

INSTRUCTIONAL ASSISTANT, INFORMATION TECHNOLOGY

DEFINITION

Monitors and maintains one or more instructional computer laboratories and provides students with assistance in the areas of computer program analysis, equipment operation, and use of standard software applications.

TYPICAL DUTIES

- Schedules and oversees the use of one or more instructional computer laboratories by students, faculty, and staff.
- Explains to students the established instructional laboratory policies and the use of equipment available within the instructional laboratory.
- Assists students with problems related to arithmetic and logic operations, flowcharting, or coding, testing, and debugging of their computer program assignments.
- Assists students with use of standard application software applications such as word processors, spreadsheets, database management, presentations, and computerized accounting.
- Assists instructional staff in coordinating classroom instruction with hands-on operation of computer equipment and programming experience by providing them with observations regarding the problems encountered and progress being made by students using the laboratory as part of the educational program.
- Provides assistance in the LAN (Local Area Network) design, operation, security, and maintenance of assigned computer laboratories related to installation and configuration of workstations, servers, and basic troubleshooting of network malfunctions.
- Diagnoses computer equipment malfunctions and takes corrective action involving minor adjustments and repairs such as changing floppy disk, CD/DVD, hard disk, and other storage media drives, adapter cards, and memory on computer equipment.
- Performs installations and updates of software programs.
- Contacts maintenance and service personnel when appropriate and maintains records of maintenance and repair calls.
- Sets up and maintains records of equipment reservations, user identification numbers, student usage accounts, and other computer equipment utilization statistics.
- Maintains inventory records of supplies and equipment, and prepares periodic inventory reports and requisitions.
- Assists instructors with preparation of lab materials such as development of proper computer operating instructions, lab problems, and documentation.
- Assists instructors with research of product specifications related to software and hardware purchasing options.
- Performs start up and shut down of laboratory equipment and all backup and security procedures including detection and removal of computer viruses.
- May provide training and work direction to student employees.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

An **Instructional Assistant, Information Technology**, applies knowledge of computer programming, application software and computer operations to assist students with problems related to the computer laboratory assignments, familiarizes students with the operation of computers and ancillary equipment and is responsible for the day-to-day operations of one or more instructional computer laboratories.

An **Assistant Computer and Network Support Specialist** provides technical support functions of moderate difficulty, complexity and scope involving repair/replacement of computer parts and adjustment of computer equipment, basic troubleshooting of system processing failures, and assistance with a wide variety of software applications in a local area network environment at a college or the District Office.

Instructional Assistants in other academic disciplines are responsible for the day-to-day operations of instructional laboratories and apply their specialized knowledge to a broad range of duties related to the day-to-day operations of their academic departments.

SUPERVISION

General supervision is received from a Department Chair. Functional supervision may be received from instructional staff. Work direction may be provided to student employees.

CLASS QUALIFICATIONS

Knowledge of:

Capabilities, operation, and care of computers, printers, terminals, and local area network(s)
Application software for wordprocessing, spreadsheets, database management, desktop publishing, presentations, and computerized accounting
Operating Systems Environments such as DOS, Microsoft Windows, UNIX, VMS or VM/IS
Programming logic
Two or more programming languages such as BASIC, Pascal, COBOL, C, FORTRAN, RPG, Ada
Principles of recordkeeping

Ability to:

Provides instructional assistance to students and instructional staff
Effectively utilize computer hardware and software of assigned computer laboratories
Diagnose problems related to software and computer equipment malfunction
Perform minor repairs on computer laboratory equipment
Explain and demonstrate the proper utilization of computers and ancillary equipment to students
Communicate effectively both orally and in writing
Work effectively and cooperatively with students, instructional staff, and other District staff
Give clear and concise instructions
Keep detailed and accurate records
Learn additional computer programming languages
Learn additional application software packages most commonly used with computer systems
Learn to use electronic measurement and related equipment used for service and simple repair of computers

ENTRANCE QUALIFICATIONS

Education and Experience:

- A. An associate degree or its equivalent from a recognized college or university with a major in computer information systems, computer science, computer engineering, or a closely related field which included course work in at least two computer programming languages, basic computer operations and operating systems, and the use of computer applications software.

OR

- B. Graduation from high school or its equivalent **AND** two years of recent full-time paid programming and computer operations experience in a computer environment which included a local area network. Programming experience must include applications development in at least two computer programming languages and the use of computer applications such as word processing, spreadsheet, database management, desktop publishing, and presentation software.