## SOUTHWESTERN COMMUNITY COLLEGE DISTRICT

CLASS TITLE: INSTRUCTIONAL LAB COORDINATOR - CHEMISTRY

## **BASIC FUNCTION:**

Under the direction of the Dean, Math/Science/Engineering School, oversee and coordinate the operations of the complex chemistry stockroom; perform complex technical work related to chemistry including to prioritize, distribute, and coordinate lab assignments; and train, assign, and review the work assigned to students and lab technicians.

#### **DISTINGUISHING CHARACTERISTICS:**

The Instructional Lab Coordinator – Chemistry classification is a single position classification that works with minimal supervision and is responsible for a lab that uses complex state-of-the-art equipment and analytical instrumentation as well as a wide variety of hazardous chemicals. The Chemistry lab is a dynamic environment requiring that the incumbent maintain a current working knowledge and understanding of complex equipment, instrumentation, hazardous chemicals, and related safety regulations. Employees in this class are responsible for ensuring all equipment and instrumentation is operational; that toxic chemicals are handled, stored and disposed of according to applicable safety laws and regulations; and that students and faculty are trained in the use of equipment, instrumentation, and safety procedures. The Instructional Lab Coordinator – Chemistry is distinguished from the Instructional Lab Technician - Science by the performance of more difficult assignments, the level of responsibility for complex equipment and instrumentation, the advanced level of knowledge required, and the responsibility for training other lab technicians, instructors, and student workers.

## REPRESENTATIVE DUTIES:

Screen, select, train, evaluate, and provide work direction for laboratory assistants and student workers; coordinate schedules and activities of student workers and lab technicians; provide guidance to student workers to enable student workers to work with minimal supervision; provide student workers with opportunities to learn new tasks and techniques employed in the lab; provide input into performance evaluations. E

Assign locker equipment and explain locker responsibility to students; check students out of assigned lockers; clean-up lockers from students that dropped class; clean and prep lockers for following semester; prepare assessment of charges and place holds on students not checked out of locker. E

Prepare and issue materials and equipment for student use; ensure that all supplies, equipment, and chemicals are presented in a safe and orderly fashion for each chemistry lab according to schedules of faculty for both day and evening labs; prepare chemical solutions, reagents, unknowns and other laboratory materials, supplies, and equipment; dismantle and clean-up labs. E

Maintain stock rooms, laboratories, prep areas, and other assigned areas in a safe, clean, and orderly condition; assume responsibility for the security of building, chemicals, equipment, and supplies; store, handle, treat, and dispose of hazardous chemicals as necessary for all instructional programs in the School of Math, Science, and Engineering according to applicable safety laws and regulation. E

Participate in safety programs and workshops; institute necessary changes to keep department functioning in safe manner; encourage awareness of and oversee the proper use of facilities and safe practices. E

# Instructional Lab Coordinator - Chemistry - Continued

Organize, prepare, and maintain laboratory procedures manuals; generate lab protocols for faculty, staff, and student workers. E

Rewrite and update lab experiments to meet needs; perform newly introduced experiments before presentation to students; identify problems and advise instructor. E

Maintain state of the art analytical instrumentation; test, adjust, maintain, use, and perform minor repairs including necessary calibrations to apparatus and equipment to ensure optimal operation; monitor gas levels; send equipment out for major repairs; coordinate usage of instrumentation with other departments. E

Use and operate a variety of technical equipment and measuring devices; learn to use and operate new equipment as it is obtained. E

Assist instructional staff; provide safety training to part-time instructional staff; demonstrate departmental procedures in the lab. E

Work cooperatively with, and coordinate activities with other District staff and service areas including maintenance, purchasing, computer services, warehouse, cashiering, and other offices throughout campus. E

Maintain a variety of files and records regarding instructional materials, inventories, purchase orders, and equipment repairs. E

Assist in preparation of the preliminary laboratory budget; project estimated needs, supplies, and requests; monitor budget expenditures. E

Participate in setting-up for faculty lecture series, majors meetings, and science opportunity day with chemical demonstrations. E

Provide assistance in semester class schedule plans using room charts.

May provide assistance and technical expertise on related special project such as the design or modification of laboratories in new or existing facilities.

Perform related duties and responsibilities as required.

#### KNOWLEDGE AND ABILITIES:

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Principles, practices, procedures, and equipment used in the chemistry department.

Chemistry laboratory operations on college campuses.

Technical aspects of field of specialty.

Operational characteristics of state of the art analytical instrumentation and equipment used in the chemistry department.

Biotechnology instrumentation.

Principles of supervision, training, and performance evaluation.

Basic principles and practices of budget preparation and administration.

Occupational hazards and standard safety practices.

Principles and practices used in handling and disposing of hazardous materials.

Principles and procedures of record keeping.

Modern office procedures, methods, and equipment including computers.

Computer applications such as word processing, spreadsheets, and statistical databases.

### Instructional Lab Coordinator - Chemistry - Continued

Correct English usage, grammar, spelling, punctuation and vocabulary.

Oral and written communication skills.

Interpersonal skills using tact, patience, and courtesy.

Pertinent federal, state, and local codes, laws, and regulations.

#### ABILITY TO:

Oversee and coordinate the day-to-day activities in the chemistry department laboratories.

Prioritize and coordinate experimental laboratory set-ups.

Apply techniques of precise measurement and notation.

Ensure the care and security of assigned equipment, specialized materials, and supplies.

Assemble, maintain, and repair lab equipment for safety and functionality including state of the art analytical instrumentation.

Demonstrate competence in chemistry.

Issue, present, and receive equipment, supplies, and chemicals in a safe and orderly fashion.

Adapt to changing technologies and learn functionality of new instruments, equipment, and systems.

Assist instructors in planning demonstrations.

Prepare chemical solutions, reagents, unknowns, and other laboratory materials, supplies, and equipment utilized by chemistry instructors and students.

Plan and organize work.

Train, select, evaluate, and provide work direction to student workers and lab technicians.

Work independently with little direction.

Meet schedules and time lines.

Maintain records and prepare reports.

Understand and follow oral and written instructions.

Work with and exhibit sensitivity to and understanding of the diverse racial, ethnic, disabled, sexual orientation, and cultural populations of community college students.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

#### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: a Bachelors degree from an accredited college or university with major course work in chemistry or a closely related field; and two years of work experience as a laboratory technician in an instructional setting.

# LICENSES AND OTHER REQUIREMENTS:

Successful completion of training as a First Responder in Handling Hazardous Materials Incidents.

# WORKING CONDITIONS:

#### **ENVIRONMENT:**

Instructional lab environment.

#### PHYSICAL ABILITIES:

Lifting, carrying, pushing, and pulling moderately heavy to heavy objects.

Dexterity of hands and fingers to operate various equipment and instruments.

Hearing and speaking to exchange information and give presentations.

Sitting, standing, or walking for extended periods of time.

Climbing on step stools to reach shelves with supplies.

Reaching overhead, above the shoulders and horizontally.

Bending at the waist, kneeling or crouching.

Seeing to read a variety of materials and assist with lab projects.

# Instructional Lab Coordinator - Chemistry - Continued

# HAZARDS:

Exposure to chemicals and fumes from chemicals. Exposure to potentially hazardous materials. Contact with hostile and/or abusive individuals occasionally.

Created: October, 2004 *Johnson & Associates*