

San Diego Community College District

CLASSIFICATION DESCRIPTION

Title: Instructional Assistant / Machine Shop

Unit: Office Technical

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Job Code: J1250
Original Date: 01/1991
Last Revision: 05/2016
Staff Type: Classified
FLSA status: Non-exempt
Salary Range: 19

DEFINITION

Under the direction of an instructor, Instructional Lab Technician, or assigned supervisor or manager, assist students and instructors in the area of machine shop; assist in the preparation of instructional materials and perform related clerical duties as assigned.

DISTINGUISHING CHARACTERISTICS

The Instructional Assistant class is distinguished from the Instructional Lab Technician class in that positions assigned to the class of Instructional Assistant provide instructional assistance to students and instructors in an instructional lab designated for a specific academic or vocational subject area. Under the direction of an administrator or specified faculty member, incumbents operate independently and perform a wide variety of technical support duties, requiring training and/or experience in the field of specialty. Incumbents assigned to the class of Instructional Lab Technician oversee a complex instructional lab for an academic or vocational area and must possess more extensive technical or academic training and experience in the field of specialty.

EXAMPLE OF DUTIES

1. Assist students in assignments related to basic blueprint reading and geometric tolerancing, shop math, safety, machinist handbook, tool geometry, and speeds and feeds.
2. Tutor students individually or in small groups, reinforcing or following up on instructions provided by the instructor.
3. Explain concepts, principles, and terminologies to students.
4. Control the circulation of instructional supplies, materials, tools, and equipment to students and instructors by checking items in and out, maintaining appropriate records and inventories, and ordering replacement items as necessary according to approved procedures.
5. Assist students in the proper selection, operation, and care of instructional materials and equipment; assist students to understand assignments by reinforcing instruction provided by the instructor.
6. Perform clerical duties, such as answering telephones, taking messages, opening and routing mail, scheduling appointments, collecting fees, scoring and recording student assignments, preparing reports, and maintaining records and files.
7. Process incoming supplies, materials, tools, and equipment by identifying and labeling items and maintaining appropriate records.
8. Advise students in the proper operation of lathe and attachments; milling machines, vertical and horizontal; surface grinders; bench grinders; drill presses; and basic hand tools and measuring instruments.
9. Prepare materials and equipment for demonstrations by instructors or for use by students.
10. Provide information to students, instructors, and others as requested; ensure that appropriate safety procedures are observed by students.

11. Assist in preparing, administering, scoring, and recording student tests; provide relevant information to instructors regarding student progress.
12. Maintain instructional materials, supplies, and equipment; schedule repairs for all lab equipment according to approved procedures.
13. Provide training and work direction to student aides and hourly assistants.
14. Maintain instructional area in a clean and orderly manner; ensure the security of the facilities as assigned.
15. Perform related duties as assigned.

DESIRABLE QUALIFICATIONS

Knowledge:

- Basic knowledge of blueprint reading and geometric tolerancing, shop math, and tool geometry.
- District organization, operations, policies, and objectives.
- English usage, grammar, spelling, punctuation, and vocabulary.
- General needs and behavior of students of various ethnic, racial, and cultural backgrounds.
- Instructional methods and techniques.
- Operation, maintenance, uses, and characteristics of a wide variety of equipment used in instructional labs and learning centers for machine shop.
- Oral and written communications skills.
- Principles and practices of work direction and training.
- Record-keeping techniques.
- Safety regulations involving field of specialty.
- Technical aspects of maintenance of machine tools and tool crib.

Skills and Abilities:

- Advise students in the proper operation and use of lathe and attachments, milling machines, surface grinders, drill presses and bench grinders, and use of basic hand tools and measuring tools.
- Assist students in understanding and applying basic principles of a machine shop.
- Communicate effectively both orally and in writing.
- Establish and maintain effective working relationships with others.
- Explain work assignments to students.
- Maintain records and prepare reports.
- Make simple arithmetic calculations.
- Meet schedules and time lines.
- Perform minor maintenance and repair of equipment.
- Plan and organize work.
- Provide orientation to instructors, staff, and students in the operation of equipment.
- Train and provide work direction to others.
- Understand and follow oral and written directions.
- Work cooperatively with others.
- Work independently with little direction.

Training and Experience:

- Any combination of training and experience equivalent to: three years of tutoring, instructional, or work experience related to machine shop and satisfactory completion of sufficient specialized training in machine shop to satisfactorily perform the assigned duties.

WORKING CONDITIONS

Physical Requirements:

Category II

Environment:

Involves a machine shop; may be exposed to hazards of power machinery, lifting, and fumes from chemicals.