

## YUBA COMMUNITY COLLEGE DISTRICT

### **CLASS TITLE: SENIOR SYSTEMS ANALYST**

#### **BASIC FUNCTION:**

Under the direction of a designated supervisor, perform varied and difficult systems software analysis, planning, security, and network operations in accordance with standards and established procedures supervisor. Research, analyze and provide recommendations for system upgrades and management to assure system security.

#### **DISTINGUISHING CHARACTERISTICS:**

The Programmer I classification provides basic support to the administrative computing system. Incumbents may also provide assistance to users. Incumbents assigned to the classification of Programmer/Analyst II provide more complex support to various users through configuration, operation, program modification and problem resolution. The Senior Systems Analyst classification provides leadership to all phases of systems software and hardware planning, maintenance, security and operation. The incumbents assigned to the Senior Systems Analyst classification perform difficult systems software analysis and security planning. The Senior Software Specialist classification provides difficult systems analysis, development and implementation tasks. The incumbents assigned to the Senior Software Specialist classification have the breadth and depth of knowledge to resolve the most complex application development.

#### **REPRESENTATIVE DUTIES:**

Monitor the operation and performance of the Administrative Computer System; verify proper completion of batch processes and use of system resources including disk space and memory usage; monitor system errors; respond to user complaints concerning system response time and system access. (E)

Install and configure new and upgraded hardware and software on the Administrative Computer Systems and network servers; load, configure and test new and upgraded software. (E)

Maintain data security on the Administrative Computer Systems; research, design, and implement a comprehensive system to back-up current data, archive old data; restore data as needed to recover lost data; compress and remove records as needed. (E)

Monitor and maintain security on the Administrative Computer System and network servers to prevent intrusion by unauthorized users. Design and implement secure access to the administrative computing system from sites throughout the district, and from web servers for approved processes. (E)

Research and recommend improvements/upgrades to system hardware and software as necessary to assure continuous satisfactory service. (E)

Configure, maintain and operate a test system to provide a safe environment to test software upgrades, maintenance software releases, etc. (E)

Evaluate and determine repair or replacement alternative for peripheral and network devices in relationships to the Administrative Computer System; determine if problem is software or hardware related; make repairs or refer personnel to outside agencies for repairs. (E)

Install and configure network devices and system peripherals required for use and access of the Administrative Computer Systems. (E)

Establish and monitor implementation of procedures for creation and maintenance of user accounts for the Administrative Computing system. (E)

Develop and implement procedures for configuration of print queues. (E)

Provide back-up to programmers to create new and modify existing programs. (E)

Other related duties as assigned.

**KNOWLEDGE OF:**

Firewall configuration and maintenance.

Computer application tuning and systems administration.

Advanced local and wide area network configuration and maintenance, including domain naming system (DNS), directory services, and network protocol layers.

Computer hardware and software concepts, systems, and procedures, including UNIX based enterprise servers and microcomputers with a variety of operating systems (e.g. Windows NT, Windows 95, Windows 3.x, and MS-DOS operating systems and Macintosh computers using Mac-OS Versions 7.0-7.5).

Operation of computer equipment, including network servers, telecommunications equipment (hubs, routers, switches), and client workstations.

Relational database concepts, tools, and techniques including the use of Structured Query Language (SQL).

Computer application programs, including word processors, spreadsheets, graphics programs, and desktop publishing programs, HTML authoring tools and techniques.

Computer application programs, including word processors, spreadsheets, graphics programs, and desktop publishing programs, HTML authoring tools and techniques.

Computer local area network (LAN) wiring concepts, tools and techniques.

Internet applications (such as email, web browsers, network news, and FTP and CGI programs).

Oral and written communications skills.

Interpersonal skills including tact, patience and courtesy.

Modern principles, practices and techniques of information system design, development, testing, deployment and operation.

Recent computer programming languages (for example: C++, Visual Basic, C, Java and UNIX shell scripting languages).

Advanced mini-computer system software, including RAID subsystems, power management, multi-processor operating systems, and UNIX configuration.

Advanced system security.

**ABILITY TO:**

Learn District organization, objectives, policies and operations.

Research system and application software maintenance and security updates to assess the applicability to Yuba College environment and needs.

Plan system software and hardware upgrades to achieve maximum reliability and availability.

Research security threats and develop recommendations for action to minimize threats to the administrative computer servers and data.

Develop, maintain and operate a comprehensive data security system designed to prevent loss of data under all circumstances.

Develop procedures for ongoing tuning, updates and operation of the administrative computing software to assure maximum performance and reliability.

Install application and system software upgrades in test and operational accounts.

Operate and maintain a separate server to test system and application software upgrades and patches.

Write clear and concise system maintenance and operations documentation.

Use designated computer programming and database query languages, learning new ones as necessary.

Analyze system and program structures and data flows to isolate and remedy logic and coding errors.

Design, develop, implement and use computer databases.

Install, configure, and use Internet server and client application software, including linkages to existing applications.

Work without close supervision; including researching and planning for system maintenance and upgrades.

Work effectively with a diverse student/staff population.

Establish and maintain cooperative and effective working relationships with others.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: bachelor's degree in computer science or related field and four years of relevant and increasingly responsible systems software and telecommunications experience is required. Experience in installation, maintenance, and operations of LANs and WANs is preferred. Work experience may

be substituted for education, i.e., two (2) years of work experience equates to one (1) year of education. Experience claimed to satisfy requirements above must be current experience.

**LICENSES AND OTHER REQUIREMENTS:**

Valid driver's license.

**ENVIRONMENT:**

Office environment.

**PHYSICAL ABILITIES:**

Hearing and speaking to exchange information.

Seeing to view a computer monitor.

Dexterity of hands and fingers to operate a computer keyboard.

Climbing ladders to string wire for connecting computer devices.

Lifting and carrying moderately heavy objects.

Reaching overhead, above the shoulders and horizontally.

Bending at the waist, kneeling or crouching.

**HAZARDS:**

Working on ladders at heights.