Cabrillo College

SCIENCE LABORATORY TECHNICIAN

DEFINITION

Under general supervision, prepares and assembles media and equipment used in experiments and demonstrations; operates and maintains scientific equipment; researches, orders, issues, receives and stores laboratory materials; monitors laboratory supply and material budgets and performs related duties as required/assigned.

CLASS CHARACTERISTICS

This classification assists faculty in the effective operation of a college instructional science laboratory by applying scientific laboratory procedures and techniques in performing a broad range of duties related to the day-to-day operation of a community college science laboratory. It differs from other instructional assistant classifications in that the Laboratory Technician does not tutor students, grade papers and/or performs in classroom instructional support work on a regular basis, however provides technical support to both students and faculty.

EXAMPLES OF DUTIES (Illustrative Only)

- Set up, operate and demonstrate the use of specialized equipment, instruments and apparatus typically found in community college laboratories (E)
- Maintain and coordinate a clean and safe learning environment in the laboratory, laboratory office and storage areas; inspect areas for hazardous materials spills; prepare and maintain required documentation regarding the purchase, storage and disposal of hazardous chemicals and bio-hazards (E)
- Order, receive, store and inventory equipment, supplies and materials for laboratory experiments; issue and distribute instructional materials for student use in the lab (E)
- Prepare various media, cultures, solutions, and stains (E)
- Provide technical support and serve as a resource to faculty, students and staff (E)
- Prepare and maintain a variety of records, logs and files related to supplies and equipment inventory and purchase, student assistant schedules and chemical inventories (E)
- Arrange procurement and proper disposal of human cadavers and maintain required legal records (E)
- Must be willing to work safely with tools, equipment and hazardous materials (E)
- Operate specialized equipment used in a science laboratory including measuring devices and instruments, hot plates, centrifuges, autoclaves, microscopes, incubators, refrigeration units, vacuum systems, Geiger systems, spectrometers, interferometers and oscilloscopes (E)
- Communicate with instructors, vendors and suppliers regarding science laboratory purchases, operations and equipment (E)
- Assist faculty in writing instructions and designing apparatus for specialized experiments (E)
- Assemble, test, install, operate and maintain laboratory apparatus; dismantle equipment, clean and return to storage or stockroom after laboratory sessions; may make minor adjustments and repairs on laboratory equipment and arrange for service or repair (E)
- May assist in conducting classroom experiments and demonstrations (E)
- Issue materials and equipment to students for use in laboratory assignments, keep records and effect the return of supplies and equipment loaned to students (E)
- Assist in the development of the department budget; monitor the budget and prepare as directed (E)
- Train and oversee the day to day work of student assistants; schedule, assign and review work (E)
- Collect specimens from the field or resource institutions
- Perform related duties as required or assigned
QUALIFICATIONS

Knowledge of:

- Laboratory equipment, supplies and materials typically used in instructional science laboratories
- Principles and practices of laboratory to which assigned
- Preparation of culture media and stock solutions for laboratory experiments
- Technique for collecting and preserving live organisms
- Proper handling, storage and disposal of hazardous materials
- Health and safety precautions used in an instructional science laboratory
- Operation and maintenance of instructional science laboratory equipment
- Standard office practices and procedures including filing, the operation of office equipment, including personal or on-line computers as well as scientific computer software of laboratory to which assigned
- Oral and written communication skills
- Assembly, installation and operation of scientific instruments, devices and apparatus

Ability to:

- Effectively operate and maintain an instructional science laboratory
- Safely operate, maintain and demonstrate the use of specialized equipment, supplies and materials
- Maintain records and prepare reports
- Train and oversee the day to day work of student assistants
- Ensure proper and safe handling, storage, use and disposal of chemicals, hazardous materials, and other laboratory materials
- Prepare and/or collect instructional materials for laboratory activities
- Maintain a clean and orderly laboratory environment
- Operate a personal or on-line computer to enter, edit and retrieve data and generate reports
- Establish and maintain effective working relationships with those contacted in the course of work
- Prioritize duties and work effectively to meet deadlines

Other Requirements:

- Specific positions may require possession of a valid California driver’s license.
- Specific positions may require possession or eligibility to obtain a valid collecting permit.
- Specific positions may require CPR certification.
- Specific positions may require or desire bilingual skill in a designated second language.

A typical way of gaining the knowledge and skills outlined above is:

Two years of college coursework majoring in the scientific area to which assigned and two years of responsible science laboratory experience comparable to the duties described above. Additional related college coursework may be substituted for experience on a year-for-year basis.