

Manager of [Ecology] Teaching Labs

Department:	Office of the Dean of Environment	Effective Date:	April, 2011
Grade:	USG 10 35 hr/wk	Reports to:	Assoc Dean Undergrad Studies

General Accountability

The incumbent is part of the Dean's Office staff and reports directly to the Associate Dean, Undergraduate Studies. The incumbent is responsible for conforming to all University and provincial safety and ethics regulations, and for implementing safety practices pertaining to the facilities in all tasks performed.

The Ecology Teaching lab manager (ETLM) applies their skills in the field of Ecological processes and sciences to adequately support related courses. They liaise with course instructors and offer services via the Ecology lab facility. The ETLM provides the tools and techniques to advance the knowledge of Ecology, while continually upgrading and developing new techniques.

Nature and Scope

- The incumbent is responsible for the full operation of the Faculty of Environment's Ecology laboratory, a teaching and research facility. The incumbent will be skilled in modern field and laboratory techniques including experimental design and implementation, data analysis, field identification of taxa and equipment purchase, maintenance, and operation.
- Duties include field and laboratory demonstrations, supervision of teaching and laboratory assistants, volunteers, as well as planning, maintenance, safety and laboratory budget.
- The ETLM needs to keep up to date with emerging technologies that will benefit ENV students learning experience.
- Maintain familiarity with current and potential field study sites for instructional and research purposes.
- The incumbent may be expected to teach an ENV undergraduate course in ecology.
- The incumbent will have an Ontario driver's licence. S/he should be willing to upgrade to 'F' class.

Statistical Data

The ETLM is responsible for purchasing field and lab equipment through several funding sources. They consult with relevant course instructors, Executive assistant to the Dean, president of student societies and the financial officer to ensure appropriate acquisition of equipment. The annual budget ranges from \$25,000-\$60,000.

The ETLM is responsible for providing support to over 1,700 undergraduate students, up to 200 graduate students, over 12 faculty members teaching various courses and up to 20 environmental related courses requiring lab services.

Specific Accountabilities

- Maintaining the ENV teaching laboratories and corresponding classroom, as well as scheduling use of the facilities and equipment. Keeping abreast of information related to teaching properties and any field stations that may be acquired.
- Continually research, update, develop and implement field and lab procedures within the Faculty as they pertain to the ENV Ecology laboratory.
- Maintain safety certification and complying with provincial legislation to provide a safe working environment for all users of the ENV Ecology laboratory facilities or when working in the field.
- Regulating and tracking the use and distribution of lab and field sampling equipment through the creation and maintenance of barcode inventory system.
- Managing budget from several sources, organizing financial records and procurement associated with the ENV ecology laboratory. Writing and presenting proposals to raise funds to upgrade and/or purchase equipment.
- Ensure equipment is working and reliable by calibrating, repairing and general maintenance.
- Responsible for instructing faculty members, staff and students on the safe processing and handling of physical, chemical and biological research.
- Responsible for the ordering, preparation and standardization of chemical reagents including use of hazardous chemicals.
- Supervision and related performance evaluations of graduate and undergraduate teaching assistants, university co-op, volunteers and high school placements that are working for the ENV Ecology laboratory.
- Design and delivery of an ENV undergraduate course in ecology (e.g. classroom and/or laboratory course).
- Participate in campus projects and committees.
- Develop workshops for existing and prospective students.
- Initiate, coordinate and participate in outreach activities that will raise the profile of Ecology lab services.
- Actively research and acquire memberships and certifications where applicable to fulfill Ecology lab objectives.
- Responsible for all administrative tasks.
- Create web site and continually populate and maintain web pages.

- Incorporate Geomatics and related technology (GIS, GPS, remote sensing, statistics) into lab services and objectives for learning.
- Manage digital warehouse of archived material.
- Arrange laboratory orientations for new students and faculty.
- Prepare and maintain instructions, teaching material and manuals of standards techniques in Ecology.

Working Conditions

The ETLM works in varied conditions ranging from safe to dangerous:

- Part of the day may be spent at a workstation doing admin related tasks, answering phone and in person visits.
- Seated on a lab bench bent over a microscope.
- Working with high temperatures (distiller, ovens)
- Working with flammable, corrosive, and carcinogenic chemical reagents on a regular basis.
- Outside in fast flowing and deep water bodies (both icy winter and hot summer).
- Outside on private owned property that is adjacent to active hunting locales.
- Lifting of heavy boxes and equipment

As a result, it is essential for the ETLM to ensure safe handling of sensitive samples, bacteria and sharp objects.

The ETLM position can be stressful as they are responsible for students in these conditions as well.

The ETLM is required to multitask as several chemical experiments could be occurring within the lab and it is their responsibility to ensure safe environment.

This position can be incredibly stressful, particularly during height of field season, approaching deadlines or being responsible for managing an entire lab class in one area.

The incumbent will hold an MSc, MES or equivalent graduate degree in ecology or closely related discipline. Must have a good working knowledge of Microsoft Word, Excel and software for database management.