



Job Description

JOB TITLE: INSTRUCTIONAL ASSISTANT – BIOLOGICAL SCIENCES

PAY GRADE: CL 20

LAST REVISED: 12/01/2010

*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 Biological Sciences 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. Administers, and maintains the Sierra College Biological Sciences Web site; maintains the department's Web server; coordinates with information technology staff to set proper network protocols; maintains, monitors, and upgrades server as needed; maintains Web site and page relationships/flow; monitors Web server and database server operations.
2. Researches and purchases assigned contracts, materials, and supplies; inventories existing supplies and instructional materials; determines future needs; discusses new products or special needs with vendors; prepares and submits requisitions for approval; works with District staff to obtain laboratory, lecture, or other supplies; maintains expenditure records and prepare reports.
3. Maintains, inventories, and organizes the Biological Sciences Prep-Lab facility including stockroom and project center; locates, identifies, collects, preserves, prepares, labels, cleans, maintains and otherwise curates biological collections and specimens; arranges for timely receipt of purchases of living and perishable specimens; inspects incoming shipments and distributes or stores in proper locations; designs, organizes, and maintains departmental storage facilities; prepares listings of unneeded hazardous materials and arrange for their pick up and removal from District premises.
4. Prepares, monitors, and cleans-up materials and supplies for laboratory protocols; collects laboratory schedules from, interacts with, and coordinates timely laboratory preparation for activities with departmental faculty members; cultivates, maintains cultures, and prepares living specimens and microbial, fungal, and bacterial specimens as specified in laboratory protocols; provides care and observes protocols for humane treatment of living specimens; prepares preserved animal dissection materials; prepares specialized and/or bio-technical microscopic materials for classroom/laboratory use; prepares chemical solutions.
5. Provides instructional support for all Biological Sciences Departmental instructional activities; provides technical and other assistance to departmental students with special projects, field trips, and classroom/laboratory presentations; assists with curriculum planning and coordination; assists with

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layout and production of departmental instructional materials including graphics; researches, learns, and shares information regarding new laboratory techniques and methods with other staff.

6. Sets up/takes down, tests, maintains, cleans, inspects, calibrates, makes minor repairs to, or arranges for maintenance and repair of departmental facilities and specialized technical equipment including apparatus, equipment, models, and other instructional materials; monitors proper use of laboratory equipment and materials; participates in processes to upgrade or replace departmental equipment as authorized within budget(s) parameters and program needs.
7. 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.
8. 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.
9. 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.
10. 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.
11. Performs related duties as required, including advocating for the needs of the department.

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:

Theories, concepts, principles, and applications of biological sciences and related scientific discipline. Mathematical principles and scientific concepts.

Biotechnology, PCR, and recombinant deoxyribonucleic acid (DNA) techniques and protocols.

Biological collecting and preservation techniques including techniques for care of living specimens.

Operational characteristics of laboratory apparatus, equipment, and materials pertaining to assigned laboratory and subject area.

Office procedures, methods, and equipment including applicable computer hardware and software applications such as word processing, desktop publishing, spreadsheets, database management, Web/database server and page design, and network administration management.

Basic budgeting and bookkeeping concepts and techniques.

Basic inventory processes and procedures.

English usage, spelling, grammar, and punctuation.

Principles of lead supervision and training.

Research techniques.

Occupational hazards and standard safety practices including methods and techniques used in handling and disposing of hazardous chemicals.

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Ability to:

Locate and identify regional plants, animals, and other specimens in the field.
Assemble, utilize, test, calibrate, clean, and make minor repairs to various biological sciences laboratory apparatus and other equipment; instruct others in the use of scientific apparatus.
Prepare chemical and other solutions, extracts, and dilutions to specifications.
Aseptically transfer and isolate pure cultures of bacteria.
Prepare electrophoresis gels and DNA laboratory samples.
Cultivate various living organisms.
Identify, maintain, and prepare microscopic slides.
Identify human and other animal skeletal structures.
Assist in the identification of regional fossils.
Observe laboratory protocols and ensure adherence to safe work practices and procedures.
Assist with instructional tasks including to administer tests and tutor students.
Operate office equipment including computers and supporting word processing, spreadsheet, database management, network management, desktop publishing, and Internet navigation applications.
Adapt to changing technologies and learn functionality of new equipment and systems.
Read and understand laboratory manuals, technical manuals, and laboratory procedures.
Make arithmetic calculations of average to above average difficulty.
Hire, train, and supervise student and/or other temporary help.
Work independently and collaboratively.
Maintain accurate records.
Organize storage facilities.
Plan and organize work to meet changing priorities and deadlines.
Apply scientific principles to practical applications; analyze data and solve problems.
Learn and apply applicable federal, state, and local laws, codes, and regulations as well as administrative and departmental policies and procedures.
Preserve and otherwise prepare animal skins for study.
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 biological sciences or a closely related field. A Bachelor's degree from an accredited college or university is desirable.

Experience:

Two years of increasingly responsible biological sciences laboratory experience.

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



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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.

Johnson & Associates
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