

# San Diego Community College District

## CLASSIFICATION DESCRIPTION

**Title:** Instructional Lab Technician / Physics-Astronomy

**Unit:** Office Technical

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**Job Code:** J1092  
**Original Date:** 01/1991  
**Last Revision:** 05/2016  
**Staff Type:** Classified  
**FLSA status:** Non-exempt  
**Salary Range:** 23

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### **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 subjects of physics, geology and astronomy.

### **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. Prepare and set out materials necessary to perform laboratory experiments. Design equipment configurations and procedures for experiments. Work with faculty and staff to assure that equipment and facilities are utilized efficiently, effectively, and properly.
2. Oversee the operation and maintenance of an instructional laboratory environment in the subjects of physics, geology, and astronomy; train and provide work direction to Instructional Assistants and student assistants.
3. Assist instructors and staff in the use of a variety of equipment, materials, and supplies found in a laboratory for physical science.
4. Order, receive, catalog, and store supplies, materials, and equipment; maintain inventories, ensuring that adequate quantities are available for timely instructional use.
5. Test, adjust, calibrate, and maintain apparatus and equipment. Assure there is adequate lighting in the laboratory. Check scales and other laboratory equipment for proper operation.
6. Make minor repairs on equipment such as replacing screws, soldering, and minor wiring. Send equipment to district repair facilities or to outside agencies as needed.
7. Provide technical assistance in the preparation of specifications for equipment and material purchases; recommend selection of equipment as requested; may interview vendors to assess new equipment and supplies.
8. Observe appropriate safety procedures and provide instruction in the work area to student assistants and workers.
9. Participate in the preparation of the laboratory budget; monitor budget expenditures.
10. Make recommendations regarding the use of laboratory equipment, facilities, and experiments to maintain and improve the educational program.
11. Perform related duties as assigned.

**DESIRABLE QUALIFICATIONS**Knowledge:

District organization, operations, policies, and objectives.  
English usage, grammar, spelling, punctuation, and vocabulary.  
General needs and behavior of students of various racial, ethnic, and cultural backgrounds.  
Oral and written communications skills.  
Physics, astronomy, electronics, electricity, electromagnetism, and modern physical science.  
Principles and practices of work direction and training.  
Principles, practices, procedures, and equipment of physics, astronomy, geology, and technical science.  
Record-keeping techniques.  
Safety regulations involving a physics laboratory and related activities.  
Theories of sound, heat, and mechanics as applied to physics.

Skills and Abilities:

Assemble, maintain and repair laboratory equipment.  
Assist students in understanding and applying basic principles of physical science.  
Communicate effectively both orally and in writing.  
Demonstrate competence in assigned areas of physical science.  
Ensure the care and security of assigned equipment, materials, and supplies.  
Establish and maintain effective working relationships with others.  
Explain work assignments to students.  
Issue and receive equipment and supplies.  
Learn and apply techniques of precise measurement and notation.  
Maintain records and prepare reports.  
Make simple arithmetic calculations.  
Meet schedules and time lines.  
Plan and organize work.  
Relate effectively with people from varied cultural and socio-economic backgrounds.  
Train and provide work direction to others.  
Understand and follow oral and written directions.  
Work cooperatively with others.  
Work independently with little direction.  
Work with faculty and staff to assure that equipment and facilities are used efficiently and effectively.

Training and Experience:

Any combination of training and experience equivalent to: satisfactory completion of core courses for an AS in physics and at least two years of successful work experience in the field of physics or a Bachelor of Science degree in Physical Science. Experience in an instructional setting is desirable.

**WORKING CONDITIONS**Physical Requirements:

Category II

Environment:

Favorable, involves an instructional laboratory setting. Includes exposure to high voltage and occasionally lifting and moving heavy objects.