



Job Description

JOB TITLE: Instructional Assistant – Plant Sciences

PAY GRADE: CL 20

LAST REVISED: 01/01/2012

*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. Additional or different duties from the ones set forth below may be required to address changing business needs/practices.*

SUMMARY DESCRIPTION

Under direction of assigned manager, provides a full range of instructional support to the Science Department's faculty, students, and staff requiring in-depth knowledge of subject area; provides tutorial assistance to students in a classroom or laboratory setting; provides assistance to students and staff in the use of technology; maintains equipment in assigned labs; supervises and provides training to student and/or other temporary workers; and performs a variety of other duties as needed to provide technical and teaching assistance to support instructional program laboratory activities.

REPRESENTATIVE DUTIES - *The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. Provides instructional support and assists with classroom activities; proctors exams and classroom videos; coordinates with Instructors to set up demonstrations; produces reports; assists with curriculum planning and coordination; assists with layout and production of instructional materials including graphics; researches, learns, and shares information regarding new techniques and methods with other staff.
2. Cultivates, maintains, and prepares living specimens and cultures including fungal, bacterial, and related specimens and cultures; arranges for donations; prepares specialized materials and solutions to meet classroom requirements for Plant Sciences/Environmental Horticulture.
3. Performs a variety of duties related to equipment maintenance and set-up; inspects, cleans, maintains, and makes minor repairs to equipment; tests, calibrates, and adjusts various precision scientific instruments, audio-visual equipment, and laboratory equipment; services, repairs, and calibrates tools; paints, repairs, wires, and installs various items in support of program operations and activities; arranges for servicing and repair as necessary; arranges for servicing, packaging, and shipping of faulty equipment as necessary.
4. Performs a variety of inventory and supply duties; orders and maintains an inventory of supplies and equipment including chemical and organic fertilizers, herbicides, pesticides, plant life, and cultures for Plant Sciences and Environmental Horticulture programs; arranges for timely receipt of purchases of living and perishable specimens; inspects incoming shipments; notifies appropriate staff and/or vendors in regards to receipt of shipments and/or problems; stores materials in proper locations; designs, organizes, and maintains storage facilities; monitors quantity and quality of supplies and materials to meet departmental needs; prepares reports and maintains records on equipment and material inventories; prepares listings of unneeded hazardous materials and arranges for pick-up and removal; updates Material Safety Data Sheets (MSDS) and/or other safety-related documentation for

Job Description

hazardous materials in storage or use; operates District or privately owned vehicle to pick up and deliver equipment and supplies to various locations to meet program needs.

5. Performs a variety of duties related to plant growth and care including plant propagation, plant specimen collection maintenance, spraying herbicides and pesticides, fertilizing, weeding, mowing, pruning, removing trees, shrubs and debris, and operating, maintaining, and repairing irrigation controllers and systems; maintains, operates, and cares for department greenhouses, shops, laboratories, department nursery and other growing facilities, and arboretums; maintains herbaria and herbarium collections.
6. Maintains garden/horticultural tools and equipment; cleans, inspects, repairs, maintains, troubleshoots, and operates hand and power tools and equipment including tractor, utility cart, power mowers, blowers, sprayers, chainsaws, and related items; researches and orders new and/or replacement equipment; arranges for the specialized maintenance and repair of equipment.
7. Prepares, loads, transports, and sets-up equipment for field trips or observation sessions; provides technical support related to equipment operations including to assist students and faculty with equipment problems during observation sessions; assists students with locating and identifying specimens and confirming their results; breaks-down and stores equipment.
8. Assists with the role of Curator of Sierra College's Natural History Museum; performs a variety of duties related to displays and specimen curation; may prepare specimens or design/build cases; may organize, mount, and label specimens or museum displays taking into account earthquake safety; may replace light fixtures and/or maintain lights in the museum displays.
9. Collects, prepares, identifies, labels (indoor/outdoor), catalogs, displays, plants, maintains and stores specimens.
10. Arranges student transportation to/from field trips; completes and submits forms; confirms vehicles for student transportation; communicates directly with Plant Operations/Facilities regarding said requests; may be required to operate District vehicle for equipment transport.
11. Administers and maintains and/or assists with maintaining the Sierra College Plant Sciences website; maintains the department's web server; coordinates with information technology staff to set proper network protocols; maintains, monitors, and upgrades server as needed; maintains or helps to maintain website, page relationships/flow; monitors web server and database server operations.
12. Provides a variety of administrative support; responds to inquiries regarding departmental operations or refer to appropriate staff; coordinates sharing of departmental resources; assists in the maintenance of assigned natural area(s); monitors departmental facilities for appropriate access and security; coordinates use of departmental facilities and collections; prepares or assists with preparation of departmental reports and correspondence; performs other clerical tasks.
13. Participates in the preparation and administration of assigned budgets; provides input regarding budget(s) development; monitors budget expenditures and coordinate purchasing to meet needs within budget(s) parameters; coordinates budget(s) transfers.
14. Provides initial computer technical assistance to faculty, staff and students; installs, removes, maintains, and assists with troubleshooting of departmental personal computer hardware and software; assists with set up of departmental computer systems and networks; answers questions; provides training to students and/or staff members; maintains departmental databases; requests or arranges for assistance, servicing, and/or repair of departmental computer equipment from District information technology staff or other technology resources.

