PALOMAR COMMUNITY COLLEGE DISTRICT

INSTRUCTIONAL SUPPORT ASSISTANT IV

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 within the job.

DEFINITION

To assist in the instructional program by performing complex technical work in an instructional laboratory environment for a highly technical or complex academic subject area; to independently operate various and complex apparatus, equipment and machines; to mix, store and dispose of various hazardous chemicals; to instruct students in laboratory procedures and equipment use; and to assume responsibility for the operations and maintenance of a complex instructional laboratory environment.

DISTINGUISHING CHARACTERISTICS

Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including the mixing, storage and disposal of various hazardous chemicals for the performance of laboratory exercises. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from an assigned instructor.

Exercises technical and functional supervision over assigned laboratory assistants.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Participate in course development and modification for assigned subject area; prepare and produce instructional materials; instruct students in laboratory procedures and equipment use.

2. Repair and maintain laboratory equipment; operate, distribute and demonstrate specialized instruments, supplies and equipment.

3. Clean, wash and store laboratory work areas according to established procedures; instruct students in the proper set up, cleaning and maintenance of laboratory equipment and supplies; calibrate and perform minor repairs on laboratory equipment.
4. Participate in establishing department goals, priorities, planning and implementation.

5. Develop, explain and demonstrate learning exercises and instructional materials to aid students' knowledge in course work; consult with faculty as needed to develop lesson plans.

6. Train and instruct students in the proper use and care of equipment; train students in procedures for mixing, storing, dispensing and labeling laboratory work or supplies; monitor students in class work procedures.

7. Supervise and schedule the work of instructional and student assistants; train instructional and student assistants in laboratory procedures and operations.

8. Maintain learning environment in a safe, clean and orderly condition; make minor repairs and adjustments to learning equipment.

9. Maintain records of materials ordered, issued, used and returned and prepare related reports; maintain inventories to ensure that adequate quantities are available for timely instructional use.

10. Assist in ordering and receiving chemicals, laboratory supplies and equipment; contact vendors to order supplies as needed.

11. Assume full responsibility for disposal of unsafe or hazardous materials according to Federal, State, County and City regulations.

12. Calculate amount of reagents and chemicals needed for experiments; prepare, mix, dissolve and transfer chemicals and solutions; label chemicals and supplies.

13. Conduct safety and health training for faculty and laboratory assistants; create and update safety handouts and manuals.

14. Participate in the preparation and administration of the laboratory budget; submit budget recommendations; monitor expenditures.

15. Maintain safety equipment; record safety inspections and calibration of equipment.

**Marginal Functions:**

1. Assign laboratory lockers to students for use each semester.

2. Contact service managers/technical representatives for repair and service maintenance of lab equipment as needed.

3. Perform related duties and responsibilities as required.
QUALIFICATIONS

Knowledge of:

Advanced methods and techniques of instruction and tutoring.
Principles and applications of assigned academic subject matter.
Operations, materials and equipment used in a scientific laboratory.
Basic principles of supervision and training.
Principles and procedures used to set up for and perform various laboratory experiments and exercises.
Methods and techniques used to mix chemicals for laboratory experiments.
Proper disposal methods for unsafe or hazardous materials.
Safe practices used in scientific laboratory operations.
Modern office procedures, methods and equipment including computers.
Occupational hazards and standard safety practices.
Pertinent Federal, State and local codes, laws and regulations.

Ability to:

Perform at a college graduate level in the assigned area.
Instruct and tutor students in a highly technical or complex academic subject area.
Set up, prepare, demonstrate and explain various laboratory experiments.
Plan, prepare and deliver laboratory lectures.
Calculate and safely mix reagents and chemicals needed for laboratory experiments.
Instruct students and laboratory staff in various laboratory operations and safety procedures.
Dispose of hazardous waste according to established rules and regulations.
Maintain inventory of laboratory supplies and equipment.
Conduct safety and health training for faculty and laboratory assistants.
Maintain accurate records and files.
Operate office equipment including computers and supporting software applications.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Experience and Training Guidelines
Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Experience:**

Three years of increasingly responsible experience providing tutorial or instructional assistance to students within the assigned academic subject area.

**Training:**

Equivalent to a Bachelors degree from an accredited college or university with major course work in chemistry, biology, education or a related field.

**WORKING CONDITIONS**

**Environmental Conditions:**

Classroom or laboratory environment; exposure to potentially hazardous chemicals; work in or with water; extensive contact with students and faculty.

**Physical Conditions:**

Essential and marginal functions may require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time; the ability to distinguish color; operating laboratory equipment and machinery.