

JOB TITLE: NETWORK SUPPORT SPECIALIST

PAY GRADE: CL 27

LAST REVISED: JANUARY 2012

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job. Additional or different duties from the ones set forth below may be required to address changing business needs/practices.

## **SUMMARY DESCRIPTION**

Under direction, ensures continuous and efficient operation of District network and connected nodes; installation and maintenance all networking components and nodes; configuration of networked computer workstations and related equipment and software used in administrative and instructional lab environments; maintenance and monitoring of network security for all workstations and servers on the local area network; coordination of operation of instructional computer labs and classrooms; planning, designing, and maintaining complex systems and networks, including instructional delivery technologies; and serving as technical advisor to college and district staff. Performs a variety of tasks relative to assigned area of responsibility.

**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.

- Installs, configures, tests, upgrades, patches, and/or maintains all networking components and nodes
  including hardware and software for business, laboratory, and curriculum networks and workstations
  including servers, printers, networking devices, software, Windows and Mac computers, and other
  peripherals; ensures workstations are in compliance with current license and copyright laws.
- Installs and configures network users; sets up student accounts onto local networks; sets up related, dedicated servers to communicate on a network; configures user preferences on individual workstations including user and email profiles, special application requirements, printers, and peripheral configurations.
- 3. Responds to computer system emergency situations such as service interruption, system failures, power outages, and damaged media and hardware; uses a range of troubleshooting techniques to resolve network hardware and operations problems; performs backup and recovery operations.
- 4. Analyzes equipment problems using a variety of diagnostic and testing devices; troubleshoots and diagnoses complex network problems including network/internet access, email, and server connectivity; tests and resolves existing operating systems and workstations for potential viruses, spyware, adware, or other security problems.
- 5. Participates in the administration of the District's network servers, including VLANS, firewalls, switches, and routers; configures and corrects system parameters, directory structures, security, and software; tests existing systems for potential viruses and security problems; assigns and maintains network addresses; provides end level resolution to computer and network related issues.
- 6. Interacts with vendors to coordinate hardware and software issues; serves as technical liaison to external vendors and specialists obtained by the District to provide support; orders and transports materials and equipment to onsite and offsite locations.



- 7. Installs and configures all computer and network related upgrades and enhancements to increase productivity, compatibility, and efficiency; replaces and/or repairs faulty equipment including servers, computers, printers, networking devices, and other peripherals; coordinates and communicates system changes with technical staff and peers; performs installation for additions, moves, and changes to locations of District staff, lab computers, and related equipment.
- 8. Researches and makes recommendations on available options for data transmission and network projects; participates with District department managers to estimate network system costs, timelines, alternatives, and special needs.
- 9. Participates in the planning and design of data communications facilities and equipment for LAN/WAN network requirements regarding capacity, security, and performance; designs and configures hardware layouts for new or existing facilities in accordance with industry standards; facilitates and coordinates the installation and movement of District staff and lab computers and related equipment; determines locations for terminal closets, cable, conduit routing, and computers.
- 10. Installs cables including CAT5e/6, fiber optics, conduits, wire molds, cable racks, and trays to meet ANSI/EIA/TIA industry standards for cabling and cable terminations.
- 11. Makes cable connection on blocks, jacks, and terminals; makes cross connections, tag, and/or mark cable designation strips, blocks, and jacks; installs and sets data lines for instructional and/or other activities.
- 12. Installs, configures and maintains television and IP-based video conferencing systems; operates data and image transmission devices, cameras, computer conferencing hardware, telecommunications devices and studio switchboards.
- 13. Fabricates, installs, configures and supports a variety of closed-circuit television equipment including video network components, cabling, transmission equipment, satellite down link and other instructional based delivery systems.
- 14. Resolves technical problems prior to and during transmission/reception; troubleshoots, repairs and maintains electronic media equipment and systems; provides support for broadcast equipment users.
- 15. Participates in coordinating project tasks and work sequences; monitors and prepares reports of project work-in-progress status; leads and participates in technical projects.
- 16. Initiates and prepares purchase order requisitions for computer workstations and network equipment, parts, and software; submits completed documents for review and approval.
- 17. Confers with contractors and outside service providers involved with data communications projects to ensure compliance with District specifications; reviews blueprints and schematics and evaluates adequacy of specified material and supplies. Generate request for quotation and request for proposal in order to provide the products and services that best meet the District's interest.
- 18. Documents all actions taken from start of problem through resolution of technical issues arising in work order tracking system; schedules and prioritizes work orders and trouble tickets assuring timely completion; reviews work order and trouble ticket resolutions for completeness and accuracy.
- 19. Prepares technical specifications of requests for proposals; participates in determining technical aspects of projects, including resources and timeframes.
- 20. Develops and maintains current documentation on network infrastructure, system blueprints and schematics, equipment installation procedures, and recycling of surplus computer assets; maintains an inventory of materials and supplies.
- 21. Assists in developing the department budget; projects upcoming equipment purchases, repairs, and



labor needs; assesses and evaluates proposed projects and upgrades.

- 22. May train and provide work direction to assigned student workers and temporary help as assigned.
- 23. Performs related duties as required.

**QUALIFICATIONS** - The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

### Knowledge of:

The structure and function of multi-platform computer operating systems, hardware, networking systems, and related peripherals.

Personal computer operations, including the relationship and usage of various input and output components.

Administrative/Business related software and instructional software.

Data communication protocols.

Processes and procedures for setting up new equipment, troubleshooting and performing routine maintenance.

Personal computer-based local area networks, network operations, connectivity between servers, and integration of data and telecommunications.

Physical elements of the network including cabling and connections, routing, and switching.

Communication skills to conduct individual instruction and technical assistance on the use and application of business and education, internet, utility, and connectivity software.

Sufficient writing skill to document technical procedures, RFQ (Request for Quote), RFP (Request for Proposal),

#### Ability to:

Troubleshoot and resolve a wide range of complex hardware, software, and network issues.

Install, configure, and troubleshoot networked computer workstations, systems, and programs used by the College in both instruction and administrative areas.

Install and configure computer components.

Properly evaluate, design, plan and perform network cable plant installation from conception to completion.

Fabricate and connect interface cables and connections between computers.

Analyze data, evaluate the needs of users and develop solutions.

Prioritize and organize work to meet deadlines and timetables.

Read, interpret and apply complex technical information including equipment blueprints and schematics.

Oversee student and other help assigned to instructional laboratories.

Conduct group and individual instruction.

Provide team leadership and direction as well as prioritize and coordinate activities while exercising independent judgment and personal initiative.

Adapt to changing technologies and learn functionality of new equipment and systems.

Work independently in the absence of supervision.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

<u>Education and Experience Guidelines:</u> Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:



#### **Education/Training:**

Two years of college with major course work in computer science or a related field.

#### **Experience:**

Four years experience in network support, personal computer technical support, and server administration. Industry certifications may substitute for some experience.

### **License or Certificate:**

Possession of a valid California driver's license.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT** - The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**Environment:** Work is performed primarily in a standard office setting.

<u>Physical</u>: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally walk, stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

<u>Vision</u>: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

**Hearing**: Hear in the normal audio range with or without correction.

Developed in Consultation With

