JOB TITLE: Systems Engineer

DESCRIPTION OF BASIC FUNCTIONS AND RESPONSIBILITIES:

Provides technical support for the ongoing administrative and instructional efforts of Shasta College, its students, faculty and staff. The Systems Engineer participates as a member of a technology team, focusing on the design, implementation, and support of systems, servers, desktops, peripherals, and network technologies, and supports web environments including the main Shasta College web presence. The Systems Engineer is responsible for engineering and supporting standardized solutions that are reliable, scalable, manageable, secure, accessible, and that meet the needs of the customers being served by that solution. This position may direct the activities of other technical support staff that perform hardware, software, peripheral, lab and/or classroom, or other voice/data/video/telecom support activities.

SUPERVISOR: As assigned

TYPICAL DUTIES:

Essential and marginal function statements and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

- Designs, builds, tests, configures and/or codes, implements, supports, maintains, and audits:
  - Standardized local and wide area network solutions from physical to application layer
  - Systems solutions, server configurations, system components and peripherals
  - Shasta College web presence
  - Accessible classroom, lab, and distance learning environments
  - Network (WAN & LAN) and System maintenance and monitoring tools
  - Configuration and support documentation for those environments

- Performs network, server and desktop/laptop systems engineering, implementation, administration, monitoring, and maintenance including but not limited to system build, account creation and maintenance, standard system image creation and maintenance, system & network security and monitoring, system & file backup and restoration.

- Insures access to network (WAN & LAN), system productivity tools, and administrative computing systems in support of our faculty and staff. Insures access to Technology Delivered and/or Technology Assisted Instruction and other classroom and lab educational or learning support tools and information in support of our students and the our community.
• Develops and maintains complete and accurate records pertaining to hardware, software, system, and network configurations, changes, outages and improvement plans.

• Develops and maintains favorable relationships with other technicians, faculty, staff and students as well as counterparts in other academic institutions, vendors, communications network service providers, and state and local regulatory agencies.

• Insures compliance with software licensing and copyright laws and network, system, and environment warranty agreements.

• Troubleshoots, resolves and documents technical problems/difficulties with our ability to deliver services to students, faculty and/or staff.

• As necessary, schedules and completes installation and upgrade activities during off-hours at night or on weekends in order to minimize interruption of day-to-day activities of the College.

• Works with all levels of faculty, staff, and student workers.

• May direct the work of other technical support staff.

Marginal Functions:

• Provides assistance and counsel to faculty and staff pertaining to their computing needs.

• Secures network and computer equipment as appropriate; monitor access.

• Provides technical advisement and training of other staff members as necessary.

• Works with students to enhance their learning experiences in the area of computer and network systems.

• Participates in the establishment, enforcement and updating of network computing standards, policies, procedures, and use guidelines.

• Performs other related duties similar to the above in scope and function as required.

EMPLOYMENT STANDARDS

Knowledge of:

• Requisite technical skills to perform essential and marginal job functions

• LAN/WAN and Internet technologies from physical layer up (e.g. cabling, routing, firewalls, VPNs, switching and MLS, bridging, IP addressing architecture, mail, web content delivery)

• NOS installation, Server configuration, and operations and backup measures in Windows, Unix (AIX, HP, Sun, Linux), and Mac OS environments

• Productivity, analysis, troubleshooting and utility tools for desktops, peripherals and servers
• Methods and procedures of standardizing, securing, maintaining, and operating computers and peripheral equipment in lab and classroom environments

• Desktop support techniques in a networked environment (e.g. TCP/IP, DNS, WINS, DHCP, configuration and troubleshooting)

• Software License compliance laws and methodologies

• Security and business continuity (disaster recovery) planning and execution

• Troubleshooting, diagnostic techniques, procedures, equipment and tools used in computer and peripheral repair

• Technology documentation and presentation techniques

**Ability to:**

• Plan, schedule and perform simple and complex customer support activities (e.g. individual machine, lab or classroom environment) in an organized manner

• Perform skilled technical work in the installation, maintenance and repair of network, telecommunications, computer equipment and peripheral devices

• Maintain current knowledge of technical advances in all areas of responsibility

• Keep detailed, precise records and handle correspondence effectively

• Work and communicate effectively and cooperatively with students, faculty, and staff

• Work independently and exercise sound judgment while meeting schedules and time lines

• Demonstrate interpersonal skills using tact, patience and courtesy

• Understand and carry out oral and written directions

• Direct the work of other technical support employees

**Education/Experience:**

• AA degree with coursework in computer and network systems and technologies, plus substantial continued education and training in the Information Technology field, OR equivalent experience in the field.
  
  o Bachelor’s degree and MCSE certification preferred.

• Minimum of two years professional experience directly supporting networks and desktops.
  
  o Four years experience with progressively higher responsibilities preferred.

• Demonstrated technical knowledge and ability to communicate clearly verbally and in writing.
  
  o Ability to produce and clearly explain LAN documentation preferred.