

CLASS SPECIFICATION
Chemistry Laboratory Specialist

FLSA Status: Nonexempt
EEOC Job Category: Professionals
Union Representation: Represented

GENERAL PURPOSE

Under general supervision, maintains and manages a chemistry laboratory; coordinates and prepares materials for laboratory classes and exercises; coordinates and oversees activities of the Life Sciences Learning Center; orders, stores and inventories lab materials, supplies and consumables; maintains safety and cleanliness of lab equipment and facilities; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Chemistry Laboratory Specialist is responsible for overseeing and maintaining a chemistry laboratory including maintaining an inventory of required materials, supplies and consumables and preparing and setting up equipment and materials for laboratory exercises. The incumbent is also responsible for coordinating and overseeing day-to-day activities of the Life Sciences Learning Center. The incumbent is responsible for ensuring the safety and cleanliness of laboratory equipment and facilities. Work assigned requires a detailed knowledge of the scientific subject matter applicable to the assignment and the ability to assist in providing instruction to others in an effective manner.

ESSENTIAL DUTIES AND 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. Maintains, manages and oversees the activities of a chemistry laboratory; prepares and sets up equipment and materials for laboratory classes, exercises and experiments; makes chemical calculations and prepares a variety of stock solutions and chemical reagents; grows cultures and gathers specimens; takes down, cleans and stores equipment and materials following experiments; assists faculty in demonstrating and conducting laboratory experiments; confers with faculty in planning for and coordinating multiple lab sections for various life science courses.
2. Determines types and amounts of materials and supplies to order for lab exercises and experiments; orders and maintains an inventory of laboratory chemicals; receives, inspects, catalogs, organizes, stores, handles, utilizes and maintains microscopes, magnetic stirrers, water baths, pH meters, spectrophotometers, centrifuges, fume hoods, microcomputers, slide projectors, laminators and other laboratory supplies and consumables; disposes of chemicals and other hazardous materials in accordance with state and federal requirements.
3. Coordinates and oversees the day-to-day activities of the Life Sciences Learning Center; explains, demonstrates and clarifies foundational college-level biological concepts to students; answers questions and provides reference materials and learning aids; provides suggestions on fundamental research techniques and study methods to assist students in mastering scientific concepts, theories and

principles; retrieves and provides relevant information and resources for students and faculty members regarding Center facilities and opportunities provided.

4. Maintains and tracks movement of equipment and instruments, office and laboratory supplies and chemical inventories from the stockroom, classrooms and the Learning Center; makes minor repairs and adjustment to equipment and instruments and ensures proper working order; contacts appropriate maintenance personnel or third-party vendors to schedule major repair/maintenance requirements; updates computer software and hardware as required by the District.
5. Ensures proper maintenance and cleanliness of laboratory and Learning Center equipment and facilities to ensure the health and safety of students, faculty and staff; ensures proper storage, sterilization and disposal of chemicals, biological specimens and solutions; follows established procedures in the disposal of organic and animal tissue waste and other hazardous materials.
6. Prepares and maintains a variety of lab records; files and consults material safety data sheets; prepares a variety of records and reports on operations of the Learning Center.
7. Supervises work study students assigned to the program; coordinates and assigns work; monitors and provides instruction on safe work practices and procedures; trains new stockroom workers in the setting up of labs for different courses; provides performance feedback; prepares and submits time cards for student workers.

OTHER DUTIES

1. Confers with faculty and Department Head regarding Learning Center policies and procedures and reference materials and other learning apparatus and resources; develops and recommends changes and improvements.
2. Attends a variety of meetings, training sessions, seminars and workshops as required.

QUALIFICATIONS

Knowledge of:

1. Theory, principles, laws and scientific fundamentals applicable to assigned responsibilities in a chemistry laboratory.
2. Theory, principles, laws and scientific fundamentals applicable to assigned responsibilities in a Life Sciences Learning Center, including biology, physiology, biochemistry, chemistry and human anatomy.
3. Uses of various chemicals, biological specimens and solutions in reinforcement of science classroom instruction.
4. Use and operation of standard life science and chemistry laboratory equipment.
5. Research techniques and standard reference materials in the field of specialty.
6. Basic chemistry formulas and equations, solutions, substances, weights and measures, reactions and symbols used in the area of specialty.

7. Laboratory safety rules, practices and procedures, including the storage and disposal of specimens, chemicals and hazardous materials in accordance with state and federal laws and regulations.
8. Correct English usage, including spelling, grammar and punctuation.
9. Administrative practices and procedures, including purchasing, record keeping and filing practices and procedures.

Ability to:

1. Assist instructors in planning, organizing and preparing classroom and laboratory materials and experiments.
2. Demonstrate the safe and efficient operation of specialized chemistry and life science lab instrumentation and equipment.
3. Operate a variety of equipment including microscopes, magnetic stirrers, water baths, pH meters, spectrophotometers, centrifuges, fume hoods, microcomputers, slide projectors and laminators.
4. Follow and instruct others on established laboratory safety rules, practices and procedures.
5. Operate a computer and other standard office equipment.
6. Organize, set priorities and exercise sound judgment within areas of responsibility.
7. Organize and maintain records and files.
8. Communicate clearly and effectively, both orally and in writing.
9. Understand and follow written and oral instructions.
10. Use tact, discretion, courtesy and patience in dealing with sensitive and difficult students and situations.
11. Establish and maintain effective working relationships with College management, faculty, staff, students and others encountered in the course of work.

Education, Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a four-year college or university with a major in chemistry, life sciences or a closely related field; and at least one year of experience working with college-age students in an organized, educational environment; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

None.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this class, an employee is regularly required to stand, walk and sit; talk or hear, both in person and by telephone; use hands to finger, handle or feel objects or controls; reach with hands and arms. An employee also is regularly required to stoop, kneel, bend, crouch and lift up to 25 pounds.

Specific vision abilities required by this job include close vision, distance vision, depth perception, color vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the employee is regularly required to use written and oral communication skills; read and interpret information; analyze and solve problems; observe and interpret people and situations; use basic math; learn and apply new information or skills; work under intensive deadlines and interact with District management, faculty, staff, students and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee works in a lab setting and is exposed to fumes or airborne particles, toxic or caustic chemicals, biological hazards and risk of electrical shock. The noise level can be moderately loud.