Approved: April 2004 Revised: April 2007; Jan. 2012; Feb. 2015; Feb. 2022 Reviewed: 2007 - 2008

LABORATORY TECHNICIAN – SCIENCE

Series Specifications Laboratory Technician - Science Lead Laboratory Technician - Science

DEFINITION

This series describes two classes that have the primary responsibility for all of the functions associated with the maintenance of science instructional laboratories and stockrooms including hazardous material storage, clean up, and disposal.

POSITION SUMMARY

<u>Laboratory Technician:</u> Under general supervision of the assigned manager/supervisor, performs specialized and technical duties in the operation and maintenance of science instructional laboratories and stockrooms including hazardous material storage, clean up, and disposal. Prepares, receives, stocks, and issues laboratory supplies, materials, and equipment; coordinates budgetary requisitions and expenditures for laboratory supplies and equipment, repairs, alterations, preventative maintenance contracts, and blanket purchase orders; and trains and directs student help.

<u>Lead Laboratory Technician:</u> An experienced Lab Tech who, with minimal supervision from an assigned manager/supervisor, performs the most complex specialized and technical duties in the operation and maintenance of science instructional laboratories and stockrooms including lab set up and management, hazardous material storage, clean up, and disposal; and trains and directs student help. Acts as lead for three or more regular Lab Techs and Instructional Assistants.

TYPICAL DUTIES

Generates purchase orders for supplies, materials, and equipment needed for laboratories; and prepares instructional materials and equipment for instructor demonstrations and student use. Organizes and facilitates the collection, clean up, and disposal of biohazardous or toxic chemical waste; interfaces with hazardous waste disposal vendors; adheres to state and local laws and regulations relating to health and safety, and safe storage and disposal of hazardous materials; and maintains the stockroom and laboratory in a safe, clean, and orderly condition, which includes functional checks on safety equipment such as eyewash stations, showers, fire extinguishers and hoods. Assures availability of supplies, materials, and equipment needed for laboratories; and provides training for instructors and new technicians in stockroom operation. Prepares and issues materials and equipment for student use; and cleans, sterilizes, performs minor repairs to, adjusts, and maintains laboratory and stockroom equipment. Trains and provides direction to student help as assigned; operates a variety of equipment related to the science lab and stockroom; orders, receives, and stores supplies, materials, and equipment; communicates results of tests and analyses; and prepares and maintains various records and reports related to laboratory operations, including records of storeroom expenditures and consumable materials use. Operates a computer for word processing, spreadsheet, and database applications; and maintains supply, materials, and equipment inventories and related accountability records in a scientific storeroom. Controls expenditures within the assigned budget allocation; and provides data for and prepares budget estimates. Operates a motor vehicle as needed; meets with science faculty, Instructional Assistants, and other Laboratory Technicians Los Rios Community College District Laboratory Technician – Science Series Specification Page 2

to assist in the design and development of experiments and demonstrations; and performs related duties as required.

<u>Biology:</u> Prepares and maintains microbial cultures and media; prepares solutions; handles living organisms; works with preserved organisms; moves and relocates biological models; operates autoclaves; cleans lab and stockroom glassware and equipment; and uses dissecting tools.

<u>Chemistry:</u> Prepares materials for instructors including solutions, solids, unknowns, and associated demonstration materials; prepares standard volumetric solutions and reagents used in labs; tests and analyzes chemical and physical properties of liquids, solids, and gasses; maintains a chemical library for students to check out various items needed for their labs or homework; assigns lockers each semester to the various labs; performs minor maintenance and keeps inventory on lockers and usage; maintains breakage cards for instructors in order to monitor glassware breakage and shortages.

<u>Physics:</u> Prepares equipment and materials for instructors; assembles items for demonstration and lab use; repairs equipment using basic electronics skill; calculates data to compare with expected values; maintains sensors and probes; and may work with nuclear materials.

QUALIFICATIONS

EDUCATION/ EXPERIENCE

<u>Laboratory Technician</u>: One year of responsible and successful work experience in a science laboratory or stockroom, or equivalent training. Successful completion of two years of college education, with 19 semester units in Biology, Chemistry, and/or Physics. Additional experience or education may be substituted on a year-for-year basis for the required experience or education.

