

JOB TITLE: INSTRUCTIONAL ASSISTANT – ASTRONOMY

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 <u>not</u> 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 Astronomy / 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.

- 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. Performs a variety of duties related to equipment maintenance and set-up; inspects, cleans, maintains, and makes minor repairs to equipment including telescopes and multimedia equipment; tests, calibrates, and adjusts various precision scientific instruments, audio-visual equipment, and laboratory equipment; 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.
- 3. Prepares, loads, transports, and sets-up equipment for observation sessions originating from the Rocklin campus and/or at the Robotic Observatory at the Nevada County campus and other remote observation sites; provides technical support related to equipment operations to include assisting students and faculty with equipment problems during observation sessions; assists students with locating and identifying stellar objects and confirming their results; breaks-down, stores, and services equipment.
- 4. Arranges student transportation to observation sites; 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.
- 5. Maintains, inventories, and organizes Astronomy prep area/lab facility including stockroom and project center; 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.



- 6. Administers and maintains and/or assists with maintaining the Sierra College Astronomy 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.
- 7. Provides a variety of administrative support; responds to inquiries regarding departmental operations or refer to appropriate staff; coordinates sharing of departmental resources; monitors departmental facilities for appropriate access and security; coordinates use of departmental facilities; 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. May perform basic first aid at field sites.
- 12. 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:

Astronomy and associated field work practices sufficient to assist with programs to which assigned.

Office procedures, methods, and equipment including applicable computer hardware and software applications such as word processing and desktop publishing.

General software installation and updating.

General maintenance and upkeep procedures for audiovisual equipment.

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

Principles and techniques used in the repair and calibration of scientific instruments.

Supervisory techniques.

Basic 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 and operational duties in support of the Astronomy Department.

Organize, file, sort, and document various items and materials.



Design and fabricate materials using metal and wood.

Repair, calibrate and adjust scientific equipment.

Identify stellar objects.

Understand and utilize blueprints, diagrams, schematics, and technical manuals.

Make arithmetic calculations of average to above average difficulty.

Listen actively and effectively, identify and solve problems, and facilitate problem solving.

Operate and maintain computer-aided learning equipment and utilize software applications that are dedicated to the subject matter.

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 repairs on machines, computers, and equipment.

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.

Lift 70 to 140 pounds.

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

<u>Education and Experience Guidelines</u> - 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 Astronomy or a 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 an Astronomy or other closelyrelated 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, 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.

<u>Physical</u>: 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 when necessary.

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

<u>Hearing</u>: Hear in the normal audio range with or without correction.

Developed In Consultation With

