

**SENIOR SCIENCE LABORATORY ASSOCIATE**

| **Reports to:**  | Dean or Department Chair |  |  |
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| **Dept:** | Chemistry, Biology, Biotechnology & Physical Sciences | **Range:** 26 |  |
| **FLSA:** | Nonexempt/Extended Day | **EEO:** | Professional/Nonfaculty |

*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, lead and participate in the work of other Science Laboratory Tech­nicians and student assistants engaged in preparing laboratory equipment, materials and supplies to support student learning in assigned science laboratories; coordinate and manage multiple science laboratories in different building and campus locations; prepare and track laboratory budgets and prepare purchase requisitions; and provide assistance to instructors in developing laboratory demonstrations and experiments; work with faculty in preparing demonstrations, modifying lab activities and developing new experiments to support classroom learning.

### DISTINGUISHING CHARACTERISTICS*:*

A Senior Science Laboratory Associate is distinguished from a Science Laboratory Technician in that an incumbent in the latter class prepares and maintains laboratory equipment, materials and supplies and provides assistance to instructors during lab classes.

### 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. Participate in selecting, training and providing day-to-day lead work direction to other staff and student assistants; assign and monitor work for completeness, accuracy and conform­ance with district, depart­ment and legal/regulatory requirements and standards; monitor work flow to ensure that mandated deadlines are being met in an optimal manner; provide information, instruction and training on work procedures and technical/legal/regulatory and safety requirements; provide input to supervisor on employee work performance and behaviors; assist in ensuring a fair and open work environment in accordance with the district’s mission goals and values.
2. Coordinate laboratory staff schedules and coverage and the writing and maintenance of laboratory docu­ments and records including stockroom guidelines, student locker assign­ments and other files.
3. Assist in managing the laboratory budget; research vendors for price and quality; prepare purchase requisitions for inventory replenishment; set up blanket purchase orders and contracts for service of equipment and instrumentation; maintain an inventory of chemicals and other materials, supplies and consumables required for laboratory use; track usage to anticipate future requirements; organize and ensure safe storage of chemicals and hazard­ous materials.
4. Coordinate and ensure the safety of the laboratory environment; provide instruction and demonstrate safety procedures to Science Laboratory Technicians, 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; maintain accident report guidance documents and files of accident reports.
5. Oversee the work of student assistants engaged in maintaining and ensuring laboratory cleanliness to protect the health and safety of students, faculty and staff, including clean­ing and sanitizing classroom and laboratory furniture, work surfaces and equipment and wash­ing glassware.
6. Participate in preparing, setting up, monitoring and breaking down equipment and materials for laboratory classes, exercises and experiments; create recipes, test, calculate, mix, prepare, label and store a variety of chemical solutions, reagents, media, compounds, bacterial cultures and samples; perform tissue culturing and bacterial work in a sterile environment; test processes and identify sound and safe methods to streamline preparation for lab classes; work with faculty in preparing demonstrations, modifying lab activities and develop­ing new experiments to support classroom learning.
7. Maintain, recalibrate and repair laboratory equipment and instrumentation including micro­scopes, gas chromatographs, high-performance liquid chromatographs, spectrophotom­eters, FTIR, NMR spectrometer, centrifuges, sterile hoods, pipettes, pH meters, laptops and other laboratory equipment; maintain an inventory of replacement parts; arrange for major repairs by outside vendors.
8. Prepare hazardous waste labels; store and dispose of chemicals, solutions, biological speci­mens and other hazardous materials in accordance with college policies and proce­dures and state and federal requirements; arrange for pickup of hazardous waste.

### OTHER DUTIES:

1. Maintain cadavers and other specimens in excellent condition for instructional use.
2. Perform research on new equipment and recommend purchases and replacements within budget limitations.
3. Collect field samples required for assigned laboratories; manage and ensure quality control for a microscope slide inventory for lab courses.
4. Make logistical arrangements for field studies and science outings.
5. Solicit and coordinate with others to receive donations of equipment and supplies from local firms.
6. Train and oversee the work of student assistants; demonstrate tasks and lab safety proce­dures.
7. Maintain department shared electronic workspace records and course-specific resources.
8. Perform related duties as assigned.

### KNOWLEDGE AND ABILITIES:

### KNOWLEDGE OF:

1. Subject-matter areas at the graduate level in the area of assignment including, where applic­able, theory, concepts, scientific fundamentals, methods and processes, tools, 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. District practices and procedures for budgeting and purchasing.
7. 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.
8. Written and oral communication skills including correct English usage, grammar, spell­ing, punctuation and vocabulary.

### ABILITY TO:

1. Assist faculty and instructors in planning, organizing and preparing classroom and labora­tory demonstrations, experiments and classroom/laboratory materials.
2. Demonstrate and walk students through operations of specialized instrumentation, equip­ment, tools, hardware and software in an assigned scientific lab.
3. Organize, set priorities and exercise sound, independent judgment within areas of respons­ibility.
4. Assign and inspect the work of Science Laboratory Technicians and student assistants.
5. 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.
6. 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.
7. Communicate effectively, both orally and in writing.
8. Understand and follow written and oral instructions.
9. Analyze problems, evaluate alternatives and recommend or adopt effective courses of action.
10. Understand, interpret, explain and apply applicable laws, codes and regulations.
11. Present proposals and recommendations clearly, logically and persuasively.
12. Operate a computer and standard business software.
13. Use tact and diplomacy in dealing with sensitive and complex issues, situations and concerned people.
14. Demonstrate sensitivity to and understanding of diverse academic, socioeconomic, cultural, ethnic, gender, sexuality and disability issues.
15. Establish and maintain effective working relationships with all those encountered in the course of work.

### EDUCATION AND EXPERIENCE:

Graduation from an accredited four-year college or university with a Bachelor’s degree in the assigned scien­tific discipline, and two years of experience in a scientific laboratory that provided 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 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:**

Work direction to Science Laboratory Technicians and 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 50 pounds or more; 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, 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.