<u>Lead Laboratory Technician</u>: Bachelor of Science degree in Biology, Chemistry, Physics or related field, completion of a HazMat training course, and two years of experience as a Laboratory Technician. Additional experience or education may be substituted on a year-for-year basis for the required experience or education.

One year of experience is equal to 12 months of experience at 40 hours per week. Applicable part-time experience will be converted to the full-time equivalent for purposes of meeting the experience requirement.

One year of education is equal to 30 semester units. Education must be from an accredited institution.

SPECIAL REQUIREMENT

Possess and maintain a valid California Driver's License in compliance with Los Rios Board Regulation R-8343; employment is contingent upon meeting the requirements of Los Rios Board Regulation R-8343. This position may require operating a District or personal vehicle in order to complete assigned work within the scope of the position duties. Any offer of employment will be contingent upon the successful completion of a medical evaluation.

ALLOCATION FACTORS

The amount of supervision exercised and received; the complexity and scope of work performed; breadth and scope of knowledge of college and District policies and procedures required; and the scope, level, and range of impact of decisions made.

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KNOWLEDGE OF

Knowledge of the composition, structure, and properties of substances; and basic chemical processes and transformations that they undergo; and the use of chemicals and their interactions, danger signs, production techniques, and disposal methods. Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (biology). Knowledge of principles, practices, procedures, vocabulary, supplies, materials, and equipment commonly used in a science laboratory and stockroom; and federal, state and local safety laws and regulations. Knowledge of record keeping and filing techniques; basic computer applications; basic principles and practices of overseeing and training student workers; elements of correct English usage, spelling, and vocabulary; and interpersonal skills using tact, patience, and courtesy; basic principles of leadership, supervision and training (Lead Lab Tech).

SKILL IN

Skill in using scientific methods to solve problems; finding information; identifying essential information; using mathematics to solve problems; and finding ways to structure or classify multiple pieces of information. Skill in inspecting and evaluating the quality of products; controlling the operations of equipment and systems; determining the kind of tools and equipment needed to do a job; and managing one's own time. Skill in leading the work of others (Lead Lab Tech).

ABILITY TO (ESSENTIAL FUNCTIONS)

The ability to perform the basic functions (Lab Tech) or advanced functions (Lead Lab Tech) of the position; sustain regular work attendance; work cooperatively and effectively with students, faculty, and staff; exercise initiative and good judgment; work as a member of a team; and to meet schedules and time lines. The ability to correctly follow a given rule or set of rules to arrange things or actions in a certain order; and match or detect differences between colors, including shades of color and brightness. The ability to understand information and ideas presented orally and in writing; and communicate information and ideas orally and in writing so others will understand. The ability to quickly make sense of information that seems to be without meaning or organization; work independently; set priorities; perform several tasks simultaneously; and compile, prepare, and maintain accurate records and reports. The ability to use a personal computer for word processing, spreadsheet, and database applications; perform basic mathematical calculations used to solve basic formulae; follow directions accurately; use a microscope (biology); and oversee and train student help. The ability to identify and work with equipment, specimens, supplies, solutions and materials common to the field to which the position is assigned; maintain stockroom records, equipment and materials in an orderly condition; and respond to emergency calls during non-working hours. The ability to lead the work of others (Lead Lab Tech).

Physical and Environmental Factors:

Stand and maneuver for extended periods of time; bend at waist and knees; stoop and crouch; climb ladders; lift heavy objects (up to 25 pounds) with and without assistance; reach for, grasp, pull and push equipment across various types of surfaces; and manipulate small objects. Drive a motor vehicle; routinely work with and around hazardous materials and allergens, which may include pesticides, degreasers, oil or grease. Make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects; make fast, simple, repeated movements of the fingers, hands, and wrists; and see details of objects at close range (within a few feet of the observer).

TYPICAL EQUIPMENT USED (May include, but not limited to)

A variety of equipment related to science labs and stockrooms including: computer, microscope, autoclave, chemical analytical instrumentation, hand and power tools, VCR, fax, printer, copier, spectrophotometer, testers, and meters.