



California State University
SAN MARCOS

POSITION DESCRIPTION

Department: College of Science, Technology, Engineering and Mathematics (CSTEM)/Chemistry and Biochemistry

Position Title: Instructional Support Technician

Job Code: 1615

Time Base: 1.0

Position Number: 00004321

Union / Unit (if applicable): California State University Employees Union (CSUEU)/Unit 9

Position Reports To: Associate Dean, CSTEM

Classification: Instructional Support Technician I

Range Code: 1

Exempt or Non-Exempt: Non-Exempt

Last Update: 1/24/2022

PURPOSE OF POSITION:

The primary function of the Instructional Support Technician (IST) is to provide comprehensive instructional support services to faculty in the teaching of chemistry and biochemistry classes. The IST I operates under the lead direction of the IST III and Department Chair, and under the direct supervision of the Associate Dean. Major responsibilities include: (1) preparation of chemicals, minor equipment, and course materials for classes, (2) inventory of chemicals, solvents and supplies, (3) repair of minor equipment, (4) safe storage, handling, and disposal of chemicals

MAJOR RESPONSIBILITIES:

	<u>% OF TIME</u>
1. Assist faculty with chemical laboratories (includes preparation of reagents & chemicals and lab set-up and take down)	80%
2. Manage chemistry stockroom	10%
3. Inventory of chemicals, equipment, and supplies	10%

LIST OF DUTIES FOR EACH MAJOR RESPONSIBILITY:

1. Assist faculty with chemical laboratories:

- Prepare solutions, materials, and reagents as requested by faculty or required by protocol.
- Set-up and removal of instructional laboratory materials, including proper hazardous waste disposal.
- Dispense chemicals, supplies, and assistance to students as necessary for laboratories and special projects.
- Check-in and check-out laboratory equipment, including the preparation of proper documentation.
- Issue lab keys and supervise check-in and check-out of lab drawers.
- Assign and track charges for laboratory breakage.
- Coordinate duplication of manuals for each chemistry lab course.
- Repair or arrange for repair of minor scientific equipment or laboratory facilities.
- Coordinate equipment use among various laboratories.
- Solicit lists (and maintain records of) chemicals, equipment, and supplies needed for classes and research.
- Help train faculty and students in the independent use of equipment.
- Act as a liaison to the equipment technician to describe equipment needs and repairs.
- Help faculty develop new instructional activities by acting as a resource in material or equipment utilization.

2. Manage chemistry stockroom:

- Maintain the stockroom and chemical prep room, as well as auxiliary storage areas.
- Maintain inventory databases for chemicals, equipment, and supplies, as well as a chemical storage system that

meets current safety requirements.

- Receive, unpack, inventory, hazard code (chemicals), shelve, and dispense chemicals, equipment, and supplies in accordance with current procedures.
- Maintain the departmental MSDS file.
- Collect, label, and categorize hazardous waste and coordinate disposal with the Environmental Health & Safety Services.

3. Inventory of chemicals, equipment, and supplies:

- Maintain files of purchase orders including delivery tickets, warranty, repair records, and other relevant information.
- Arrange for any necessary return, exchange, or repair of materials purchased.
- Purchase items at local stores when necessary using petty cash funds.
- Maintain files of equipment manuals and vendor catalogs/information.
- Research new equipment or supplies needed for classes.

PROVIDES LEAD DIRECTION OF OTHERS:

N/A

REQUIREMENTS OF POSITION:

1. List certificates, licenses, or education required

- Equivalent to two years of experience providing instructional support services for a unit or discipline, acting as a student assistant, or in producing materials or supplies related to the discipline
OR
- Equivalent to two years of college with 16 semester units in courses involving extensive use of materials, supplies, or equipment and in a discipline related to the area to which assigned may be substituted for one year of the required experience.
OR
- Equivalent to four years of college with 16 semester units in courses involving extensive use of materials, supplies, or equipment and in a related discipline may be substituted for the experience.
- One year of experience with knowledge in:
 - i. preparation of solutions and reagents,
 - ii. safe handling & storage of chemicals & solvents,
 - iii. inventory of chemicals & laboratory supplies, and
 - iv. hazardous waste disposal
- BA or BS in Chemistry, Biochemistry, or Biology with an educational background equivalent to a minor in Chemistry preferred.

