San Diego Community College District

CLASSIFICATION DESCRIPTION

<u>Title:</u> Instructional Lab Technician / Biology

<u>Unit</u>: Office Technical

DEFINITION

Under the direction of an instructor or assigned supervisor or manager, assist in the instructional program by performing complex technical work in an instructional laboratory environment in the subject of biology.

DISTINGUISHING CHARACTERISTICS

The Instructional Lab Technician class is distinguished from the Instructional Assistant class in that positions assigned to the class of Instructional Lab Technician oversee a complex instructional laboratory for an academic or vocational area and must possess extensive technical or academic training and experience in the field of specialty. Under the direction of an administrator or specified faculty member, incumbents work independently and provide work direction and training to Instructional Assistants and/or student assistants.

EXAMPLE OF DUTIES

- 1. Oversee the operation and maintenance of biology laboratory classrooms and the main and auxiliary preparation rooms; train and provide work direction to Instructional Assistants and student assistants; maintain laboratory and/or storeroom in a safe, clean, and orderly condition.
- 2. Oversee appropriate handling, storage, and disposal of hazardous materials, hazardous chemicals, and biological wastes.
- 3. Order, receive, catalog, and store live specimens and preserved materials, chemicals, glassware, instructional equipment, collecting gear, and nets; maintain inventories, ensuring that adequate quantities are available for timely instructional use; mark chemicals, glassware, and other equipment with appropriate identification and safety information.
- 4. Prepare materials and equipment for instructional use as required according to approved procedures. Test, adjust, and maintain equipment. Perform minor repair, adjustment, and upkeep of materials and equipment, as necessary. Maintain and ensure proper operation of a wide variety of complex laboratory instruments.
- 5. Care for microbial cultures, plants, and animals; prepare chemical solutions, reagents, and glassware for student use; issue lockers to students.
- 6. Assist instructors, staff, and students in the use of equipment, materials, and supplies. Provide technical support for faculty developing new laboratory activities and experiments and writing protocols.
- 7. Provide technical assistance in the preparation of equipment and material purchases; recommend selection of equipment as requested; may interview vendors to assess new equipment and supplies, as necessary.
- 8. Assist in the preparation of the laboratory budget; monitor budget expenditures.
- 9. Prepare and maintain department documents, records, and files; maintain records of materials and equipment loaned to students.
- 10. Perform related duties as assigned.

DESIRABLE QUALIFICATIONS

Knowledge:

- Applicable federal, State, local, and environmental safety and waste management laws. Biological laboratory and field equipment.
- District organization, operations, policies, and objectives.
- English usage, grammar, spelling, and vocabulary
- Field collecting techniques.
- General needs and behavior of students of various ethnic, racial, and cultural backgrounds.
- Laboratory safety regulations and techniques.
- Minor emergency first aid.
- Operation, maintenance, uses, and characteristics of a wide variety of specialized equipment and instruments used in an instructional laboratory setting for biology.
- Operation and use of computers and software applications necessary for area of specialty. Oral and written communication skills.
- Preparation and handling of chemical solutions, reagents, and bacteria media.
- Principles and practices of work direction and training.
- Principles and techniques of animal care and handling preserved specimens and cadavers, microorganisms, and organisms.
- Principles of Biology, Zoology, Marine Biology, Botany, Microbiology, Chemistry, Anatomy, Physiology, Genetics, and Biotechnology.
- Principles of handling, storage, and disposal of hazardous material and waste management (chemical and biological).
- Principles, practices, and procedures of sterilization techniques for microbiology.
- Record-keeping techniques.
- State and local regulations regarding animal care and cadaver care.

Skills and Abilities:

- Assemble, maintain, and repair laboratory equipment.
- Assist students in understanding and applying principles of biology.
- Communicate effectively both orally and in writing.
- Demonstrate competence in laboratory skills, laboratory safety, and chemical and biological hazardous waste management.
- Ensure the care and security of assigned equipment, instruments, materials, and supplies.
- Establish and maintain effective working relationships with others.

Explain work assignments to students.

- Follow set standards and procedures and make decisions based on facts and test results.
- Issue and receive equipment and supplies.
- Learn and apply techniques of precise measurement and notation.
- Lift, carry, and move up to 25 pounds of weight.
- Maintain records and prepare reports.
- Make simple arithmetic calculations.
- Meet schedules and time lines.
- Operate computers and applicable software.
- Operate and perform maintenance and repair on a wide variety of specialized equipment and instruments.
- Plan, prioritize, and organize work.
- Provide training to students and staff in laboratory protocols and the safety and operation of laboratory equipment.
- Relate effectively with people from varied cultural and socio-economic backgrounds.
- Remain current in technical knowledge for field of specialty.
 - Train and provide work direction to others.
- Understand and follow oral and written directions.
- Work cooperatively with others.
- Work independently with little direction.

Training and Experience:

Any combination of training and experience equivalent to: a Bachelor of Science degree in Biology or related field. Experience in an instructional setting is desirable.

WORKING CONDITIONS

Physical Requirements: Category II

Environment:

Favorable, involves an instructional laboratory setting. Exposure to chemicals, bacterial cultures, and hazardous waste.