* Student Assistants
* Teaching Assistants

**Communication**

Internal:

* Students
* Technicians
* Staff and faculty
* Teaching Assistants
* Computer Technicians

External

* Trent Community: act as a resource

**Motor/ Sensory Skills**

* Fine Motor Skills - manipulating equipment and measuring devices, keyboarding
* Dexterity - precision in manipulating equipment and measuring devices
* Hearing - responding to student and faculty queries
* Sight - reading reports, precision in manipulating equipment and measuring devices
* Touch - precision in manipulating equipment and measuring devices

**Effort**

Mental:

* Sustained Concentration - reading new material, analyzing problems, working with equipment

Physical:

* Standing, walking - administering labs
* Lifting - moving equipment and rearranging labs/classrooms

**Working Conditions**

Physical:

* Dangerous equipment
* Dangerous material
* Repetitive strain - data entry
* Noise

Psychological:

* Complaints - faculty and staff
* Conflicting priorities - labs, manuals
* Interruptions - interruptions from students
* Lack of Control over pace - academic term ‘end rush’
* Multiple competing demands - providing simultaneous support in several courses