

BCGEU POSITION DESCRIPTION

POSITION TITLE: Instructional Associate – Sustainable Agriculture **JOB NUMBER:** 835 **REPORTS TO:** Associate Dean – Faculty of Science and Horticulture **INCUMBENT:** N/A

DEPARTMENT: Sustainable Agriculture DATE CREATED: January, 2023

JOB CLASS: 13 DATE REVISED: N/A

PRIMARY FUNCTION

To provide support and assistance to faculty and farm manager with overall delivery of applied courses taught at the KPU Farm and the Richmond campus Seed Lab, including support for student research-based coursework and independent student research projects. Duties include preparing materials for student use; assisting in instruction and evaluation; providing guidance to students; and managing equipment, supplies, facilities and systems in and out of the lab environment.

JOB DUTIES AND TASKS

- 1. Provides instructional support, practical demonstrations, supervision and evaluation of student training, student practice sessions and student research projects conducted at the KPU Farm and Richmond campus Seed Lab:
 - Assists with the development, implementation and evaluation of lab settings, activities and demonstration materials, including researching the use of materials and equipment used in the farm and laboratory environment.
 - b. Prepares farm and lab equipment, tools, and supplies for student work, research, and applied learning experiences.
 - c. Provides lab instructions including explaining practical objectives, methods and techniques.
 - Demonstrates and explains the safe use of farm and lab equipment, chemicals, tools, supplies and instruments.
 - e. In conjunction with faculty, supplements the instruction of general agricultural principles, theories, procedures and industry practices.
 - Provides guidance and tutoring to students performing assigned laboratory exercises and research projects.
 - g. Ensures that equipment is cleaned, stored and in good working condition after use.
 - h. Sets and invigilates exams at the request of faculty.
 - In conjunction with faculty, supplements the instruction, carries out demonstrations and supervises students on general safety procedures and regulations according to WCB and WHMIS standards; monitors students for compliance to standards.
 - j. Evaluates and revises the use of equipment and supplies on the farm and in the lab.
- 2. Assists faculty with the delivery of sustainable agriculture programs, as requested by faculty:
 - a. Researches, costs-out, orders and obtains appropriate farm and lab supplies, equipment and tools as requested by faculty.
 - b. Maintains and organizes lab supplies, equipment, tools, manuals, schematics and as-built drawings.
 - c. Safely prepares and handles chemicals, fertilizers, pesticides, fuels and lubricants.
 - d. Orders and stocks education resource materials (books, posters etc.) for farm and lab use.
 - e. Collects, propagates, organizes and maintains live-plant collections and catalogues for lab use.
 - f. Facilitates the use of farm resources for optimal use.
 - g. Prepares farm equipment, tools, supplies and areas for class exercises.



- h. Prepares materials for use in lab instruction such as videos, slides, posters, demonstration boards and lab handouts.
- Demonstrates, instructs, supervises and evaluates the use of farm and laboratory equipment and materials including technical use and specifications.
- Demonstrates, instructs, supervises and evaluates student safety protocols to WCB and WHMIS standards.
- k. Assists faculty with the invigilation of tests and exams.
- I. Supervises, assesses and evaluates student lab, practical work, and research projects.
- m. Directs, supervises and ensures proper post-lab activities in the absence of instructor.
- n. Assumes responsibility for all practical lab activities in the absence of instructor.

3. Assists with the management of the farm and laboratory facilities:

- a. Provides input into the preparation of the maintenance standard for the farm and lab areas.
- b. Provides input into the adjustment of the maintenance standard as required by environmental or operational variability.
- c. Provides input into the planning and implementation of renovations and alterations of the farm and lab facilities.
- d. Recognizes, recommends and implements controls for biotic and abiotic stresses of crops.
- e. Maintains records of crop quality and crop maintenance operations.
- f. Repairs or enables repair of farm and laboratory equipment and supplies.
- g. Develops and implements preventative maintenance program for farm and laboratory equipment and supplies.
- h. Researches, orders, purchases and enables delivery or pickup of supplies and equipment as required.
- i. Provides input into the capital and operating budgets for the farm and laboratory operations.
- j. Ensures Field Lab compliance with all WCB, WHMIS and MSDS requirements.
- k. Organizes and maintains farm and laboratory equipment and tool storage areas.

4. Related duties:

- a. Conducts tours of the facility for staff, students and members of the public.
- Assists in the organization and implementation of outreach events.
- c. Organizes and implements farm sales:
 - i. Assists with the pricing of farm products.
 - ii. Maintains customer lists and records.
 - iii. Maintains inventory records.
 - iv. Carries out billings and collection of revenues.
 - v. Liquidates leftover product.
- d. Assists with the conducting and evaluating of field trials and experiments.
- e. Responds to farm and laboratory alarms and emergencies.
- f. Opens, closes and ensures that the farm and laboratory are secured after use.
- g. Supports the sustainable agriculture production programs.
- i. Purchases, handles, stores and disposes of hazardous materials; chemicals, paints, pesticides, fertilizers, fuels and lubricants.
- j. Assists in the recruitment of seasonal staff.
- k. Contributes to and promotes a safe, respectful, and inclusive work environment by adhering to University policies and procedures and completing mandatory training programs.



SUPERVISION RECEIVED:

This position reports to the Associate Dean, Faculty of Science and Horticulture.

SUPERVISION/DIRECTION EXERCISED:

Recruits, trains, directs and supervises work of student assistants and auxiliary technicians. Monitors and assists in the evaluation of student work and/or workers. Provides demonstrations on use of equipment to staff and faculty as required.

PHYSICAL ASSETS/INFORMATION MANAGEMENT:

Maintains and operates farm and laboratory equipment, supplies and materials. Maintains farm records. Creates, maintains, organizes and monitors equipment, tools, supplies and hazardous material inventories. Purchases, handles, stores and disposes of hazardous materials (chemicals, paints, pesticides, fertilizers, fuels and lubricants).

FINANCIAL RESOURCES:

Researches, orders and purchases supplies and equipment as required. Provides input into the preparation of capital and operating budgets. Collects money from the sale of farm products. Maintains purchasing records. Monitors purchasing impact on budget.

The above statements reflect the general details considered necessary to describe and evaluate the principal functions of the job identified, and shall not be construed as a detailed description of all the work requirements that may be inherent in the job.



EMPLOYER REQUIRED KNOWLEDGE SKILLS AND ABILITIES

- 1. Knowledge of WHMIS and safe work procedures for agriculture operations.
- 2. Ability to effectively demonstrate proper farm and laboratory equipment use to students.
- 3. Working knowledge of the operation and routine maintenance of farm and laboratory equipment.
- 4. Ability to communicate effectively with people of varied backgrounds and experience.
- 5. Ability to communicate the skills, knowledge, and attitudes necessary for success in sustainable agriculture to students and the public.
- 6. Ability to work in a self-directed environment with minimum supervision.
- 7. Working knowledge of computers and farm record-keeping.
- 8. Demonstrated physical ability to stand for long period of time and to lift and carry items weighing up to 50 lbs.

EMPLOYER REQUIRED EDUCATION & EXPERIENCE

- 1. Post-secondary training in agriculture (bachelor's degree minimum).
- 2. Farming and research experience.
- 3. Plus one or more of:
 - a. Farm and laboratory equipment repair and maintenance.
 - b. Organic farm management.
 - c. Research trial management.