



## Job Description

**JOB TITLE:** Automotive Technology Instructor (Specialization: Carburetion, Fuel Injection, Ignition, Electrical/Electronic Systems)

**LAST REVISED:** MAY 1999

### DEFINITION

Under administrative direction of an educational administrator, to provide help to students to learn various aspects of Automotive Technology by preparing and delivering lesson plans, lectures, and supplementary materials, to select appropriate teaching methods and techniques, to evaluate student progress, and to do related work, as required.

### JOB CHARACTERISTICS

Incumbent supervises classified employees and/or student and/or other temporary help, as assigned.

### EXAMPLES OF FUNCTIONS AND TASKS

**Lecture/ Instruction - ESSENTIAL:** Lecture to students; design and administer exams; research technology data to include in lectures; maintain grading records; counsel students regarding career choices and degree and certificate programs.

**Laboratory Instruction/ Supervision - ESSENTIAL:** Demonstrate equipment to students; assign student projects and assignments; answer student questions; evaluate student projects; inventory supplies; oversee student progress; maintain grade records; test and evaluate equipment performance; recommend repair procedures; repair laboratory equipment; direct repairs; requisition repair parts; direct routine maintenance on equipment; direct organization of tools and equipment; plan shop space.

**Curriculum Development - ESSENTIAL:** Design job sheets; design and update curriculum material; research changes in technology; develop operating instructions for equipment to be included in materials; attend curriculum meetings; review textbooks for appropriateness for use in curriculum; design degree and certificate programs; incorporate advice from Advisory Committee and other sources into curriculum.

**Department Management - ESSENTIAL:** Schedule advisory meetings; develop departmental class schedules for full-time and adjunct faculty members for Fall, Spring, and Summer and for special courses; prepare and manage departmental budget; assist in record keeping; prepare and sign requisitions; write grant and Vocational and Technical Educational Assistance (VATEA) proposals; interview and hire student and/or other temporary help; interview and assign volunteer help; assist in hiring of adjunct faculty members; work with the Laboratory Technician-Automotive to determine need for supplies and equipment; assign work schedules and duties for the Laboratory Technician- Automotive and the Maintenance Technician- Automotive; work with the Laboratory Technician- Automotive and the Maintenance Technician- Automotive on a day-to-day basis providing suggestions to accomplish assigned tasks; sign time sheets, approve vacations, etc., of staff supervised; provide information to area Dean for use in evaluating the performance of assigned classified staff members.

**Foundation Assistance - ESSENTIAL:** Receive vehicles donated to the Sierra College Foundation (Foundation), write and forward letters of acceptance to donor(s), notify Foundation Board of Trustees members of donations, and process smog certification and appropriate documentation to the California Department of Motor Vehicles (DMV); determine and designate appropriate use(s) for donated vehicles, i.e., instructional use or surplus; for donated vehicles designated as surplus, establish value(s), locate buyers, renew smog certification and DMV certification, send buyers to the Business Services Department, Accounting Section to make payment(s), deposit receipts to the Foundation account, and sign off vehicle title transfer(s), as appropriate; order supplies authorized by Foundation; process awards made to District Automotive Technology students on behalf of the Foundation;



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recruit funds of donations to the Foundation for use by the Automotive Technology Department; assist in awarding Foundation scholarships to District Automotive Technology student recipients.

**Surplus Property Acquisition - ESSENTIAL:** Obtain approval from District Board of Trustees for incumbent to be included on approved buyer listing for state agency and visit state agency for surplus property weekly; review what is available through all forms of surplus property; purchase items such as supplies, tools, and equipment appropriate for departmental use; process requisitions through the Business Services Department.

**Advisory Committees - ESSENTIAL:** Interact with the Sierra College Automotive Technology Committee by assisting in securing committee members, providing input for meeting agendas, and attending committee meetings; work with Automotive Technology Committee to if department is using Foundation funds for non-ordinary items; serve as member of the Advisory Committee for the 49er Regional Occupation Program (ROP), attend committee meetings at locations in the Placer County area, and provide assistance and advice to the ROP.

**Liaison - ESSENTIAL:** Function as primary District point of contact for representatives of the Public Equipment Management Association (PEMA); organize and host PEMA workshops, including arranging for instructors, facilities, refreshments, etc.; coordinate Automotive Service Excellence (ASE) certification and ongoing evaluations, collecting data, as necessary, and contacting evaluator and evaluating team members; coordinate with Rehabilitation Program students and counselors; identify rehabilitation organizations and counselors; invite rehabilitation counselors to visit District campus(es); determine goals, time lines, and educational plans for Rehabilitation Program students; coordinate rehabilitation funding with State organization; work with Apprenticeship Standards and 49er ROP regarding courses approved for the Apprenticeship Program; coordinate with California Department of Apprenticeship Standards on Apprenticeship Program matters.

**Special Programs - ESSENTIAL:** Coordinate with the General Motors™ (GM®) Corporation to determine feasibility of the District's participation in the Automotive Service Education Program (ASEP), and if feasible, to incorporate materials in existing Automotive Technology Department curriculum; coordinate with GM® to obtain training on equipment; interact with representatives of local GM® dealerships to coordinate students participating in the ASEP; coordinate with other automobile manufacturers to ensure Automotive Technology Department curriculum and course materials have a broad base with regard to the automobile industry.

