

LABORATORY TECHNICIAN II – PHYSICAL SCIENCES AND ENGINEERING

DEFINITION

Under general supervision, provides instructional support services for faculty and students of the Physical Sciences and Engineering program; prepares and sets up laboratory exercises, demonstrations, instructional materials, and supplies; assists students and faculty in the use and operation of equipment and materials related to the Physical Sciences and Engineering program.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Dean, Natural Sciences. Exercises no direct supervision of staff. Provides technical and functional direction and training to student workers.

CLASS CHARACTERISTICS

This is the full journey-level in the Laboratory Technician class series. Incumbents at this level are capable of performing the full range of activities related to Physical Sciences and Engineering program. Incumbents at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Incumbents use independent judgment in carrying out assigned laboratory activities. Successful performance of the work requires knowledge of applicable regulations, policies, analytical methods, and quality control/quality assurance procedures associated with assigned responsibilities. This classification is distinguished from other laboratory technicians by having subject matter expertise in Physical Sciences and Engineering.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

1. Prepares and sets up laboratory exercises, demonstrations, and instructional materials; monitors laboratory environment; organizes, arranges, stocks, and distributes materials, equipment, and supplies.
2. Provides instructional support services for the Physical Sciences and Engineering program; performs instructional demonstrations of procedures and techniques; explains related principles, practices, procedures, methods, materials, terminology, tools, and equipment.
3. Operates, demonstrates use of, and maintains various laboratory equipment and materials; assembles apparatus for experiments and checks for proper functioning.
4. Prepares and sterilizes instruments and solutions.
5. Cleans and ensures proper storage of laboratory equipment; ensures laboratory and work areas are in clean and orderly condition.
6. Maintains accurate logs, reports, and records of work performed and materials and equipment used.
7. Monitors, orders, receives, stores, and maintains adequate inventory levels of supplies and equipment as directed.
8. Trains and directs the work of student workers.
9. Submits work orders for maintenance and repair of equipment and facilities.
10. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
11. Performs other related duties as assigned.

QUALIFICATIONS

Knowledge of:

1. Terminology, techniques, equipment, materials, principles, theories, practices, and procedures related to the Physical Sciences and Engineering program.

2. General methods and procedures for preparing course materials and laboratory exercises and demonstrations used in Physical Sciences and Engineering courses.
3. Set-up, operation, demonstration, and maintenance of various tools and equipment used in Physical Sciences and Engineering program.
4. Methods, practices, and techniques of student learning and instruction.
5. Modern office practices, methods, and computer equipment and applications related to the work.
6. Record keeping principles and procedures.
7. English usage, spelling, vocabulary, grammar, and punctuation.
8. Techniques for providing a high level of customer service by effectively dealing with the public, students, and College staff, including individuals of various ages, disabilities, various socio-economic and ethnic groups.

Skills & Abilities to:

1. Explain and apply principles, practices, procedures, methods, materials, tools, terminology, and equipment related to the Physical Sciences and Engineering program.
2. Assist students and faculty in the use and operation of equipment and materials related to the Physical Sciences and Engineering program.
3. Create an engaging and positive learning environment in a laboratory or other learning environments.
4. Demonstrate proper use and maintenance of equipment, materials, and supplies used in the Physical Sciences and Engineering program.
5. Interpret, apply, and explain applicable College policies, rules, and regulations related to areas of responsibility.
6. Estimate and order required supplies and equipment.
7. Establish and maintain filing, record keeping, and tracking systems.
8. Organize own work, set priorities, and meet critical time deadlines.
9. Operate modern office equipment including computer equipment and software applications programs.
10. Use English effectively to communicate in person, over the telephone, and in writing.
11. Understand scope of authority in making independent decisions.
12. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
13. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience which would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to an Associate's degree from a regionally accredited college in physics, physical science, engineering, or related field, and three (3) years of experience working in a physical science and/or engineering classroom, laboratory, or similar setting, or two (2) years of experience equivalent to the Laboratory Technician I – Physical Sciences and Engineering. A Bachelor's degree from a regionally accredited college or university is desirable.

Licenses and Certifications:

The incumbent may periodically be required to travel to a variety of locations. If required to operate a vehicle in the position, employees must demonstrate possession of a valid California's Driver's License.

PHYSICAL DEMANDS

Must possess mobility to work in a laboratory/classroom environment and in the field; strength, stamina, and mobility to perform medium to heavy physical work, to operate varied lab equipment; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work. Incumbents must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, and occasionally heavier weights with the use of proper equipment.

ENVIRONMENTAL ELEMENTS

Incumbents work in a laboratory/classroom and in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, dust, fumes, and allergens, and hazardous physical substances. Incumbents may interact with staff and/or students in interpreting and enforcing departmental policies and procedures.