

JOB TITLE: CONSTRUCTION TECHNOLOGY INSTRUCTOR

**LAST REVISED:** APRIL 2002

Job Descriptions are intended to present a descriptive list of the range of duties performed by employees in the position. They are <u>not</u> intended to reflect all duties which may be performed and additional or different duties from the ones set forth below may be required on occasion to address changing needs of the district.

### **SUMMARY DESCRIPTION**

Under administrative direction of an educational administrator, to provide direction and assistance to students in Construction Technology by preparing and delivering lesson plans, lectures, laboratory exercises, and supplementary materials, selecting appropriate teaching methods and techniques, to develop curriculum; to evaluate student progress; and do related work, as required.

**REPRESENTATIVE DUTIES** - The following duties are typical for this job 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.

#### JOB CHARACTERISTICS:

Incumbent may supervise and evaluate work performed by classified staff, and student and/or other temporary help, as assigned.

#### **EXAMPLES OF FUNCTIONS AND TASKS:**

**Lecture/Laboratory Preparation and Presentation: ESSENTIAL –** Research lecture and laboratory material; present lecture/laboratory information and concepts to students; develop syllabi of lecture materials; prepare and distribute handouts and supplemental materials; develop equipment operating instructions; design job sheets; design and administer examinations; assign and evaluate student projects and assignments; evaluate student progress, including tests and grading; maintain student records; counsel student regarding career choices, degree and certificate programs.

Laboratory Instruction and Supervision: - ESSENTIAL - Design, build, and test projects for laboratory assignments; demonstrate proper performance of each laboratory assignment prior to student performance; select equipment, materials, and supplies necessary to operate the laboratory; plan shop space and organization of tools and equipment; coordinate with Maintenance Technician to order and store required laboratory materials and equipment; recommend routine maintenance and repair procedures; repair lab equipment, as appropriate and feasible.

**Curriculum Development: ESSENTIAL -** Review and evaluate curriculum and materials in order to meet student interests and needs within the parameters of Divisional and/or Departmental budget constraints and availability of equipment and materials; research industry needs through advisory committees and other sources; research changes in technology; work with local businesses, industries, and community groups to plan and develop curriculum to meet employment needs; present proposals for curriculum changes; design and update curriculum material; attend curriculum meetings; design degree and certificate programs; coordinate with full and part-time faculty to enhance consistency of lecture/laboratory content.



**Department Management: ESSENTIAL -** Develop department class schedules for full and part-time faculty; prepare and manage budget; coordinate purchases of supplies, tools and equipment appropriate for department use; prepare capital outlay requests; write grants and Vocational and Technical Educational Assistance (VTEA) proposals; assist in hiring part-time faculty; select, train, and supervise student and/or other temporary help; assign work schedule and duties for Maintenance Technician; provide Division Dean with information for evaluations.

**Foundation Activities: ESSENTIAL -** Notify Sierra College Foundation of donations; receive donated equipment; write letters of acceptance to donor(s); determine uses for donated equipment; order supplies authorized by Foundation; process student awards; recruit funds or donations; assist in awarding scholarships.

Advisory Committee Participation: ESSENTIAL - Interact with Sierra College Construction Technology Advisory Committee; assist in recruiting committee members; schedule and make arrangements for advisory committee meetings; provide input for meeting agendas; attend advisory committee meetings; provide assistance to advisory committees of local high schools and Regional Occupations Programs (ROPs).

Student Outreach and Placement Participation: ESSENTIAL - Conduct tours of departmental facilities for prospective students and other interested individuals; visit local area schools to interact with prospective students; host departmental open house activities; attend local job fairs; assist in developing 2+2 articulation agreements with high schools and regional occupational programs; prepare program brochures; provide student career advisement; coordinate with rehabilitation program students and counselors to visit District campus(es); determine goals, timelines, and educational plan for rehabilitation program students; interact with local businesses to place students in job opportunities, as appropriate; coordinate student internships with local businesses.

Off-Site Program Coordination: ESSENTIAL - Determine need for program delivery; determine appropriate sites for delivery of instruction, including equipment and materials for program to be offered; procure and set-up equipment for delivery of program; coordinate and schedule program delivery with homeowners, suppliers, and vendors; coordinate educational projects with engineers and inspectors; provide appropriate storage and security for materials and equipment at off-site locations.