Job Description

15. Oversees student assistants and other temporary work forces; compiles work specifications and coordinates work requests and needs; recruits, interviews, hires, and provides orientation and training to new student/temporary employees; assigns projects and daily work; evaluates work performed; monitors student/temporary workers hours worked and budgets.
16. May perform basic first aid at field sites.
17. Performs related duties as required.

QUALIFICATIONS - *The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

Knowledge of:

Concepts associated with general Biology and Environmental Horticulture.
Techniques and protocols for the collection of samples, care for living specimens, and preservation.
Laboratory procedures, equipment, tests, and experiments.
Operational characteristics of laboratory apparatus, equipment, and materials pertaining to assigned laboratory and subject area.
Operational characteristics of garden/horticultural equipment.
Plant knowledge, care, and propagation techniques.
Techniques for mixing/spraying/applying chemical & organic fertilizers, herbicides and pesticides
Office procedures, methods, and equipment including applicable computer hardware and software applications such as word processing, desktop publishing, and database management.
Basic budgeting and bookkeeping concepts and techniques.
Basic inventory and purchasing processes and procedures.
English usage, spelling, grammar, and punctuation.
Occupational hazards and standard safety practices including methods and techniques used in handling and disposing of hazardous chemicals.

Ability to:

Perform general technical/operational duties in support of the Science and Environmental Horticulture programs.
Carry out the responsibilities of the position including to set up laboratory assignments, experiments, simulations, tests, and student projects.
Grow and propagate plants.
Properly mix, apply, and store chemical/organic fertilizers, herbicides and pesticides.
Operate and perform minor troubleshooting and repair of garden/horticultural and laboratory hand and power tools and equipment.
Maintain assigned areas and equipment in a safe and organized manner.
Listen actively and effectively, identify and solve problems, and facilitate problem solving.
Operate office equipment including computers and supporting word processing, database management, and desktop publishing applications.
Adapt to changing technologies and learn functionality of new equipment and systems.
Perform general clerical tasks.
Train and supervise student and/or other temporary help.
Work independently and collaboratively.
Plan and organize work to meet changing priorities and deadlines.
Perform routine record keeping and report writing duties.
Learn and apply applicable federal, state, and local laws, codes, and regulations as well as administrative and departmental policies and procedures.
Observe safety procedures and protocols, including those for safe handling, storage, and disposal of hazardous materials.

Job Description

Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.
Perform general clerical tasks.
Hire, train, and supervise student and/or other temporary help.
Work independently and collaboratively.
Maintain accurate records.
Plan and organize work to meet changing priorities and deadlines.
Learn and apply applicable federal, state, and local laws, codes, and regulations as well as administrative and departmental policies and procedures.
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 GUIDELINES - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

Education/Training:

Two years of college with major course work in Plant Science, Botany, Environmental Horticulture, Plant Biology, or another closely-related scientific field. A Bachelor's degree from an accredited college or university is highly desirable.

Experience:

Two years of increasingly responsible experience in a Plant Science, Botany, Environmental Horticulture, Plant Biology, or closely-related scientific department.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT - *The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

Environment: Work is performed indoors in a classroom/laboratory setting and outdoors in the field; exposure to dusts, mists, fumes, wet/damp surfaces, extremes of heat or cold, moderately high levels of noise, chemicals and caustics, allergenic plants and materials; risk of insect and animal stings and bites; risk of exposure to blood borne and/or other pathogens; work with laboratory equipment and apparatus. Moderate exposure to risks controlled by safety precautions.

Physical: Primary functions require sufficient physical ability and mobility to work in an office and/or indoor/outdoor education center/classroom/laboratory setting; to stand or sit for prolonged periods of time; to occasionally walk, stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate laboratory and office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; to verbally communicate to exchange information; and requires the wearing of personal protective equipment including safety glasses or goggles, lab coats, rubber or plastic gloves, respirators, or face shields.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

Hearing: Hear in the normal audio range with or without correction.



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Developed In Consultation With

