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**SCIENCE LABORATORY TECHNICIAN**

| **Reports to:**  | Department Chair |  |  |
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| **Dept:** | Chemistry, Biology, Biotechnology, & Physical Sciences | **Range:** | 20 |
| **FLSA:** | Nonexempt/Extended Day | **EEO:** | Technical and Paraprofessional |

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed by individual positions.*

### BASIC FUNCTION:

Under general supervision, prepare laboratory equipment, materials and supplies to support student learning in an assigned science laboratory at multiple sites and campuses; prepare experiment prep sheets and carts; calibrate, troubleshoot and repair instrumentation; maintain an inventory of supplies; provide assistance to instructors during lab classes; and perform related duties as assigned.

### DISTINGUISHING CHARACTERISTICS*:*

A Science Laboratory Technician is distinguished from a Senior Science Laboratory Technician in that an incumbent in the latter class plays a lead role in the preparation and setup of multiple science laboratories, trains and oversees the work of Science Laboratory Technicians and student workers, and exercises budgetary and purchasing responsibilities for science laboratories in assigned departments.

### ESSENTIAL DUTIES & RESPONSIBILITIES:

*The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.*

1. Prepare, set up, monitor and break down equipment and materials for laboratory classes, exercises and experiments; may demonstrate methods and assist students in the use of appropriate techniques during labs, under the guidance of an instructor; assist in trouble­shooting any failed experiments including assessing user errors and equipment errors or failures, often on a real-time basis; may assist in preparing demonstrations, modify­ing lab activities and developing new experiments to support classroom learning.
2. Calculate, mix, prepare, label and store a variety of chemical solutions, reagents, media, compounds, bacterial cultures and samples; test processes and identify sound and safe methods to streamline preparation for lab classes; prepare prep sheets, instructions and other documentation.
3. Write and maintain laboratory documents and records including stockroom guidelines, student locker assignments and other files.
4. Maintain, recalibrate and repair laboratory equipment and instrumentation including micro­scopes, gas chromatographs, high performance liquid chromatographs, spectrophotom­eters, nuclear magnetic resonators, centrifuges, sterile hoods, pipettes, pH meters, laptops and other laboratory equipment; maintain an inventory of replacement parts; arrange for major repairs by outside vendors.
5. Maintain and organize an inventory of supplies and consumables; track use of materials; estimate materials needed for laboratory exercises and request inventory replenishment to ensure sufficient supplies are on hand to support laboratory activities.
6. Maintain the safety of the laboratory environment; provide instruction and demonstrate safety procedures to staff, instructors, student assistants and students; monitor activities in the laboratory to ensure safety procedures are followed; inspect and maintain laboratory safety equipment such as eye washer, shower, fire extinguisher, respirator and safety kits; report the need for any repairs; maintain and update MSDS notebooks as required by law.
7. Ensure proper maintenance and cleanliness of laboratories to protect the health and safety of students, faculty, and staff; clean and sanitize classroom furniture and work surfaces and equipment.
8. Organize, store, and dispose of chemicals, solutions, biological specimens and other hazard­ous materials in accordance with college policies and procedures and state and federal requirements; autoclave and dispose of biological wastes; arrange for pick-up of hazardous waste.

### OTHER DUTIES:

1. Perform research on new equipment and recommend purchases and replacements within budget limitations.
2. Coordinate with others to receive donations of equipment and supplies from local firms.
3. Train and oversee the work of student assistants; demonstrate tasks and lab safety proce­dures.
4. Perform related duties as assigned.

### KNOWLEDGE AND ABILITIES:

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1. Subject-matter areas at the bachelor’s degree level in the area of assignment including, where applic­able, theory, concepts, scientific fundamentals, methods and processes, tools, scientific terminology, equipment and instrumentation used in the scientific discipline.
2. Formulas, equations, solutions, substances, weights and measures, reactions and symbols used in the assigned area of scientific specialty.
3. Methods and practices of student instruction and tutoring.
4. Use and operation of computers with standard business and specialized software and methods and procedures for diagnosing and resolving minor hardware and software problems in a classroom or laboratory environment.
5. Office practices and procedures, including recordkeeping.
6. College environmental safety policies and procedures and safety methods and practices applicable to the assigned laboratory including the safe mixing, storing and disposing of hazardous chemicals and biohazards in accordance with state and federal requirements.
7. Written and oral communication skills including correct English usage, grammar, spell­ing, punctuation and vocabulary.

### ABILITY TO:

1. Provide effective tutoring, instruction and guidance to students in subject-matter areas applic­able to area of assignment; accurately, thoroughly and clearly answer students’ subject-matter, equipment-use and technology questions.
2. Assist faculty and instructors in planning, organizing and preparing classroom and labora­tory demonstrations, experiments and classroom/laboratory materials.
3. Demonstrate and walk students through the operation of specialized instrumentation, equip­ment, tools, hardware and software in an assigned scientific lab.
4. Organize, set priorities and exercise sound, independent judgment within areas of responsi­bility.
5. Assign and inspect the work of student assistants.
6. Train, demonstrate, inspect, enforce and monitor safe work practices and safety compliance by instructors, staff, student assistants and students in a laboratory environment with hazardous chemicals and biohazards.
7. Analyze, interpret, explain and apply relevant laws, regulations, rules and policies.
8. Communicate effectively, both orally and in writing.
9. Understand and follow written and oral instructions.
10. Operate a computer and standard business software.
11. Demonstrate sensitivity to and understanding of diverse academic, socioeconomic, cultural, ethnic and disability issues.
12. Establish and maintain effective working relationships with all those encountered in the course of work.

### EDUCATION AND EXPERIENCE:

Graduation from an associate degree program with a major in the assigned scientific discipline, and at least one year of experience in a scientific laboratory that provides experience in the use of equipment and instrumentation in conducting scientific experiments; or an equivalent combination of training and experience. Experience working with college-age students in an organized educational environment is highly desirable.

### LICENSES AND OTHER REQUIREMENTS:

A valid California driver’s license and the ability to maintain insurability under the district’s vehicle insurance program.

Completion of annual lab safety training is required for continued employment.

**WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES:**

Student assistants.

**CONTACTS:**

Faculty, instructors, coworkers, students, and employees in other departments.

**PHYSICAL EFFORT:**

*The physical efforts described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Frequent standing, walking, bending and stooping; occasional lifting and/or carrying of objects weighing up to 50 pounds; ability to work at a computer, including repetitive use of a computer keyboard, mouse or other control devices; ability to travel to a variety of locations on and off campus as needed to conduct district business.

**EMOTIONAL EFFORT:**

Ability to develop and maintain effective working relationships involving interactions and com­munications personally, by phone and in writing with a variety of individuals and/or groups from diverse backgrounds on a regular, ongoing basis; ability to concentrate on detailed tasks for extended periods and/or intermittently while attending to other responsibilities; ability to work effectively under pressure on multiple tasks concurrently while meeting established deadlines and changing priorities.

**WORKING CONDITIONS:**

Instructional lab environment; subject to equipment and chemical hazards, fumes, loud noise, dust, and extreme temperatures. Subject to frequent interruptions by individuals in person or by tele­phone and intermittent exposure to individuals acting in a disagreeable fashion. May work at any district location or authorized facility with occasional evenings and/or weekends on an as-needed basis. Occasional local travel may be requested.