

CHEMISTRY LABORATORY TECHNICIAN

DEFINITION

Prepares and assembles media and equipment used in chemistry experiments and demonstrations; operates and services scientific equipment; assists students and faculty with instructional activities; and orders, issues, receives, and stores laboratory materials and supplies.

TYPICAL DUTIES

Schedules and oversees the use of one or more chemistry laboratories by students, faculty and staff.
Instructs students individually in the proper and safe use and operation of a variety of equipment and tools and orients students to established policies within the instructional laboratory.
Prepares and dispenses solutions and chemical materials used for lab classes which may include reagents, chemicals, acids, bases, buffers, and stains.
Ensures the return of all solutions and chemicals used in laboratory exercises.
Assembles supplies and constructs apparatus; sets up and may assist in conducting classroom experiments and demonstrations.
Issues and receives materials and equipment for student use in laboratory and classroom assignments; keeps records, and effects the return of supplies and equipment checked out to students for laboratory use.
Operates, maintains, and makes minor adjustments and repairs on laboratory equipment such as microscopes, balances, centrifuges, emulsifiers, and homogenizers.
Maintains inventory records of supplies, materials, and equipment, and prepares requisitions as needed.
Performs elementary glass blowing in making simple laboratory equipment.
Stores supplies and equipment, disposes of solutions according to guidelines, and keeps storerooms and working areas orderly and clean.
Washes and sterilizes laboratory glassware.
May assist instructional staff in writing instructions and designing apparatus for specialized experiments.
May provide training and work direction to student employees.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

A **Chemistry Laboratory Technician** applies knowledge of chemistry and scientific laboratory procedures and techniques in performing a broad range of duties related to the day-to-day operations of chemistry laboratories which includes the preparation of media, supplies, materials, and equipment; maintenance of equipment and facilities; storekeeping functions; and proper and safe use of equipment and materials.

A **Life Sciences Laboratory Technician** applies knowledge of the biological sciences and scientific laboratory procedures and techniques in performing a broad range of duties related to the day-to-day operations of biological laboratories, which includes the preparation of media, supplies, materials, and equipment; maintenance of equipment and facilities; storekeeping functions; and proper and safe use of equipment and materials.

SUPERVISION

General supervision is received from a Department Chair. Functional supervision is received from instructional staff. Work direction may be provided to student employees.

CLASS QUALIFICATIONS

Knowledge of:

- Basic principles of biochemistry, organic and inorganic chemistry
- Scientific laboratory procedures and techniques used in a chemistry laboratory
- Scientific laboratory equipment and apparatus
- Scientific methods of measurements
- Health and safety practices and precautions applicable to a chemistry laboratory
- Capabilities of computer systems, software, and hardware common to instructional laboratories
- Principles of recordkeeping

Ability to:

- Provide instructional assistance to students and instructional staff
- Follow complex instructions and formulae in the preparation and construction of media and equipment set-ups
- Prepare chemical and reagent solutions, extracts, and dilutions to specifications
- Effectively and safely operate, adapt, and maintain scientific equipment
- Perform minor repairs and adjustments to a variety of laboratory equipment
- Stay abreast of technical subjects, practices, and developments in the field of chemistry
- Keep detailed and precise records
- Maintain an inventory of equipment and tools
- Work effectively and cooperatively with students and instructional staff
- Give clear and concise instructions
- Effectively utilize computer hardware and software
- Learn general and specialized software applications

ENTRANCE QUALIFICATIONS

Education and Experience:

An associate degree or its equivalent, from a recognized college or university, with a major in chemistry or a closely related field.

OR

Graduation from high school or its equivalent **AND** two years of full-time paid experience as a laboratory technician in a chemical laboratory.