2. List additional knowledge, skills, and abilities required for this position.

- Knowledge about chemical instrumentation
- Strong organizational skills
- Demonstrated ability to work independently
- Demonstrated ability to work in a team environment
- Demonstrated ability to establish and maintain effective working relationships with faculty and students
- Knowledge of common computer applications; Word, Excel and data base experience
- Knowledge of instrumentation and hazardous materials and their proper usage and disposal.
- Knowledge and experience in research to work with faculty and students on experimental protocols.
- Demonstrated ability to evaluate materials, supplies and equipment used.
- Demonstrated ability to learn to modify and make minor repairs on scientific equipment.
- Working knowledge and experience with common chemistry lab equipment, especially computer controlled equipment
- Knowledge and experience with one or more of the following instruments/techniques: GC, HPLC, AA, IR, UV-Vis

- Knowledge and experience with biochemistry labs
 - Demonstrated ability to communicate effectively orally and in writing.
 - Demonstrated ability to work in a diverse work setting.
 - Demonstrated ability to work in a fast-paced environment and respond to frequent interruptions.
3. **List machines, tools, equipment, and motor vehicles used in the performance of the duties**
- Working knowledge of and experience with common chemistry lab equipment, especially computer controlled equipment (both Windows and Apple-based)
4. **Unique working conditions**
- Handling of poisonous, noxious, flammable, radioactive, corrosive or other hazardous chemicals and substances.
 - Periods of standing, stooping and reaching to maintain equipment.
 - Able to lift equipment up to 25 lbs.
 - Wear safety equipment, possess olfactory sense capable of detecting chemical odors, and sufficient hearing to respond to safety alarms.
5. **Other employment requirements**
- This position is subject to a background check including, but not limited to, employment verification, education verification, reference checks and criminal record checks. Failure to satisfactorily complete the background check may affect the application status of applicants or continued employment of current CSU employees who apply for the position.
 - Must participate in required campus trainings including, but not limited to, Information Security Awareness Training and Sexual Violence Awareness and Prevention “EDU: Eliminate Campus Sexual Misconduct”.
 - This position is a ‘designated position’ in the California State University’s Conflict of Interest Code. The incumbent in this position is required to file Conflict of Interest forms subject to the regulations of the Fair Political Practices Commission.
 - Must successfully meet and pass a pre-employment medical examination and drug screen.
 - Must be enrolled in the University’s medical monitoring program.

PURPOSE AND NATURE OF WORK RELATIONSHIPS:

Define working relationships with people on and off campus (other than supervisor or people supervised) with whom this employee interacts on a continuing basis, and how often this interaction occurs.

DAILY:

1. Faculty: In consultation with individual faculty members, prepare, deliver and remove to or from each laboratory the necessary equipment, chemicals, reagents, solvents and supplies for the experiments to be conducted.
2. Staff: Work with current ISTIII to learn how to prepare for the laboratory and what to do if problems arise. In addition, bring any purchasing or inventory needs to the IST III (account manager).
3. Students: Provide material or assistance as requested.

PHYSICAL EFFORT:

Check the appropriate box for each of the following items which most accurately describes the extent of the specific activity performed by this employee on a daily basis.

	Number of hours/day				
	N/A	1-2	3-4	5-6	7+
1. Sitting		X			
2. Standing			X		
3. Walking			X		
4. Bending Over		X			
5. Crawling	X				
6. Climbing	X				
7. Reaching overhead		X			
		X			
8. Crouching					
9. Kneeling		X			
10. Balancing		X			
11. Pushing or pulling		X			

- 16. Driving cars, trucks, forklifts and other equipment
- 17. Being around scientific equipment and machinery
- 18. Walking on uneven ground

	Number of hours/day				
	N/A	1-2	3-4	5-6	7+
12. Lifting or carrying		X			
A. 10 lbs or less		X			
B. 11 to 25 lbs		X			
C. 26 to 50 lbs	X				
D. 51 to 75 lbs	X				
E. 76 to 100 lbs	X				
F. Over 100 lbs	X				
13. Repetitive use of hands/arms			X		
14. Repetitive use of legs		X			
15. Eye/hand coordination			X		

Yes	No
	X
X	
	X

MENTAL EFFORT

	Number of hours/day				
	N/A	1-2	3-4	5-6	7+
1. Directing others		X			
2. Writing		X			
3. Using math/calculations		X			
4. Talking			X		
5. Working at various tempos			X		
6. Concentrating amid distractions			X		
7. Remembering names		X			
8. Remembering details				X	
9. Making decisions		X			
10. Working rapidly			X		
11. Examining/observing details				X	
12. Discriminating colors		X			

ENVIRONMENTAL FACTORS

	Number of hours/day				
	N/A	1-2	3-4	5-6	7+
1. Inside					X
2. Outside		X			
3. Humid	X				
4. Hazards				X	
5. High places	X				
6. Hot	X				
7. Cold		X			
8. Dry	X				
9. Wet	X				
10. Change of temp		X			
		X			
11. Dirty					
12. Dusty		X			
13. Odors				X	
14. Noisy				X	
15. Working w/others			X		
16. Working around others			X		
17. Working alone			X		

SIGNATURES

The last sheet for any staff position description should contain the signature sheet. Signatures will include the incumbent's signature (if applicable) or new employee; the supervisor's signature and all pertinent administrative personnel.

Employee

Print Name: _____

Signature: _____

Date: _____

Appropriate Administrator (MPP)

Print Name: _____

Signature: _____

Date: _____

Dean/Department Head/Director/AVP (optional)

Print Name: _____

Signature: _____

Date: _____