

Job Description



Job Title:	Biology Laboratory Technician - Molecular
Department:	Biology
Reports To:	Administrative Officer
Jobs Reporting:	None
Salary Grade:	USG 8
Effective Date:	March 2018

Primary Purpose

The incumbent is responsible for developing and ensuring the smooth and successful execution of assigned laboratory courses for several undergraduate courses, in consultation with the Instructor and/or Faculty member responsible for each course. The primary area of assignment for this position is molecular biology. The Biology Lab Technician is equally accountable to the Administrative Officer for administrative issues and The Associate Chair, Undergraduate Studies for technical issues.

Key Accountabilities

Course Work

- Prepare and provide requisite materials (e.g., solutions, reagents, RNA, protein, specimens) for laboratory offerings (including student follow-ups as requested) for assigned courses, including laboratory equipment for the initial and any follow-up laboratory sessions for particular experiments
- Perform molecular biology and genetic techniques such as extraction, visualization and manipulation of DNA, RNA and protein, gene cloning and gene expression
- Clean-up of the laboratory space with the appropriate handling and disposal techniques, including the disposal of hazardous materials at the end of each laboratory exercise
- Demonstrate proper and safe operation of equipment including: autoclave, centrifuge, compound, phase and fluorescent microscopes, Electrophoresis and Blotting system, photo developing device, fume hood and other specialized equipment
- Assist instructors or faculty members with the development of new experiments for teaching and research
- In consultation with Instructors and/or faculty members, trouble-shoot and/or update existing experiments to improve pedagogy
- Recommend changes, revisions and corrections to student lab manuals
- Create and maintain information related to the course laboratory function and operation which may serve as a guide for subsequent offerings
- Service teaching equipment and maintain records
- Support Teaching Assistants during lab sessions to trouble-shoot technical issues as they arise and/or explain the principles behind experiments

Administrative Duties

- Process marks for undergraduate courses (tutorials, labs, midterms and finals) including: compiling lab and tutorial marks, marking computer exams, providing statistical summary of student outcomes for each course, and calculating and submitting final grades to the Registrar
- Process TA evaluations for analysis at the end of each term
- Source and order laboratory and preparation room maintenance supplies

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- In consultation with instructors and faculty member(s) provide recommendations and costing to Associate Chair for equipment to improve pedagogy
- Establish and maintain liaison with sales representatives for technical and price updates
- Prepare and maintain chemical inventory in accordance with UW and legislative requirements

Safety

- Maintain personal certifications as required by Safety Office
- Update posted safety procedures including WHMIS, hazardous waste disposal etc. so that they are current
- Maintain equipment certifications and the associated records
- Prepare and maintain current Standard Operating Procedures (SOPs)
- Maintain first aid kits
- Maintain safety inspection reports (eye wash station, spill kits, etc.) and report to the Department and Safety Office as required

Other

- Serve as a technical resource person for faculty, research associates and students in the development of their research projects
- Fill in as a teaching assistant where necessary.
- Serve as a support person in other areas of department operations (laboratory preparation and clean-up for other courses, other department initiatives) as required on an occasional and short-term basis as assigned by the Chair, Associate Chair or Administrative Officer.
- May serve on the Department committees
- May serve as a back-up technician
- Maintain chemical inventory
- Work with members of the department to clean out space as needed
- May supervises co-op students, as needed

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- BSc in Biology is required, MSc preferred or equivalent related education/experience.

Experience

- Three years' experience required. Requires broad knowledge of molecular biology and competency in other fields including toxicology, physiology, plant biology, plant genetics and ecology.

Knowledge/Skills/Abilities

- Experience trouble shooting and working with scientific equipment is an asset. Requires a sound understanding of the theoretical and practical aspects of lab offerings. Maintain current certification as required by the Safety Office.
- Ability to manage multiple priorities in a fast-paced environment is essential.
- Excellent written and oral communication skills required.
- Basic skill level with Microsoft Office Suite

Nature and Scope

Job Description



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- **Contacts:** Significant internal relationships include: Administrative Officer, Department Chair and Associate Chairs, Biology faculty, graduate students, undergraduate students and research personnel, Departmental Technicians, Faculty, staff and graduate students across the Faculties of Science and in other units (e.g., Engineering). Significant External relationships include: Suppliers/Repair IST/CHIP Office, Science Technical Services, Science Projects Team, Plant Operations..
 - **Level of Responsibility:** The position has specialized work with minimal supervision and provides guidance to Teaching Assistants and Co-op students.
 - **Decision-Making Authority:** The position works with the Associate Chair, Undergraduate Studies to ensure proper interpretation and application of University policies and guidelines.
 - **Physical and Sensory Demands:** Requires exertion of physical or sensory effort resulting in moderate fatigue, strain or risk of injury. Heavy lifting is required from time to time and the incumbent must be able to routinely lift approximately 50lbs.
 - **Working Environment:** The working environment at times will be dusty and dirty. Exposure to various chemicals. Some chemicals may cause noxious smells. Evening and weekend hours are required.