

TITLE	CLASSIFICATION	SALARY GRADE
SCIENCE EQUIPMENT SYSTEMS SPECIALIST	CLASSIFIED	GRADE: O
BOARD POLICY REFERENCE: 20	14/15 Classification Review	

# **JOB DESCRIPTION:**

Under direction, maintains, repairs, and adjusts a wide variety of laboratory and scientific equipment; designs, fabricates, installs, maintains and operates scientific electrical and electronic systems and equipment; orders, receives, stores, issues, and inventories equipment and supplies; provides technical support to faculty and students; and performs related work.

### SCOPE:

The Science Equipment Systems Specialist performs skilled work in the maintenance and repair of electrical and electronic equipment used in the Aeronautics, Earth Sciences and Agriculture departments and the Planetarium.

# **DISTINGUISHING CHARACTERISTICS:**

The Science Equipment Systems Specialist is distinguished from other science classifications by the indepth knowledge for the maintenance and repair of specific science equipment.

### **KEY DUTIES AND RESPONSIBILITIES:**

Examples of key duties are interpreted as being descriptive and not restrictive in nature. Incumbents routinely perform approximately 80% of the duties below.

- 1. Maintains, repairs, aligns, wires, and installs projectors and related equipment for Planetarium.
- 2. Maintains, repairs, and calibrates telescopes and projects for Earth Sciences department.
- 3. Maintains, repairs and adjusts greenhouse equipment, refrigerators and freezers in stock room for Agriculture department; adjusts temperature controls in greenhouse and freezers.
- 4. Diagnoses, repairs, reverse engineers and modifies appropriate electrical and electronic systems in the Greenhouse, Weather Station and Planetarium.
- 5. Fabricates replacement parts for various science equipment (may require light duty Arc-welding).
- 6. Repairs and maintains rock cutting and grinding equipment for Earth Sciences department; maintains department seismograph.
- 7. Maintains, repairs and upgrades hardware and software in computer laboratory for Agriculture and Earth Science departments; operates SAREX (Space Amateur Radio Experiment) system and serves as main point of contact for communications.
- 8. Trains faculty and staff in the use of audio-visual equipment for classroom use; repairs various classroom equipment for instructors.
- 9. Orders and purchases replacement equipment, components and parts; maintains inventory and supplies for Earth Sciences stock room; assists in maintenance of assigned budgets.
- 10. Issues equipment to faculty and instructors; provides training and technical support in the use of the equipment.
- 11. Verifies that loaned equipment is returned in proper condition and in a timely manner.

# **EMPLOYMENT STANDARDS**

### **ABILITY TO:**

Perform skilled work in the repair, maintenance, and adjustment of electrical and electronic equipment; order, receive and issue supplies and equipment; use precision tools skillfully; perform exacting overhaul and repair work; maintain accurate records; give and follow oral and written directions; train others in the use of varied equipment; maintain cooperative working relationships; demonstrate a sensitivity to, and respect for a diverse population.

#### **KNOWLEDGE OF:**

Advanced electronics, electric circuit theory, 120-240 volts A.C., instrumentation, computer programming and general concepts of HVAC/R systems; principles, equipment, materials, supplies and procedures used in the sciences; tools, materials, and procedures for the construction, repair, calibration and maintenance of electrical and electronic equipment; standard office productivity software; safety precautions to be observed in the maintenance of electrical equipment and materials.

### **MINIMUM QUALIFICATIONS:**

Candidates/incumbents must meet the minimum qualifications as detailed below, or file for equivalency. Equivalency decisions are made on the basis of a combination of education and experience that would likely provide the required knowledge and abilities. If requesting consideration on the basis of equivalency, an Equivalency Application is required at the time of interest in a position (equivalency decisions are made by Human Resources, in coordination with the department where the vacancy exists, if needed.)

# Education:

An Associate's degree in Electronic Technology or related area with significant additional coursework in high voltage alternating current, analog and digital circuit design/repair, complex interconnection wiring systems, diagnostics and safety procedures and refrigeration diagnostics/repair.

#### Experience:

Significant experience in repairing and maintaining electrical and electronic equipment. Work in the repair and maintenance of equipment common to the sciences and experience performing welding and construction work is preferred.

### LICENSE OR CERTIFICATE:

- This classification requires the use of a personal or District vehicle while conducting District business. Must possess a valid (Class C) California driver's license and an acceptable driving record.
- Federal Communications Commission (FCC) Class License is required to operate the SAREX station.

# **SPECIAL REQUIREMENTS:**

Must be able to perform physical activities, such as, but not limited to, lifting heavy electronic equipment (up to 50 lbs. unassisted), bending, standing, climbing or walking. Must be able to safely use manual tools and power equipment common in the maintenance and repair of electrical and electronic equipment. May have exposure to electrical hazards.