**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Demonstrator/Technician

**Job Number:** SS-073

**NOC:** 4012

**Band:** 8

**Department:** Biology

**Supervisor Title:** Chair, Biology

**Last Reviewed:** May 5, 2015

**Job Purpose**

In co-operation with faculty, and under general supervision of the Chair, assist in the delivery of academic services in the Biology Department by coordinating lab offerings; instructing in laboratories; preparing teaching material; instructing, supervising and coordinating Teaching Assistants; marking undergraduate assignments; tutoring undergraduate students; and providing technical support for teaching facilities; ensuring that health and safety requirements are being met in laboratories; assisting in the upkeep of laboratory materials and facilities; ensuring that materials necessary for teaching laboratories are available.

**Key Activities**

1. Provides primary technical support for selected Biology undergraduate labs as designated by the Chair of Biology. Meets with course instructors before courses begin to agree upon contributions that will be made to each course.
2. When necessary, instructs and supervises undergraduate students in the classroom or field.
3. Contributes to the upkeep, repair and organization of Biology equipment and facilities.
4. Coordinates lab component of biology undergraduate courses as assigned by Department Chair. Works with course instructor to instruct and supervise student teaching assistants (GTA, AA). Researches topics and plans materials for instructional meetings. Allocates marking to markers, and keeps records of assignments and other marks in assigned courses. Keeps records of hours worked by student teaching assistants.
5. Evaluate undergraduate students as required on the basis of written work, lab reports, tests, essays, exams, oral presentations, handouts, and assignments.
6. Responds to student lab email correspondence, meets with students as needed.
7. Manages the lab section of the Blackboard website for Biology undergraduate courses as designated by Chair. Tasks include managing gradebook, lab assignments and quizzes, announcements, course content, monitoring Discussion Forum.
8. Provides one-on-one instruction of undergraduates who need assistance with course-related material and assignments.
9. Instructs students in the use of Biology laboratory equipment as needed.
10. Provides feedback to course instructors on laboratories and offers suggestions for improvement.
11. In collaboration with other staff, hires and supervises co-op students and helps support internship placements.
12. Transports students in departmental van to and from field lab venues.
13. Tracks teaching supply inventory for assigned courses and ensures that all supplies are ordered as needed.
14. Prepares solutions, supplies, analytical equipment, and computer equipment for designated undergraduate courses.
15. Oversees implementation of Health and Safety regulations in designated laboratory and field courses. Performs health and safety checks in teaching labs. Ensures that appropriate practice in Transportation of Dangerous Goods is followed in shipping and receiving. Ensures that all chemicals used in assigned courses are regulated and appropriately stored and disposed.
16. Provides health and Safety awareness training for student teaching assistants.
17. Works with other staff members to ensure upkeep, repair, and organization of Biology equipment and facilities (e.g. autoclave and dishwasher in prep room, pH meters, centrifuges, microscopes, greenhouse, van, boats, motors, trailers, sampling equipment, shed storage, electron microscopy suite).
18. Works with other staff members to manage the departmental budget and science equipment budget. Helps to maintain an electronic billing and inventory system for use in conjunction with stores and equipment loans. Helps to manage all billable services that are incurred by faculty and students using laboratory equipment.
19. Coordinates equipment and laboratory consumables transfer between Peterborough and Oshawa for undergraduate teaching laboratories.
20. Works with instructors to coordinate and ensure consistency in the lab based learning outcomes in different versions of on-line and classroom courses.
21. Works with departmental coordinator to facilitate timetabling as necessary.
22. Help to maintain departmental collections (skins, herbarium collections, etc.)
23. Invigilates undergraduate exams.
24. Participates in outreach and liaison efforts in the department.
25. Participates in any internal or external committees as agreed upon with Biology Chair.
26. Works with Biology Undergraduate Society to advise and assist with activities and promotions.

**Education**

Masters of Science Degree in Biology or related discipline.

**Experience Required**

1. Two years’ experience as a laboratory technician or demonstrator.
2. Biology field experience an asset.
3. Experience in ordering supplies, inventory, and budgeting.
4. Valid First Aid Certificate or willingness to obtain one.
5. Proficient in the use of computer applications; Intermediate level of computer skills in Microsoft Word, Excel, PowerPoint, Blackboard (or related Online Learning System).
6. Experience with statistical analysis software or programming (e.g. R) an asset.
7. Valid Ontario Driver’s Licence – Class ‘G’ minimum.
8. Strong presentation skills; experience facilitating labs and managing both large and small groups.
9. Strong organizational, interpersonal and communication (written and verbal) skills required.
10. Demonstrated skills in, and commitment to, customer service and continuous improvement.

**Responsibility for the Work of Others**

Direct Responsibility

Graduate Teaching Assistants, Academic Assistants

Indirect Responsibility

N/A

**Communication**

Internal:

* Students: teaching, assignment and report critique
* Technicians: equipment repair and replacement
* Technicians from other departments to discuss sharing of equipment
* Staff and Faculty: answer queries
* Faculty: department business
* Teaching Assistants: explanation of assignments
* Computer Technicians: Hardware/software problems
* Office of the Dean: Marking contracts

External:

* Suppliers: gather information and order equipment
* Technical Staff from other Universities
* Trent Community: act as a resource
* High School teachers: act as a resource
* Science Fair Board: act as a resource
* Primary School teachers: project assistance, lectures, demonstrations.
* Parents and prospective students: act as a resource in recruitment efforts

**Motor/ Sensory Skills**

* Fine Motor Skills - manipulating equipment and measuring devices, keyboarding and data entry
* 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 - marking assignments, reading new material, analyzing problems, using software and working with analytical equipment

Physical:

* Standing, Walking - administering labs
* Lifting - Moving equipment and rearranging labs/classrooms.

**Working Conditions**

Physical:

* Injury - Operation of dangerous equipment
* Repetitive strain - data entry
* Injury - Exposure to dangerous materials
* Poor lighting and noise conditions

Psychological:

* Complaints - Complaints from faculty and students
* Conflicting work priorities and deadlines - labs, manuals, assignments
* Angry students upset with grades - Handling of student appeals
* Interruptions - Interruptions from students
* Lack of control over pace of work - academic term “end rush”
* Multiple competing demands - instructing in several courses.
* Variable work schedule