Barstow Community College

**Position Description** 

Position: PC/Network Specialist	Salary Grade: 21
Department: IT	FLSA: Non-Exempt

#### <u>Summary</u>

Installs, configures, troubleshoots, and services networked microcomputer workstations and related equipment and software used in administrative and instructional lab environments. Assists in installations, configures, operates, and maintains server hardware and software for local networks. Provides technical support and help functions that relate to computer hardware and software, data communications, and connectivity.

### **Essential Duties and Responsibilities**

- Serves as a resource for computer purchase upgrades and emerging technologies. Recommends system and software upgrades for increased productivity and compatibility. Sets up new computers and peripheral equipment.
- Provides assistance to faculty, staff, and students on using computer and software programs including remote access and on the proper use of peripheral electronic equipment use to enhance presentations and viewing.
- Troubleshoots and performs various technical computer and peripheral repair duties that include but are not limited to diagnosing system failures and isolating faulty parts, repairing or replacing parts, and verifying and testing for correct operations.
- Installs and configures networked computers, printers, modems, cabling, and peripheral communications equipment. Installs software and configures systems to support electronic mail. Troubleshoots mail access problems.
- Participates in configuring, operating, and maintaining one or more local networks including those found in instructional laboratories. Tasks include, but are not limited to operations, moves, adds, changes, trouble detection/correction, path testing, and general maintenance.
- Assists in the design of computer networks. Assists with the design of specifications and functional requirements for small networks including those for administrative and instructional labs.
- Activates data communications ports using specialized network software. Implements protocols for electronic mail systems and accounts.
- Installs and configures upgrades to existing networked computers to enhance continuous operations, desired performance, and service. May participate in research and development of recommendations for selection of upgrades and enhancements.

- Assists in troubleshooting to resolve network hardware and operations problems, including but not limited to connectivity, internet access, electronic mail and file servers. Works with fellow staff, equipment users, vendors, and independent contractors to identify and resolve problems.
- Updates existing security software on networks and workstations. Tests existing operating systems and personal computers for potential viruses and security problems.
- Assists with implementation of protocols and procedural controls for operation of the network systems.
- Installs and configures workstations to laboratory networks. Configures, maintains, and participates in installing laboratory networks. Connects workstations to servers and participates with others to connect with College-wide networks. Sets up student accounts on local networks.
- Installs, configures, and maintains specialized software that supports a variety of technical courses offered by the College.
- Tests software to ensure compatibility with the current operating environment and to equipment capability. Configures software to communicate with peripherals such as printers, modems, scanners, and screens.
- Develops and maintains up-to-date documentation supporting assigned and related areas of responsibility. This includes procedures and steps for equipment setup, help desk questions and answers, and inventory recording.
- Provides training for computer users in one-on-one and small group settings.
- Initiates and prepares purchase orders for personal computer workstation and network equipment, parts, and software. Submits completed documents to Technical Support Services for review and approval.
- Performs other duties as assigned that support the overall objective of the position.

# Qualifications

# Knowledge and Skills

Requires a working technical knowledge of personal computer operations, including the relationship and usage of various input and output components, business and education support software, and terminology. Requires a working knowledge of operating systems. Must understand the protocols and procedures for setting up new equipment, troubleshooting and performing routine maintenance. Requires a working knowledge of personal computer based local area networks, network operations, and connectivity between servers. Requires a basic knowledge of the following protocols such as TCP/IP, IGRP, Serial, Ethernet, and Access Lists. Requires a basic understanding of the physical elements of the network including: fiber optic, twisted pair, and coaxial Ethernet cabling and connections, and routing, switching, and repeating equipment. Requires sufficient communication skills to conduct individual instruction and technical assistance on the use and application of PC-based business and education, internet, utility, and connectivity software. Requires sufficient writing skill to document technical procedures.

#### Abilities

Requires the ability to install, configure, and troubleshoot networked computer workstations, systems, and programs used by the College in both instruction and administrative areas. Must be able to install and configure microcomputer components such as, but not limited to, cards and drivers. Must be able to fabricate and connect interface cables and connections between computers. Must be able to analyze data and evaluate the needs of users and develop the alternative solutions to problems and needs. Must be able to prioritize and organize work to meet deadlines and timetables. Must be able to read, interpret and apply complex technical information including equipment blueprints and schematics. Must be able to give one-on-one and small group orientation in the use of microcomputers and business and instructional software. May require the ability to perform work assignments at all College locations.

### Physical Abilities

Requires ambulatory ability to move to various office and classroom-type locations and to bend, stoop, crawl and reach to install cables and equipment. Requires sufficient hand eye coordination and dexterity to make small component connections. Requires sufficient visual acuity to read technical documents and instructions and align small components. Requires sufficient auditory ability to carry on routine conversations. Requires the ability to lift, push, and pull objects of medium weight (less than 75 lbs.) on an occasional basis. Requires the ability to work in confined areas with noise variations, dust, and limited ventilation. Must be able to complete District-sponsored training in occupational safety and health and hazardous materials awareness within a reasonable amount of time.

Education and Experience

The position may require the equivalent to an Associates degree in computer science or related technical field and 2 years experience in network operations and personal computer technical support. Industry certifications may substitute for some experience.

### Licenses and Certificates

May require a valid driver's license.

#### Working Conditions

Work is performed indoors where minimal safety considerations exist.

This job/class description, describes the general nature of the work performed, representative duties as well as the typical qualifications needed for acceptable performance. It is not intended to be a complete list of all responsibilities, duties, work steps, and skills required of the job.

Board approved: 07/10/2003