**Student Outreach/ Placement - ESSENTIAL:** Conduct tours of District and/or departmental facilities for prospective students and other interested individuals, as feasible and appropriate; visit local area schools to interact with prospective students; prepare brochures for and host departmental open-house activities in conjunction with the District Vocational Open House activities; provide student career advisement, as requested, and interact act with local businesses to place students in job opportunities, as feasible and appropriate.

### MINIMUM QUALIFICATIONS

#### Licenses/Certifications:

**ESSENTIAL:** Incumbent must possess or be able to obtain prior to appointment a valid California Class C or higher Driver's License in order to accomplish official travel in District and/or privately owned vehicles and to test drive vehicles. Incumbent must also complete requirements to be issued a forklift certification pursuant to completion of District-provided training in forklift operation, must complete requirements to be issued a Hazardous Materials Awareness Training Card as issued by the District pursuant to completing District-provided training mandated by Federal and/or State Occupational Safety and Health Administration (OSHA) "right to know" laws concerning handling of hazardous materials. In addition, incumbent must possess Automotive Service Excellence (ASE) certification in A-1 through A-8: engine repair; automatic transmission/trans-axle; manual drive train and axles; suspension and steering; brakes; electrical/electronic systems; heating and air conditioning; engine

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performance, including L-1: advanced engine performance, and must possess an enhanced smog license or be able to obtain such a license within six (6) months of appointment to this position.

### Degrees/Experience:

**ESSENTIAL:** Incumbent must possess a Bachelor's Degree AND two (2) years of occupational experience in the discipline AND any certificate or license required to do this work OR must possess an Associate's Degree AND six (6) years of occupational experience in the discipline AND any certificate or license required to do this work OR the equivalent.

### Knowledge of:

**ESSENTIAL:** Automotive principles and systems, with strong emphasis in theory and servicing of feedback carburetion and fuel injection systems, ignition, electrical and electronic systems, oscilloscopes, laboratory scopes, scan tools, five-gas analyzer, and on-board diagnostics I and II; California regulations regarding handling and disposal of hazardous wastes used in the automotive repair industry; shop safety principles and OSHA regulations; sources for continuous retraining to respond to changes in technologies; safe lifting techniques.

### Ability to:

**ESSENTIAL:** Apply work experience in the automotive field; teach and lecture; conduct classes in a laboratory environment; organize lecture and laboratory elements of courses; develop procedures for laboratories and student activities; read and understand technical manuals and schematics; select, use, and repair tools and equipment; organize and direct departmental budget activities; maintain effective working relationships with students, staff, and advisory committee members; supervise staff, student help, and volunteers; provide information and input for evaluation of classified staff; communicate effectively orally and in writing; follow oral and written instructions; collaborate with other staff as a team member; work independently and make effective decisions; function well under pressure and meet deadlines and timetables; maintain accurate records; utilize and demonstrate proper safe lifting techniques.

### Physical Suitability Requirements:

**ESSENTIAL:** Incumbent must be able to function effectively primarily indoors in a shop/laboratory and/or classroom environment engaged in work of predominantly a moderately active to active nature and to accomplish the following, with or without reasonable accommodation: Constantly: Maintain cardiovascular fitness to engage in active physical labor. Almost Constantly: Utilize vision (near and far) to read written materials and equipment displays, to write, to observe laboratory activities, and to operate motor vehicles; utilize hearing and speech for ordinary and telephonic conversation, to distinguish between noises associated with normal vs. abnormal operation of automobile systems, and to hear sound prompts from equipment; utilize manual and finger dexterity to use tools and equipment, write, demonstrate use of equipment, demonstrate/perform technical procedures, and operate motor vehicles; walk, to move about campus and classroom/laboratory environs; run, to traverse large garage area to mitigate safety hazards and emergency situations; stand upright and forward flexing, often for long periods of time, to deliver lectures and oversee laboratory activities; operate stationary and mobile equipment, machinery, vehicles and rolling stock; lift (from overhead, waist, and floor levels, max. 100 lbs.) and carry (max. 100 lbs.) to move tools and equipment to and from classroom/laboratory areas and in and out of storage areas; reach (from low, level, and overhead) to pick up tools and equipment from shop floor and counters and to demonstrate technical procedures on vehicles on shop floor or hydraulic lifts; push and pull hand trucks, carts, and vehicles; crawl, to reach underside of vehicles during laboratory demonstrations; stoop, bend, twist and turn head and trunk, squat, and kneel to access areas in and around vehicles to demonstrate technical procedures and otherwise direct laboratory activities; climb to reach such areas and to use step stools and ladders to reach storage and other areas above ground level; work in areas subject to exposure to dusts, mists, fumes, hazardous substances, wet/damp surfaces, extremes of heat or cold, chemicals, caustics, and solvents, risk of contact with blood borne and/or other pathogens, risk of cuts and other injuries from using power and hand tools, electrical machinery, and mobile equipment and vehicles; risk of electrical shock from electrical equipment, and high levels of noise; wear personal protective equipment to protect face and eyes, legs, feet and toes.



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Frequently: Wear personal protective equipment to protect hearing and skin. Occasionally: Work in areas subject to exposure to allergenic plants/materials and risk of falling from heights above ground level; wear personal protective equipment (including a respirator or other breathing device) to protect breathing passages, head, scalp, arms, hands and fingers, and torso.

**Faculty Salary Schedule, subject to placement at date of hire.**

**FLSA exempt.**

**SCFA bargaining unit status.**

**Classification II, Bloodborne Pathogens Exposure Control Program.**