**Shared Governance Participation – ESSENTIAL** - Represent department and/or division by serving on District-wide committees, and/or task forces, as appropriate and feasible; participate in Vocational and Technical Education Assistance (VTEA) activities and sub-groups; research and present issues to committee related to department and vocational needs; prepare listing of capital outlay needs; develop department reports on

### **Shared Governance Participation (Continued):**

articulation, student tracking, and apprenticeship issues; accumulate data on department goals and objectives; review department future plans with department staff; participate in program assessment process; follow-up on assessment finds and develop strategies to implement changes; serve on employee selection committees, as requested.

**Professional Development Activities: ESSENTIAL –** Participate in faculty and or industry internships; read related literature to remain current on new technologies and industry trends; consult with local industry regarding trends in industry and employment standards for training; attend and present workshops at professional conferences; attend trade shows and industry sponsored seminars.

## **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. Incumbent is required to meet requirements for issuance of Hazardous Materials Awareness Training Card by the District pursuant to successful completion of District-provided training for compliance with



mandated "right to know" laws and regulations administered by the U.S. Occupational Safety and Health Administration (OSHA) and the California Occupational Safety and Health Administration (CalOSHA) with regard to handling of hazardous materials, including bloodborne pathogens, as a condition of employment in 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 -** Cabinet construction, including custom and premium cabinet structure; cabinet estimating; cabinet design, both premium and custom cabinet door and drawer structures; kitchen design; wood finishing materials and application methods for exterior

and interior cabinetry furniture; foundation layout; framing and foundation; forming techniques for slab, stem wall, high wall, and insulated concrete forming (ICF); pouring and finishing of stem wall, high wall, slab and insulated concrete forming (ICF); framing of floor, wall, and roof systems, including trussed, hip, valley, cut and stacked, gable, unequal pitched, stair framing and railing; finish trim carpentry, including setting exterior and interior doors, base, crown molding, cabinets stairs, railing; finish exterior, including siding, soffit trim, decks, stairs, railing; state regulations regarding handling and disposal of hazardous waste; shop safety principles; OSHA regulations; sources of continuous retraining in response to changes in technology; applied work experience in the construction cabinet field; mathematics as applied to technologies; assembly techniques; fabrication techniques; troubleshooting methodologies; developing, implementing and evaluating project-based curriculum; coordinating construction projects.

### Ability to:

**ESSENTIAL** – Perform specific construction technology skills as listed in "knowledge of"; apply work experience in the construction field; teach and lecture; conduct classes in a laboratory environment; organize lecture and laboratory elements of courses; develop procedures for laboratories and student activities; maintain effective working relationships with community individuals and organizations, including advisory committees; select, use, and repair tools and equipment; supervise staff, student and/or other temporary help; provide input for evaluations, as requested;

#### **Physical Suitability:**

**ESSENTIAL** - Incumbent must be able to function effectively indoors in a shop/laboratory and/or classroom environment and in an outdoor setting in a construction site environment engaged in work of predominantly a moderately active to active nature to accomplish the following, with or without reasonable accommodation:

<u>Constantly</u>: Use vision (near and far), to observe laboratory and job site activities and to read plans and lecture materials; use hearing, to monitor equipment sounds and hear speech; use

manual dexterity, to write, use and demonstrate tools and equipment; maintain cardiovascular fitness to engage in active physical labor; Almost Constantly: to

stand, often for long periods of time, to deliver lectures and oversee laboratory activities; to walk, to move about campus and classroom/laboratory/construction site environs; to run, to traverse shop area/construction site to mitigate safety and hazardous events; to stoop, bend, squat, kneel, climb, in and around environs; to reach, lift (max. 70 lbs.), carry (max. 70 lbs.), push and pull, to move materials and equipment; work in areas subject to exposure to dusts, mists, fumes, 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



### **MINIMUM QUALIFICATIONS (Continued):**

## Physical Suitability (continued):

and eyes. <u>Frequently</u>: Wear personal protective equipment to protect hearing and skin. <u>Occasionally</u>: 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, legs, feet and toes, and torso.

Salary for this position is established by under the current Faculty Salary Schedule. Placement on the salary schedule is established at date of hire.

This position is considered Exempt under the FLSA (Fair Labor Standards Act).

This position is part of the SCFA (Sierra College Faculty Association) Bargaining Unit. Classification III,

Bloodborne Pathogens Exposure Control Program apply to this position.