CLASS SPECIFICATION
Vocational Instructional Technician – HVAC and Mechanical Maintenance

FLSA Status: Nonexempt
EEOC Job Category: Technicians
Union Representation: Represented

GENERAL PURPOSE
Under general supervision; provides vocational instruction support in the HVAC, mechanical maintenance and forklift trades programs; prepares equipment, materials, supplies and training aids for classroom instruction and student laboratory assignments; provides instruction and assists students in the proper use and operation of shop equipment; maintains a clean, safe and orderly learning environment; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS
Vocational Instructional Technician – HVAC and Mechanical Maintenance is responsible for assisting in maintaining and operating the District’s HVAC, Mechanical Maintenance and forklift shops and supporting the instructional programs, including ordering and maintaining an inventory of equipment, tools, supplies and materials and preparing equipment, materials and shops for class instruction, demonstrations and student laboratory exercises. The incumbent is responsible for performing a variety of support functions to assist faculty in the general operation of the HVAC, mechanical maintenance and forklift instructional programs. The incumbent supervises the work of assigned work study students. Work assigned requires a detailed knowledge of subject areas applicable to the specific trades programs and the ability to provide instruction to others in an effective manner.

ESSENTIAL DUTIES AND RESPONSIBILITIES
The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Performs skilled, journey-level HVAC mechanic duties in the inspection, installation, repair and servicing of heating, ventilation, air-conditioning, refrigeration and other equipment and forklift driving/operation duties; as applicable to class/lab assignments, properly and safely prepares, transports, sets-up and/or stores a variety of specialized machinery, equipment and tools used in instruction, including trainers, generators, acetylene gas wielding rigs, commercial refrigerators, split systems, recovery systems, refrigerant recovery machines, pressure gauges, diesel engines, hydraulic pumps, hermetic compressors, forklifts and other assigned equipment.

2. Assists instructors in planning for and conducting class sessions; provides input on class session content and laboratory exercises; prepares samples and demonstrates techniques, processes and methods for students; tutors students in small groups or on an individual basis on class session material and demonstrated techniques, processes and methods; answers questions and monitors the work of students in completing lab assignments; provides instruction on the proper and safe use of
equipment, tools and materials; issues tools and supplies to students for classroom and laboratory use; organizes, prepares, sets-up, and breaks-down student labs; assists in preparation and delivery of multiple classroom computer, projector and audio video presentations.

3. Maintains HVAC, mechanical maintenance and forklift equipment, materials, supplies and training aids required for class sessions and student laboratory assignments; as necessary, inspects, troubleshoots, rebuilds, repairs, services and/or fabricates items required; refers to manuals, schematics, wiring diagrams, meters and uses diagnostic tools to determine and repair causes of machinery, software or other equipment malfunction; inspects tools and equipment for damage and defects; if necessary, contacts vendors to repair or sends out items for repair; schedules periodic preventive maintenance services on program equipment.

4. Supervises work study students assigned to the program; coordinates and assigns work; monitors and provides instruction on safe work practices and procedures; provides performance feedback.

5. Prepares requisitions and places orders to maintain an inventory of shop equipment, tools, materials and supplies; off-loads materials and machinery upon delivery; picks up ordered items from vendors when necessary; maintains security of lab equipment, materials and facilities; opens and closes labs.

6. Maintains computer, systems and software applicable to the program; performs general administrative and clerical duties in support of program activities, including: forecasting and monitoring expenditures, tracking multiple budget accounts, and maintaining fiscal records; maintaining purchasing and inventory records; maintaining credit card purchase records; maintaining warranty/contract repair records; preparing and submitting time cards for student workers; maintaining program-specific databases.

7. Assists in maintaining a safe, clean and orderly learning environment to ensure the health and safety of instructors, students, work study assistants and staff; maintains, inspects, repairs and cleans shop facilities and equipment or arranges for their repair and/or replacement; ensures proper storage and handling of hazardous materials; maintains EPA and OSHA HAZMAT logs for assigned programs.

OTHER DUTIES

1. Attends meetings, training sessions, trade shows and workshops as required.

QUALIFICATIONS

Knowledge of:

1. Advanced methods and techniques used in the HVAC, mechanical maintenance and forklift trades.

2. Operation and maintenance of a wide variety hand, power and shop tools and equipment common to the trades.

3. Safe work methods and safety regulations pertaining to the work.
4. Shop mathematics.

5. Federal, state and local laws and regulations pertaining to the handling and disposal of hazardous materials and clean air requirements.

6. Methods and practices of student instruction and tutoring.

7. Administrative practices and procedures, including purchasing and record keeping.

**Ability to:**

1. Demonstrate proficient and advanced skills in the installation, operation, care, maintenance and/or repair of multiple heating, ventilation, air conditioning/heating, refrigeration, mechanical maintenance equipment and forklifts.

2. Demonstrate work processes, methods and techniques to students clearly and effectively.

3. Operate and maintain a wide variety of hand, power and shop tools and equipment used in the work.

4. Follow, demonstrate and enforce safe work practices, safety precautions and safety policies and procedures when working with students and student workers.

5. Estimate necessary materials and equipment to complete assignments.

6. Read and interpret manuals, specifications and drawings applicable to the work.

7. Use shop mathematics to make calculations.

8. Organize, set priorities and exercise sound judgment within areas of responsibility.

9. Organize and maintain records and files.

10. Communicate clearly and effectively, both orally and in writing.

11. Understand and follow written and oral instructions.

12. Use tact, discretion, courtesy and patience in dealing with sensitive and difficult students and situations.

13. Establish and maintain effective working relationships with instructors, faculty, staff, vendors, students, the public and others encountered in the course of work.

**Education, Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school or G.E.D. equivalent; and three years working as a journey-level HVAC mechanic; or an equivalent combination of training and experience. An Associate's degree in industrial technologies is preferred.
Licenses; Certificates; Special Requirements:
A valid California driver's license and the ability to maintain insurability under the District’s vehicle insurance policy.

An ARI Institute Universal AC/Ref Certification.

A valid Forklift Operator certification.

PHYSICAL AND MENTAL DEMANDS
The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands
While performing the duties of this class, an employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee is frequently required to stand and talk or hear conversations and equipment signal warnings. The employee is frequently required to walk; sit; climb or balance; stoop, kneel, crouch or crawl.

The employee must frequently lift and/or move up to 50 pounds and occasionally lift and or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

Mental Demands
While performing the duties of this class, the employee is regularly required to use written and oral communication skills; read and interpret information; analyze and solve problems; observe and interpret people and situations; use basic math; learn and apply new information or skills; work under intensive deadlines and interact with District instructors, faculty, staff, students, the public and others encountered in the course of work.

WORK ENVIRONMENT
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee works in multiple HVAC, mechanical maintenance and forklift learning laboratory settings and is frequently near moving mechanical equipment and parts. The employee is regularly exposed to heavy vibrations, fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock. The employee must occasionally work in confined spaces, near heavy traffic and/or on ladders in high, precarious places or on uneven or slippery surfaces. The noise level is frequently loud.